



MARYLAND DEPARTMENT OF THE ENVIRONMENT

Water and Science Administration
Industrial Stormwater Permits Division
Wastewater Pollution Prevention & Reclamation Program
1800 Washington Boulevard, Suite 455
Baltimore, MD 21230-1708

FINAL

Response to Public Comments

Regarding

General Permit for Stormwater Discharge Associated with Construction Activity

State Discharge Permit Application No. 20-CP

NPDES Permit No. MDRC

Last Revised: December 20, 2022

Table of Contents

INTRODUCTION	3
SUMMARY OF CHANGES FROM THE TENTATIVE DETERMINATION DRAFT	4
RESPONSES TO SPECIFIC COMMENTS	9
1. COMMENT CATEGORY – Permit Format or Content.	9
2. COMMENT CATEGORY – Part I - Applicability	19
3. COMMENT CATEGORY – Part II – Authorization Under This Permit	22
4. COMMENT CATEGORY – Part III.A – Technology-Based Limits	31
5. COMMENT CATEGORY – Part III.B (& I.B.3) – Water Quality-Based Limits	42
6. COMMENT CATEGORY – Part III.C – Site Inspections and Records	52
7. COMMENT CATEGORY – Part III.D – Corrective Actions	56
8. COMMENT CATEGORY – Training Part III.E and Preconstruction (Part II.C.2)	63
9. COMMENT CATEGORY – Part III.F – SW Pollution Prevention Plan (SWPPP)	65
10. COMMENT CATEGORY – Request for Definitions and Mistakes Made	70
11. COMMENT CATEGORY – Request for Additional Input on Four Topics	75

INTRODUCTION

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 DISCHARGE 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. 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.

Notice of a tentative determination regarding this permit was published by the Departments Water and Science Administration (WSA) during the weeks of September 21 and September 28 in newspapers across the state of Maryland. The notice was published in the Maryland Register on September 25, 2020. The Department held a public hearing regarding the tentative determination on November 10, 2020. Notice of the hearing was included in those publications. The public comment period concluded on December 24, 2020.

An additional comment period, published August 12, 2022, was offered focused on four areas related to changes being contemplated. The four areas were Climate Adaptions, Threatened and Endangered Species, Requirements for Complete Application Package and Water Quality Standards and CGP Turbidity Benchmarks.

This document summarizes the comments received during the public comment periods and the Department’s responses to those comments.

In the event of any inconsistencies between the factsheet and this document, this document shall take precedence.

SUMMARY OF CHANGES FROM THE TENTATIVE DETERMINATION DRAFT

Changes related to comments on Climate Change Impacts

- The permit Part II.E requires revising E&SC plans based on updates to the ESC Handbook Standards and Specifications for Soil Erosion and Sediment Control, when the approved plan expires (every 3 years).
- The permit Part III.A.1.a includes requirements to account for potential increases in temperature of Use III or Use IV waters due to changes in climate when selecting control measures.
- In Part IV.C, clarifies that work performed within a floodplain is subject to State and/or Federal approvals.

Changes related to comments on Part I - Applicability

- Part I.B.1.c has been eliminated.
- References to “registration” under the permit have been modified to be “authorization” under the permit, throughout the final permit.

Changes related to comments on Part II – Authorization Under This Permit

- The eNOI lat/long format is modified to specify coordinates in decimal degrees with at least 4 decimal points. Clarification for applicants to provide a central point within a property boundary for large properties or projects has also been added.
- The definition for signatory has been updated to be consistent with the Federal and State Regulations, and a duly authorized representative has been added for signing of documents such as SWPPPs.
- The permit now indicates that you list your own related permits for other activities at the site, or if part of a common plan the permit of the owner.
- The permit Part II Table 1, Deadlines for Permit Coverage, NOI Submittal Deadline has been updated to indicate that a complete application is required at least 14 Days prior to construction for the following: new operators, transfers, or an increase in construction activity. Notes indicating that the Department may require additional information or actions prior to approval have also been added.
- Part II.A.11, the term “Change NOI” has been changed to “Modify/Amend NOI”.
- The clarification for fees in the permit applies only to single family home builders within a common plan of development, where the common Plan of development E&SC calls out Standard Plans for the lots, and each individual lot is less than an acre.
- The permit requires a completed and signed E&SC, and where applicable a signed SWPPP, signed Antidegradation Checklist, and payment, as part of a complete application, prior to the 14 day public notification period.
- The permit Part II.A.5 is updated to clarify that proof of the approval from the approval authority must be either in the form of an approval letter, or a copy of the actual stamped and approved page in the document or the exemption for SWM from the approval authority

- The permit is updated to clarify that a SWPPP may be used in cases where the project isn't subject to E&SC plan under Title 4, such as structures built on agricultural lands when an approved E&SC isn't available.
- A clarification has been added for when grading may begin on state or federal phased approvals.
- The language throughout the permit regarding the 14 day waiting period is corrected to consistently reference it as the "Public Notification Period"

Changes related to comments on Part III.A Technology-Based Limits

- The permit requires that downstream impacts related to potential flooding are minimized for projects that span long periods of time (i.e. more than a half a year).
- A clarifying phrase "(to design, install, and maintain stormwater controls)" is added to Part III.A.1 to make it clear which requirement is referenced.
- A reference to the ESC Handbook and Design Manual has been added for specifications regarding "the expected amount, frequency, intensity, and duration of precipitation", with a reference to make sure to take into account any updates to the criteria based on Climate Change.
- Part III.A.2.b has been updated to indicate either avoid compaction or require conditioning where post-construction infiltration stormwater control infiltration practices will be installed.
- The 6 month maximum timeframe for temporary stabilization has been added, requiring any termination to agree to place permanent stabilization within 6 months.
- The permit requires notice to the Department and a justification for use of one of the exceptions to final stabilization prior to terminating coverage.
- The permit has been changed to require advance approval for cationic chemical additives via an NOI amendment request with the associated SWPPP, which must be submitted a week prior to intended use. For approved anionic chemical additives an amended NOI request and a SWPPP must be submitted no later than a week after the product was first used.
- The permit now includes requirements to use MERLIN "<https://dnr.maryland.gov/Pages/Merlin.aspx>" to identify where threatened and endangered species are located along with information on who to consult with from DNR with questions, a requirement to indicate in the NOI if they exist within the project areas, and a requirement to include on the E&SC areas where protections must take place based on consultation with DNR.
- Examples of effective means of eliminating the discharge of spilled or leaked chemicals, including fuels and oils, have been added to the Permit.
- The permit does not require minimization of exposure 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).

- To make it clear that illegal dumping is discouraged, Part III.A.3.c.v includes notifying the permittee that there may be local or state laws related to illegal dumping.
- Part III.A.3.c.v clarifies what types of waste require dumpster covers.
- Regarding fertilizer use requirements, the final permit has replaced the words ‘heavy rain’ with ‘rain’ event, to put the burden on the operator to avoid rain events where the nutrients are likely to wash off.

Changes related to comments on Part III.B Water Quality-Based Limits

- In order to clarify the criteria for water quality standards, the permit is updated to include specific reference to COMAR 26.08.02 where the entire standards are found in regulation and in addition states the narrative non-numeric criteria.
- The permit has been updated to be consistent with the State’s proper mapping of the designated areas “if a project occurs within a Tier II watershed or catchment”. Definition of Discharge has also been updated in the Appendix to be consistent with COMAR and the state’s use of the term.
- The permit specifies that in Tier II watersheds with no assimilative capacity, the Department will require additional review, unless review had occurred prior to submitting your NOI.
- The permit incorporates language indicating that the checklist by itself isn’t an antidegradation review, and a reference to the full process, COMAR 26.08.02.04-1, is included.
- The permit clarifies that Tier II protections are to ensure that existing in-stream water uses and the level of water quality necessary to protect existing uses are maintained and protected (as provided in COMAR Antidegradation Policy Implementation Procedures).

Changes related to comments on Part III.C Site Inspections and Records

- The inspection report includes a checkbox to indicate if the site was subject to flooding.
- The permit has been updated to include requirements if a change to the inspection frequency is made.
- An inspection frequency clarification was added consistent with the CGP for rainfalls that occur over several days.
- Part III.C.7.f has been simplified to state that if the inspection was based on a storm event, to record the amount of rain (conditions during the inspection as well as the date and last recorded precipitation daily total rainfall of 0.25 inches or greater).
- The permit requires 2 inspections per week for portions of property within a Tier II watershed, one of these should be performed when reasonably possible within 24 hours of a storm event.
- An exceptions for linear projects has been added, allowing for stabilized areas to be reduced inspection frequency and eventually cease under conditions where stabilization is confirmed consistent with the EPA CGP.

- The permit has been updated to allow flexibility on larger linear construction sites or when records cannot be stored on-site. The exact location must be discussed and agreed to during the preconstruction meeting with the Department's inspector.
- The permit Part III.C.8.f provides for an option to email various documents or reports in accordance with Part III.C.8, instead of mailing them.

Changes related to comments on Part III.D Corrective Actions

- The requirement to comply with any corrective action required by the Department as a result of permit violations during an inspection has been added.
- The permit adds flexibility that records can be in a logbook, a SWPPP, or in electronic form.
- The permit is updated to clarify Part III.D.2.a is one business day.
- The permit allows for Corrective Action Reports to be stored electronically.

Changes related to comments on Part III.E Training and Preconstruction

- The permit clarifies that MDE Compliance Program is the construction program to contact when scheduling a preconstruction meeting.
- The permit language is modified to specify that the qualified person needs to be on-site at a frequency and duration sufficient to ensure compliance with the requirements of the SWPPP (if applicable) and E&SC Plan.
- The permit language now states that individuals responsible for compliance with the design be involved on the stormwater team, rather than the designer specifically.

Changes related to comments on Part III.F SW Pollution Prevention Plan (SWPPP)

- Several references to joint liability were updated to be consistent with updated Federal Permit language in Part I.B.1.b and Part III.F.1.
- Inconsistent requirements for contaminated soils have been updated in Part II.A.2.w, Part III.F.1 and Part I.D.6 of the permit and examples of how to check for contaminated soils provided.
- SWPPP requirements for Common Plans have been updated to indicate each entity working in an area is cognizant that their activities do not compromise any other operators' controls and/or any shared controls. The main developer at a minimum must keep a working SWPPP with all those working within the Development.
- Construction activities that are less than five acres and have actions that only include gravel or aggregate or other building materials present on-site, fertilizer required for revegetation or concrete washout are exempt from submitting a SWPPP to MDE, all others to include the use of polymers and known contaminants must submit a SWPPP.
- The SWPPP site map includes right-of-way as an alternative to property boundaries for linear utility projects.

- The SWPPP may either refer to the E&SC map when all information required is on that map, or you can provide an additional map separate and distinct from the E&SC plan when necessary.

Changes related to comments on Definitions and Mistakes Made

- The documentation process for delegation of signatory authority (duly authorized representative) for signing of SWPPPs has now been outlined in the permit.
- The definition has been updated for a “common plan of development or sale” to clarify it is “*a contiguous area, where activities may be taking place at different times on different schedules*” under one common plan.
- The term “receiving water” in the 20-CP has been modified to consistently consider receiving water(s) in Parts II.A.2 (l, m, n) and in the Appendix A.
- The definition of “Stream” and “Intermittent Stream” have been included, to clarify the term “Edge of Stream”.
- These definitions are included: “concept plan (SWM)” “final stormwater management plan” and “co-permittee”.
- The definition of Business Day has been updated in the permit.
- The definition of the stream protection zone is updated consistent with the EPA CGP and the federal requirements promulgated in the Construction and Development Effluent Guidelines and Standards (40 CFR Part 450).
- The definition of “Water Quality Standards” has been updated in the Appendix for reference, and includes “Water Quality Criteria” and “Designated Uses”.
- A reference to the State’s turbidity criteria has been added.
- A definition for “Assimilative Capacity” has been included.
- The definition of the “2011 Handbook” has been modified and is now the “ESC Handbook” and includes the phrase “or its updated version”.
- Definitions for “Maintenance” and “Repair” have been included.
- A definition for “Stormwater Control” has been included.
- The Definition for steep slope includes a reference to the Standards and Specifications Handbook.
- The definition of “accelerated stabilization” has been included.
- This definition “Heavy Use Area Protection” has been added to the Appendix and referenced in Part III.A.2.f about temporary stabilization.
- The definition for “Dewatering” has been updated to include “groundwater from well point”.
- A slight change to a reference under “Chemical Additive” in Definitions.
- Several unused phrases in the Appendix were removed.
- Correction made for “Waters of this State” throughout the permit for consistency.
- The proper name General Permit For Stormwater Discharge Associated With Industrial Activity is added and extra period removed.
- Several grammatical errors, definition references consistent with COMAR added and wrong references were corrected.

RESPONSES TO SPECIFIC COMMENTS

1. COMMENT CATEGORY – Permit Format or Content.

a. Grouping – New Format of the Permit (20-CP)

Response to Comment 1 and 2: The commenters note that the format has changed. Although it is a welcome change to many that do business within multiple states or jurisdictions, the one comment notes that it has increased the length of the 20-CP and looks more like an individual permit. Response: The 20-CP is being reissued and therefore it is reasonable to expect the permit will change. Some changes are to address Federal Regulation such as the EPA Construction and Development Effluent Guidelines and Standards (40 CFR Part 450) amended in 2014 and 2015. The regulations cover stormwater discharges from construction sites and are implemented in NPDES permits. Other changes are to allow construction sites to make use of chemical additives to settle out suspended solids. The reorganization was meant to incorporate changes in the best way possible. However, the concerns here don't provide a specific recommendation, but are observations. Thus no change has been made.

b. Grouping – Climate Change Impacts Need to be Considered

The comments in this section reflect concerns of additional strains and impacts on our treasured water resources as a result of climate change. Similar comments have been received on the Department's MS4 permits. The Department is committed to adapting Maryland's stormwater program in response to climate change. Before addressing specific concerns, it is important to clarify that MDE's WSA is closely engaged in an ongoing assessment of how climate change could impact stormwater best management practices and options for responding to those projected changes. This is being done in a number of ways.

Maryland is collaborating with the Chesapeake Bay Program Partnership (Partnership) in response to commitments made in March 2018 by the Partnership's Principals Staff Committee (PSC). The PSC consists of state agency leaders who serve as staff to the governors (principals) of the Chesapeake Bay watershed states. This commitment is documented in the Climate Change section of Maryland's Phase III Chesapeake Bay Watershed Implementation Plan, found here: <https://tinyurl.com/MDPhase3WIP>.

In 2019, the Partnership's Water Quality Goal Implementation Team (Water Quality GIT) agreed to take action first on urban stormwater BMPs, although the commitment is for all types of BMPs, e.g., including agricultural practices. As a result, the Urban Stormwater Workgroup (USWG) was tasked with leading the effort. Later that year, the USWG developed two contracts using Partnership grant funds:

1. The Chesapeake Stormwater Network (CSN) was hired to conduct background research and lead an effort to enhance urban stormwater management best practices. This has resulted in a series of technical memos, found here: <https://tinyurl.com/CSNClimateMemos>.

2. A consortium of Cornell, Carnegie Mellon & RAND was hired to predict how rainfall characteristics will likely change in the future. This initiative has been completed and the main product, an online tool that estimates future storm event rainfall under a range of future scenarios, is available here: <https://midatlantic-idf.rcc-acis.org/>

Through a 2020 collaboration with Virginia, Delaware and North Carolina, funds were allocated to update the NOAA Atlas 14 rainfall statistics to include a longer data record, which may reflect recent effects of climate change. The update is scheduled for completion in 2-3 years.

In response to State legislation adopted in 2021(SB227/HB295), the Department is required to report to the General Assembly by November 1, 2021, the most recent precipitation data, plans for immediately updating water quantity control standards for watersheds where flooding occurred on or after January 1, 2000, and plans for updating all other regulations adopted under Maryland's stormwater management statute (Env. Article Section 4-203).

Maryland is committed to accounting for climate change stressors. Therefore, when the Partnership makes final recommendations, the Department will evaluate them and other available information to make appropriate changes to the State's stormwater design manual and erosion control standards and specifications (i.e. the ESC Handbook, defined in Appendix A). This process will take time, but when completed it will be required across the State.

Response to Comment 3: The commenter is concerned that the advent of climate change will bring new challenges to the Chesapeake Bay watershed and therefore hinder progress made on the Chesapeake Bay TMDL. The commenter points to weaknesses in the control of pollutants based on climate change-induced increases in storm volume, intensity, and duration. (The commenter also touches on water quality standards which are discussed later in "*COMMENT CATEGORY – Part III.B (& I.B.3) – Water Quality-Based Limits*"). Response: One basic cornerstone for the 14-GP, and continued to the 20-CP, has been that every site must have an approved E&SC plan that comports with the State's design standards. Design standards, including the sizing of BMPs, are based on the universal sizing specifications that reflect historical rainfall data. As mentioned in the preceding paragraphs, the Department is actively engaged in assessing what changes are needed for these stormwater BMPs. Once the sizing specifications are adjusted to consider changes in precipitation characteristics, any changes made to the

regulations and design guidance to address climate change will also apply to the Department's permits.

The Department acknowledges that climate change will likely increase nutrient and sediment loads and is taking steps to address these increases. The Department originally developed a Phase III Watershed Implementation Plan (WIP) for the Chesapeake Bay that exceeded nutrient planning targets and will apply these surpluses toward additional climate change goals. While this will address much of the changes, by the end of 2021, the Department is committed to the identification and quantification of the pollution reduction strategies that will be implemented by 2025 to reduce the increased climate-driven nutrient loads forecast to occur in 2025.

The 20-CP as written implements several changes that will improve the ability of the Department to enforce permit conditions, as well as to ensure that sites adapt based on conditions that may differ from the initial design. In addition to the design and installation of proper E&SC and implementing SWPPPs, the best controls are not effective without maintenance and continued inspections. Thus the 20-CP emphasizes inspections and corrective actions as well. The 20-CP lists the inspection frequency, requires more frequent inspections in our treasured resource areas, includes critical stabilization deadlines, and allows the use of polymers, which promote more rapid settling of sediments and reduce turbidity. The 20-CP also includes buffer requirements, which are responsive to climate change stressors.

Prior to the changes in the ESC Handbook's Standards and Specifications, the proposed 20-CP conditions will benefit water quality in a time of more variable weather conditions.

As a result of these concerns, the permit requires revising E&SC plans based on updates to the ESC Handbook Standards and Specifications for Soil Erosion and Sediment Control, when the approved plan expires (every 3 years).

Response to Comment 4: The commenter suggests that Tier II antidegradation provisions of the 20-CP need to include specific requirements related to climate change, including increased ambient and runoff water temperatures. Response: The 20-CP implements stormwater controls considered best available technology and enforces inspections and corrective actions that will be needed to adapt to storm conditions. In addition, the 20-CP now includes numerous conditions that will enhance compliance with the 20-CP by requiring plans for multiple pollutants and potential toxics. Water quality based limits are included and enforced through Part III.B.1 of the 20-CP requiring corrective action to ensure discharges meet applicable standards to maintain water quality. Part III.B.2 specifically addresses antidegradation of Tier II. The enhanced requirements spelled out for Tier II waters are meant to provide an additional level of protection for these high quality

resources. The Appendix C checklist Section b specifically recommends redundant (such as backup or secondary) controls in Tier II areas and gives specific examples of upgrades. As referenced in the prior response, the 20-CP will automatically implement any future updates to the Standard and Specifications that could be adopted to account for climate change.

The commenter's concern with climate change induced increase in ambient temperature would more broadly apply in a Use III or Use IV streams. Considerations should be made for encouraging infiltration practices or shading of ponds to reduce temperature increases, or even monitoring the temperature of any dewatering prior to discharge to ensure it doesn't cause the receiving water to exceed 68 degrees Fahrenheit in Use III or 74 degrees Fahrenheit in Use IV waters. To address this concern, a requirement for consideration of practices that impact temperature increases in use III or Use IV streams has been added.

Response to Comment 5 and 6: A commenter suggests 95% of sediment and phosphorus in streams comes from just a few of the stronger storms, and a significant amount comes from construction sites. Response: The Department is committed to adapting its regulatory programs to the anticipated stressors associated with climate change. It is for this reason that the proposed 20-CP revisions accounts for the recommendations by the Bay Program (http://chesapeakestormwater.net/wp-content/uploads/downloads/2014/04/WQGIT-APPROVED-ESC-EXPERT-PANEL-REPORT_LONG-04142014.pdf) related to the use of chemical treatment and focuses on water quality standards, which are effective even with more intense rainstorms associated with climate change. As described elsewhere in these responses to comments, the Department is very focused on taking the necessary steps to better manage the effects of climate change on stormwater through permits and through E&SC and SWM design and plan review processes.

Sediment is more likely to runoff during active construction than it is from post-construction sites, which is why under the Clean Water Act NPDES permits are required. However, stormwater quantity also washes out streambeds and erodes soils that also increase sediment in the receiving water. The 20-CP focuses on erosion and sediment control; whereas, other permits (MS4 or Industrial SW) focus on restoration related to post-construction runoff from urbanized areas or from industrial areas. The practices in the E&SC plan are the focus in this permit because they focus on the nature of construction activities specifically. However, quantity control would play a key role in reducing sediment when projects occur over extended periods of time. See Response to Comment 9 and 10 related to potential flooding. The commenter also points to the references to the 2011 Maryland Handbook as a weakness, however the Handbook is the standard in the State for E&SC. However it is important not to lose track of the fact that the Handbook and associated standards and specs are subject to change over time. Also refer to Response to Comment 93. The permit reference to the 2011

Handbook is modified to the ESC Handbook and now includes a statement “or its updated version”.

Response to Comment 7: A commenter recommends that MDE be a true leader in climate change actions. The commenter cites a Public Information Act (PIA) request for records regarding climate records as evidence that the Department isn’t taking leadership. The commenter asserts that there is a meteorological or climatological data aspect that the Department may rely on to implement this permit. Response: The Department is a leader in climate change actions. The meteorological or climatological data is very relevant to the State’s ESC Handbook’s Standards and Specifications and Design Manual. As mentioned in this section's “*Grouping – Climate Change Impacts Need to be Considered*” introductory paragraphs, the Department is very involved in analysis of the impacts of climate data and how the changes may impact the design requirements. Contrary to the commenters statements, the 20-CP requirements do not force changes to the ESC Handbook Standards and Specifications or the Design Manual.

The commenter also recommends taking more time to study climate issues before issuing the permit, to analyze and update numeric storm design standards. Response: The 20-CP addresses several issues that are important to address in the near term, including those laid out by those concerned with enforcement and other concerns stressed in this response document. The Department is deeply involved in workgroups with the Chesapeake Bay Program and other intrastate agencies to assess how precipitation patterns have changed and are likely to continue changing in the future. Despite not having these results, MDE is taking leadership in climate change by proposing immediate changes in the 20-CP. The 20-CP is addressing storm intensity by requiring inspections and corrective actions rather than relying entirely on a static design, among other changes. Because the 20-CP has improvements that can be implemented now, and automatically requires any future changes to standards and specs by reference, it makes most sense to adopt this permit now rather than wait for changes in design standards.

Response to Comment 8: A commenter indicates numerous entities have begun updates of specs or various documents and they urge MDE to review, contact, and, if necessary, coordinate with any of the below entities that have updated Intensity Duration and Frequency (IDF) curves and storm design standards based on current rain data and trends regarding impacts from a changing climate.

Response: Each of these were reviewed.

- 1) The Chesapeake Bay Program: Draft Memo summarizing 5 studies. The Department is an active participant in Bay Program workgroups. This draft is familiar to the Department. The studies referenced in this draft point to rainfall intensity projections that will increase across the

watershed in the range of 44%. The study indicates use of Intensity Duration and Frequency (IDF) curves based on historic precipitation analysis are likely to underestimate future precipitation. Lastly, the memo notes that a study of Maryland with resulting projects is underway with results pending. The commenters urge MDE to track and communicate with the authors of this study and analyze whether the projected curves should be immediately incorporated into this permit. Response: As noted in previous responses (Comments 3, 5 and 6), the 20-CP is based on erosion and sediment control Standards and Specifications. At such time as the Standards and Specifications are updated to account for climate change, the new provisions will automatically be required by this permit.

- 2) Chesapeake Bay Program Urban Stormwater Workgroup - This reference is to a project to develop future projected IDF curves for the entire Chesapeake Bay Watershed, with the goal "to design and build infrastructure assets to withstand anticipated future precipitation conditions". Infrastructure is one of the primary concerns for urban stormwater systems due to the potential for localized community flooding. The commenter suggests MDE to track and collaborate with this workgroup as necessary to implement the appropriate standards into the CSGP (we assume this means the 20-CP) and to implement similar goals and motivation into the design. Response: The Department is following this and other workgroups, and will use the findings to inform future updates to Maryland's ESC Handbook (Standards and Specifications) and Design Manual to account for climate change.
- 3) Virginia Beach, Virginia. The commenter refers to the Public Works Design Standards Manual, updated in 2020, that increases the 1-year, 24-hour design storm by 20%. The commenter suggests that the Department perform a similar analysis of Maryland as a whole, develop updated storm design standards applicable across the state. Response: The Virginia Beach design manual change is commendable. However, the analogy does not directly apply to the proposed 20-CP that is the subject of this public comment process. The Virginia Beach design specifications referenced by the commenter are analogous to a municipal version of MDE's statewide Stormwater Design Manual; it pertains to post-construction stormwater management as opposed to erosion and sediment control during the construction process. The 20-CP is more directly aligned with Maryland's Standards and Specifications for Erosion and Sediment Control (ESC Handbook) as opposed to the Stormwater Design Manual. Thus, the comparison to the Virginia Beach design specifications, while insightful, is not directly germane to the 20-CP permit, which has general statewide applicability to multiple and different kinds of construction projects.

Maryland is participating in a Federal Highway Administration Transportation Pooled Fund Program initiative, with NC, VA and DE, to update the region's Atlas 14 precipitation statistics over the next 2-3 years.

This is part of the overall effort by the Department to review data and forecasted precipitation characteristics in relation to potential updates of Maryland's Stormwater Design Manual and ESC Handbook.

- 4) Virginia Department of Transportation. The commenter suggests this revised bridge design manual, which incorporates climate change, can be incorporated into the permit. Response: A review of the document has found that it is not directly applicable to the permit currently under public review.
- 5) Maryland's Eastern Shore. The commenter refers to this study which recommends to "upgrade infrastructure to reflect future precipitation estimates". Included in the document are recommendations for upsizing pipe and storm drain infrastructure, utilizing more hybrid green/gray infrastructure, implementing a stormwater utility fee and adopting enhanced floodplain design criteria into local development standards. Response: MDE staff served on the steering committee for this study, conducted by Dr. Kaye Brubaker. The findings are generally consistent with similar global climate change model downscaling studies; however, it should be noted that the study was hampered by very limited historical data at a timescale to characterize individual storm events with a lot of confidence. A review of the document has found that it is not directly applicable to the permit currently under public review.
- 6) Anne Arundel County, Maryland - Updated 1-year storm designation to 2.7 inches in 2017. Response: The 1-yr, 24-hour storm was already 2.7 inches based on state specs (i.e. Page 2.11 of the Design Manual). There is no recommendation with this comment.
- 7) New York - The commenter points to the New York State Highway Design Manual, by the Department of Transportation, as an example of an agency taking climate change into account, projecting peak flow in culvert design to increase by 10-20%, depending on the geographic location. Response: The guidelines suggest that designers plan to use on-site detention/retention systems to retain the volume associated with that size storm event though it is not yet a requirement. This suggests and supports evaluating changes to Maryland's Design Manual and ESC Handbook; however, it doesn't relate directly to the current permit under public review.

Response to Comment 9 and 10: A commenter suggests that, due to climate change and increases in flooding events, the permit should require more frequent reporting or limit eligibility. A commenter also suggests that the permit requires reporting of all flooding events that impact the construction area in order to gather data on site-specific flood risks. Response: To be clear this permit is required regardless of where the activity occurs. This permit isn't intended to replace any of the other necessary permits and authorizations that are required for work within a flood plain or an area subject to flooding. This includes approvals from the Wetlands and Waterways Program, and the National Flood Insurance Program.

The permit incorporates a robust set of triggers that require notification of the Department. This, combined with observations by site inspectors, provides the opportunity to collect information about flooding events.

The Department is currently investigating ways to identify areas that are prone to fine geographic scale interior flooding, apart from the broader scale riverine flooding associated with Federal Emergency Management Flood maps. Given how localized this flooding can be, it is very challenging to do this in a comprehensive way, even for local governments. A tool being explored for characterizing coastal flooding is a crowd sourcing phone app called MyCoast, which allows people to submit photos of coastal sunny day flooding events (sometimes referred to as nuisance flooding). See <https://mycoast.org/md>

The inspection report now requires verification if the site was subject to any flooding. In addition for Part III.A.2, for phased projects that span longer periods of time (e.g., more than a half a year), a requirement to “Ensure that downstream impacts related to potential flooding are minimized” has been added.

Response to Comment 11: A commenter suggests denying general permit coverage (require individual permit instead) in areas subject to potential inundation by storms or coastal storm surge or areas designated by FEMA as a flood zone (areas not determined to be an area of minimal flood hazard), in areas subject to potential inundation by storm surge from a Category 1 or 2 hurricane, and areas projected to be at risk of inundation from storm surge when sea levels increase by two feet or less. Response: An NPDES permit for stormwater associated with construction activities, whether an individual or general permit, doesn’t determine the citing or location of structures. Instead, it contains conditions designed to control the discharge of stormwater during construction.

There are other programs that do address activities within the floodplain. The Department’s Wetlands and Waterways Program, for example, protects Maryland wetlands and waterways from loss and degradation. This protection is achieved through the regulation of the draining, dredging and filling of tidal and nontidal wetlands, the nontidal wetland buffer and waterways, including the nontidal 100-year floodplain through a permitting or authorization process implemented in close coordination with the federal government (specifically, the Army Corps of Engineers). Local floodplain management programs establish ordinances that regulate building in floodplains. This can range from exclusions from building in the floodplain to building code requirements..

Since this is a point of confusion, Part IV.C, clarifies that work performed within a floodplain is subject to other State, local and/or Federal approvals.

Response to Comment 12: A commenter suggests a re-opener to ensure modifications are made based on climate change analyses, reports and plans relevant to climate change. Response: Part IV.R of the permit provides a condition for the re-opening of the permit for changes in effluent standards or limitations. Also, as stated earlier, the permit requires the use of controls in the ESC Handbook (ESC technical standards; therefore, if the design standards change, the permit holder must follow them (no modified permit is needed).

Response to Comment 13: The commenter complains that the permit references “expected flow”, and then suggests the vagueness is unenforceable. Response: As described in other comments in this *Grouping – Climate Change Impacts Need to be Considered*, the ESC Handbook Standards and Specifications requirements contain expected stormwater parameters, which is why this section specifies that the “ESC Handbook serves as the official guide”. To the extent the commenter has broader concerns about how MDE could “possibly cite a permittee for pollution running off,” state law and regulations afford broad enforcement of any water pollution violation resulting from discharging pollutants or placing them in a condition likely to pollute waters of this State as defined in 9-101 of the Environment Article.

c. Grouping – Enforcement Clarifications

Response to Comment 14: The commenter points out that permits are required by the Clean Water Act to achieve and maintain water quality standards. To be effective, permits must contain clear, specific, measurable, and enforceable limits and requirements, and must be subject to strict enforcement when terms are violated. The commenter suggests the current permit regime fails on each of these measures. Response: The 20-CP has been organized to highlight Water Quality Based Limits (Part III.B), and to include specific and enforceable technology based limits. The operator is required to take corrective actions (Part III.D.1) when there are signs that their discharges have caused an exceedance of applicable water quality standards. These are consistent with the Federal approach in EPA’s CGP and considered best practices for construction. Where commenters have provided specific and clear recommendations to further strengthen the permit, the permit has been updated.

In order to clarify the criteria for water quality standards, the permit is updated to include specific reference to where the entire standards are found in regulation and in addition states the non-numeric criteria. In addition, the specific reference will be included on the authorization letter. Refer to *Grouping – Part I.B.3 WQ and Part III.B.1 Applicable Water Quality Standards* for further discussion on Water Quality limits and criteria.

Response to Comment 15 - 16: A commenter suggests that the Department has undertaken a small amount of enforcement actions related to erosion and sediment

control, and also suggests that this is at least in part the result of unclear permit terms. Response: The Department uses all available resources to enforce violations and is committed to a consistent, timely and appropriate compliance assurance program, which is protective of the public health and the environment while creating a credible deterrent against future violations. The permit contains clear and enforceable terms. Review the Fact Sheet for areas where the permit has been modified to improve it over the 14GP.

Response to Comment 17: The commenter notes that many jurisdictions across the state have been delegated authority by MDE to enforce provisions and requests greater clarity in the permit to the jurisdiction's delegated authorities in order to make a more uniform and more robust enforcement apparatus state-wide since the vast majority of the construction general permit provisions are enforced by local personnel instead of state personnel. Response: Certain jurisdictions across Maryland have been delegated enforcement authority in accordance with provisions of the Environment Article, Title 4-Sediment Control. MDE audits these jurisdictions to ensure these delegated enforcement Programs meet the minimum standards required of all delegated jurisdictions and provides recommendations necessary to ensure consistent enforcement is applied. Enforcement of the NPDES Construction Stormwater Permit has not been delegated to any jurisdictions and is solely within the authority of the Department. The State retains enforcement authority under Title 4-Sediment Pollution or Title 9-Water Pollution and in consultation with the delegated enforcement authority, if warranted, may elect to seek additional enforcement action to resolve documented significant violations and/or return the site to compliance. As referenced in the permit's fact sheet, enforceable terms have been added to the permit to enhance compliance, including the technology-based limits in Part III.A.1 and Part III.A.2 which spell out requirements from COMAR or the ESC Handbook, pollution prevention measures in Part III.A.3, and requirements for dewatering in Part III.A.4. Improvements to these conditions have been made based on input during the comment period and the following Responses are examples: 95, 103, 104, 106, 108, 109, 119, 120, 121, 124 and 129.

Response to Comment 18: The commenter focuses on the permit being only as effective as it is enforced, and suggests a lack of adequate staffing. The commenter also points to review of NOI as being inadequately staffed. Response: Similar comment was responded to in Response to Comment 61 related to review of NOIs, however this comment also ties to enforcement. Staffing levels in the Department are outside the scope of the permit.

Response to Comment 19 and 20: The comments describe how Mill Creek and Sam Abell Cove turn light brown after rains due to sediment and relate this to a development at the Woods at Myrtle Point and Lexington Exchange (aka Oak Crest). One commenter notes the situation is getting worse since 2004, and another notes that they have asked for help from MDE multiple times, only to find

the controls are in place as required. Some solutions suggested by the commenter include disturbing smaller areas and treating the water before it runs off.

Response: A summary of the inspection and compliance actions taken for these sites to date.

Woods at Myrtle Point: Our inspectors cannot address complaints regarding the County's approval of the development, however can address enforcement of the permit. The Department directed the site to repair/maintain controls on several occasions in response to rain events. The E&S plan been revised in coordination between MDE, St. Mary's County and the SCD as needed to ensure compliance.

Lexington Exchange (aka Oak Crest): The Department is currently evaluating the permittee's current compliance status and will take appropriate enforcement action as necessary. Lexington Exchange previously paid an \$11,400 penalty in April 2016 to resolve sediment control violations that included the failure to implement controls per plan and follow the sequence of construction and to resolve NPDES violations that included inadequate recordkeeping for the NOI.

These are sites that will improve based on the additional tools in the 20-CP for treatment of turbid waters before running off and the required corrective actions when water quality is impacted.

2. COMMENT CATEGORY – Part I - Applicability

a. Grouping – Part I.B Operator Clarifications

Response to Comment 21: The comment that “I.B.1.c” appears to be placed in error. Response: That same language follows in Part I.C.1.c. Part I.B.1.c has been eliminated in the Final Determination.

Response to Comment 22, 24, 26, 28: The comments in this grouping are from one state agency (SHA) asking who is required to apply and or sign for coverage. Response: The Signature Requirements in Part II.A.8 of the permit now clarifies the requirements for a signatory. When one Operator (or Agency) is responsible for the design and implementation, the Signatory should be one person who manages both entities, not two signatories at lower levels.

Response to Comment 23: A commenter is asking for clarification whether contractors need to file NOIs. Response: If they meet the eligibility requirements, then the answer is yes. The permit authorizes each entity to discharge stormwater during construction. Also refer to Response to Comment 71.

From EPA's 1993 FAQ when the program started: *“Who must apply for permit coverage for construction activities?”*

Under the NPDES storm water program, the operator of a regulated activity or discharge must apply for a storm water permit. EPA clarified that the operator of a construction activity is the party or parties that either individually or taken together meet the following two criteria: (1) they have operational control over the site specifications (including the ability to make modifications in specifications); and (2) they have the day-to-day operational control of those activities at the site necessary to ensure compliance with plan requirements and permit conditions (9/9/92 Federal Register page 41190). If more than one party meets the above criteria, then each party involved must become a co-permittee with any other operators). For example, if the site owner has operational control over site specifications and a general contractor has day-to-day operational control of site activities, then both parties will be co-permittees.

When two or more parties meet EPA's definition of operator, each operator must submit an NOI, and either include a photocopy of the other operators' (NOI(s) or the general permit number that was assigned for that project. Under EPA's storm water construction general permits, the co-permittees are expected to join in implementing a common pollution prevention plan prior to submittal of the NOI, and in the retention of all plans and reports required by the permit for a period of at least three years from the date that the site is finally stabilized."

Response to Comment 25: A commenter asks if on-site asphalt and concrete plants must obtain NPDES coverage. Response: Yes, these operations were required to have coverage under MDE's MM General Permit as noted under the 14GP and are still required under this permit. The permit language is not new and was contained within the 14GP. The operator of such a plant should be the one to apply for coverage.

Response to Comment 27: A commenter asks for a definition of a "Common Plan of Development". The same commenter asks if this means a phased project, or projects in separate areas, etc. Response: The definition is found in the Appendix. Related to if this means phased projects, there is a slight difference between Maryland's definition and that provided by EPA, since EPA clarifies that the project area is a contiguous area, where different activities took place at different times etc. A Common Plan isn't defined as a phased project, however a phased project can be a common plan. To reduce confusion, clarifications are being made in the definitions. The "Common Plan of Development" definition is updated to include clarifying language that it is for a contiguous area, where activities may be taking place at different times on different schedules under one common plan.

Response to Comment 29: A commenter suggested that only the owner should be getting permit coverage and that the general contractor should then be covered when the site owner accepts the responsibility for stormwater permit compliance management on the construction site. Response: The permit is consistent with the Federal Regulation and specifies in clear language that it requires all “Operators” to have coverage. An owner that is not an Operator as defined in the permit doesn't require permit coverage, however any contractor considered an Operator would. The language provides clarity on who is responsible for applying for coverage. This clarification highlights previous confusion over who was required to have permits. Also refer to Response to Comment 71. To reduce any future confusion, a definition for co-permittee has also been added to the permit.

b. Grouping – Authorized Discharges

Response to Comment 30: A commenter suggests vehicle washing pollution prevention requirements referenced in Part III.A.3.b are redundant with the description of vehicle being listed as an eligible discharge in Part I.C.2, and therefore can be removed. Response: For this example, the Permit only authorizes discharges so long as certain requirements are met. Thus, the eligible discharges in Part I.C.2 are only authorized if the permittee is in compliance with the permit requirements in Part III.A.3.b. No change made.

c. Grouping – Part I.E Requiring an Individual or Alternative General Permit

Response to Comment 31: The commenter suggests that Part I.C.1.d which refers to “*Stormwater discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining.*” is in error, since mining is covered under the Mineral Mine General Permit (as noted in Part I.E.2). Response: The Part I.C.1.d is correct. It indicates that prior to mining, any land disturbance such as roadways, building or stockpile would be covered under this permit. Once active mining starts it would be under the mineral or coal mining general permits. No change made.

d. Grouping – Part I.F and I.G Expired Permit and Duty to Reapply

Response to Comment 32: This comment expresses confusion about the “*F. Continuation of an Expired General Permit and Permit Coverage*” vs “*G. Duty to Reapply*”. Response: These are specific to two individual situations. Condition F is the statement that unless terminated by the Department, coverage under the General Permit will administratively continue in full force and effect until such time as the permit is replaced by a new permit. In this situation under such an administratively-continued permit, the permittees are obligated to request to be extended on the existing permit until it is re-issued. Condition G simply requires the permittee to reapply under the new permit once it is issued. Hopefully there is no reason to have to continue an expired permit, however we know in the past this

has happened and it is important that the permit address both situations. No change made.

3. COMMENT CATEGORY – Part II – Authorization Under This Permit
a. Grouping – NOI Clarifications

Response to Comment 33: The commenter recommends eliminating paper NOI submissions. Response: Although we can envision no reason why a paper submission would be made, it remains available as a potential tool if needed. No change made.

Response to Comment 34 and 41: A commenter asks for II.A.2.b. where projects have multiple sites, what lat/long to use? Another commenter recommended requiring that the coordinates represent an approximate center point of the area of disturbance and with at least 4 decimals. Response: In these cases, the lat/long may be a central point that falls within one of the properties. The lat/long is modified to specify it in decimal degrees with at least 4 decimals, and clarify for large properties or projects that it is a central point within the property boundary.

Response to Comment 35: A commenter asks for II.A.2.e., if the name of the preparer will be added to the eNOI. Response: In the past, various entities have drafted eNOI. As indicated in the draft, roles are identified in the permit and the eNOI will match the permit language for consistency. So the answer would be yes, there will be changes to the eNOI once the permit is issued to reflect the items in the permit. The roles and required information identified are Owner/Operator's name and owner's signature (referred to a signatory or responsible party), address, telephone number, email address and principal contact; the preparer's name (often the permit contact), organization, email address and telephone number; the resident agent (for corporations/LLC) name and address, if the business is not incorporated or registered to do business in Maryland. No Change.

Response to Comment 36: A commenter asks clarification on "Identification of Receiving Water", how to identify and correctly respond. Response: In cases of stormwater, the receiving water will be determined by the watershed the rain falls in. Web based tools are available for those filing an NOI on the Department's website and can be found here: <https://mdewin64.mde.state.md.us/WSA/TMDLWaterSheds/index.html> . The commenter notes that the term isn't used consistently throughout the permit, citing specific areas that need to be addressed. The term "receiving water" in the final 20-CP has been modified to consistently consider receiving water(s) in Parts II.A.2 (l, m, n) and in the Appendix A.

Response to Comment 37: A commenter notes on Part II.A.2.o&p, that since basic information regarding the SWM BMPs and waivers are required for the NOI, prior to authorization, that an approved SWM Concept Plan would be required prior to submitting the NOI. Response: This comment confirms that in order to complete portions of the NOI, it has been and will continue to be the practice that the applicant needs to have concept plan (SWM) in mind and all their paperwork in the approval process through the jurisdiction. Prior to approving the authorization, the E&SC must be approved. But the Concept Plan (SWM) and the information contained therein is also important in completing the NOI. No change.

Response to Comment 38: A commenter objects to the requirement to list in Part II.A.2.x about listing related permits, since they may not know all permits when multiple entities are involved. Response: The objection is that this may infer you need to identify any permits that are at the site by others who have permits. The requirement is only for your own permits that are related. The permit now indicates that you list your own related permits at site, or if part of a common plan the permit of the owner.

Response to Comment 39 and 40: Commenters ask regarding signature requirements in II.A.8 requirements, if we have changed who may sign as a duly authorized official. Response: The Department has made changes in the permit to clarify who can sign the various documents, such as NOI, transfers, or SWPPPs, consistent with State and Federal Regulation and EPA's Construction General Permit for signatures of SWPPPs.

Response to Comment 42: A commenter asks if the requirement in Part II.E to keep the E&SC and SWM updated means those must be uploaded. Response: The answer is no. The requirement here is consistent with state requirements for keeping your E&SC and SWM updated. No Change.

b. Grouping – Deadline for Coverage

Response to Comment 43, 45-46, and 48 (part 1): There is a consistent and similar theme throughout this section. Primarily the focus is the 60 days specified in the Deadlines. Commenters wonder if this 60 days is the maximum amount of time the Department will take to process an application, or the minimum such time? Related comments (see Comments 62-70) suggest that the 14 Day Public Notification Period isn't sufficient.

Response: Based on the comments provided, the Permit has been changed to now require the permittee to submit a complete application for an NOI at least 14 days prior to commencing construction activities. A complete application will include an approved erosion and sediment control (E&SC) plan, a complete SWPPP when required and an antidegradation checklist if required. The Department believes fourteen days from the date of receipt of a complete application including an

approved E&SC has allows members of the public an adequate opportunity, if requested, to review the Plan from the relevant local authority, as explained in the response to Comments 62-70 (“Public Notification Period”). Coverage under the permit will begin once MDE issues a letter of authorization. MDE’s website has the anticipated review time for all permit and authorizations.

<https://mde.maryland.gov/programs/Permits/Documents/Proposed-CY20-Turnaround-Times.pdf>. MDE’s stated turnaround time for general permit coverage is 45 days. However, MDE will endeavor to continue to issue such authorizations within 48 hours after this 14-day Public Notification Period ends. The permit Part II Table 1, Deadlines for Permit Coverage, NOI Submittal Deadline has been updated to indicate a complete application is required at least 14 Days prior to construction for new operators, with notes related to the Department may require additional or actions prior to approval.

Response to Comment 44: A commenter asks if a homebuilder building individual lots in a common plan of development from a Land Developer is considered a New Site or New Operator. Response: The permit says that a new operator is through transfer of the authorization of the entire common plan of development to a new entity. Because the operator of the individual lot will not be transferred, the answer would be a New Site.

Response to Comment 47: One commenter asks if an increase in project acreage only applies to mass grading / land development disturbance, or would it apply to individual lot vertical construction activity resulting from a homebuilder buying additional lots at an existing community. Response: An increase in construction activity in this context is specific to your activity as an operator. This would trigger a request for an increase in Construction Activity. Refer to Comment 44, where the grading performed by the common plan developer and the individual home builder file separate NOIs. If you currently have authorization within a common plan and have purchased additional sites, you would apply under the “Increase in Construction Activity”.

Response to Comment 48 (part 2) and Comment 52 (part 2): Commenters ask if emergency authorization requirement to provide NOI submission within 7 days of the declared emergency, requires an approved final Erosion and Sediment Control (ESC) plan. Response: In Part II of the permit, the text states that, “A *person with emergency authorization is authorized to discharge on the condition that a complete and accurate NOI is submitted within 7 calendar days after commencing earth-disturbing activities, and must ultimately complete all requirements to obtain regular coverage under the general permit.*” Therefore, you have 7 days to get the proposed plan to the authority prior to submitting the NOI, and after the 14 day notification period, you then must have the completed a final approved ESC plan to be authorized. No Change.

Response to Comment 49 and 50: A commenter suggests that the State be required to take an enforcement action for any unpermitted discharge through the permit. Response: The intent of the language is to notify the permittee of the possibility of enforcement for any violations of the permit. No change.

Response to Comment 51: A commenter suggests that 30 days is too long to process a transfer of ownership. Response: The Department chose 30 days as consistent with the processing of hard copies of applications. However, with the use of electronic applications, the process should take no longer than processing a new source. Thus, the time frame can be reduced to 14 days. The new permit will require transfers to make the request 14 days prior to the new owner taking operational control.

Response to Comment 52 (part 1): A commenter suggests providing an email address and method to submit the emergency authorization. Response: A new form is available for customers who need to submit an emergency authorization. The form has the email address in it.

Response to Comment 52 (part 3): A commenter requests a definition for the term “complete NOI” related to requirements for emergency repairs. Response: The permit provides clarification in Part II.4.A It states what is expected in in the eNOI in reference to the ESC approval, *“Prior to submitting your NOI, you must have submitted your E&SC plan for approval to the appropriate approval authority in accordance with COMAR 26.17.02.09 E(4) and 26.17.01.07. Once the plan is approved, you must submit the proof of plan approval in the form of the scanned signature page, or a signed letter indicating approval from the appropriate approval authority.”* Therefore, the emergency authorization must be followed by a submitted NOI. The authorization approval process follows these steps: 1. Review of eNOI, 2. Approval of eNOI to public notification, (barring no comments are made from the public the NOI moves to the next step) 3. Final review of eNOI, 4. Approval of eNOI with authorization approval letter generated. No Change

Response to Comment 52 (part 4): A commenter requests clarification on the response time for the approval of the emergency work granted by the Department. Response: There is no set time frame for a response to the emergency authorization request. The complexity of the emergency work, who or what it directly affects, and other extraneous events or issues may have some bearing on the turnaround time for the approval or rejection of the emergency authorization request. However, the Department places these types of incidents as high priority and works diligently to process all emergency authorization requests in a timely manner. No Change

Response to Comment 53: A commenter asks if they will have to resubmit NOIs within the 6 months stated in the deadline table to continue to have coverage.

Response: If SWPPPs are appropriate you should implement and upload them. This is why time is provided for continuance. The answer is yes, you must apply for continuance under the new permit.

Response to Comment 54: Another commenter suggests that an enhanced level of review of NOIs by the Department should be included in the permit. Response: The commenter does not suggest any particular amendments. The Department strives to provide the best customer service by effectively processing and reviewing applications for coverage.

c. Grouping – Modification or Transfer Requirements

Response to Comment 55: A commenter asks for clarification on what is involved with increasing the LOD. Response: For a Common Plan of Development, an NOI is required for any increase in LOD. For other projects, it would be triggered by an increase of 1 acre or more. Either of these would include a public notification period. However, in review of II.A.11, the term “Change NOI” is unclear and has been changed to “Modify/Amend NOI”.

Response to Comment 56: A commenter asks about transfers when there are “a permittee and co-permittee”. Response: Each operator (permittee and co-permittee) should apply and have permit coverage and receive their own individual permit authorization number (refer to Response to Comment 71). Any operator may transfer coverage independently of the other.

Response to Comment 57: A commenter asks if during a transfer, will the SWPPP need to be developed by the new party? Response: Yes, even if it is just a modified version of the SWPPP prior to the transfer.

d. Grouping – Permit Fees

Response to Comment 58: A commenter suggests that the Department promulgate new fee regulations to increase fees to cover costs of the program. Response: The fees are established in Maryland Regulations COMAR 26.08.04.09-1(B)(1), as opposed to within this permit. As acknowledged by the commenter any fee increases or new multipliers for calculating fees are beyond the scope of the public comment process for this permit.

Response to Comment 59: A commenter requests a fee exception for townhomes, similar to what was proposed for single family home. Response: A fee will not be assessed for a single family home in a common plan of development only if it is less than an acre of disturbance. Fees are determined based on the regulation in COMAR 26.08.04.09-1C(2)(a) which has no fee for less than an acre, however for more than an acre fees are assessed (for instance, \$100 for 1 to less than 10 acres). Townhomes will have additional parking and

other considerations that will result in the area of disturbance to likely be over an acre. No Change.

Response to Comment 60: A commenter requests clarification on the fee exception and how it relates to “grading and utility work”. Response: The use of grading and utility work in the draft related to fees was an attempt to try explain why single family homes are allowed special consideration. The more precise language is that a fee isn’t applicable when NOIs for single family homes, are less than an acre (COMAR 26.08.04.09-1C(2)), when applies to single family lots identified on Standard Plans, when on the common plan of development approved E&SC plan. If the home development requires its own E&SC plan, then the fee and public notification period exceptions would not apply. The exception for fees in the final permit applies only to single family home builders within a common plan of development, where the common Plan of development E&SC specifies single family home lots on Standard Plans, and the lots individually themselves each are less than an acre.

e. Grouping – Staffing for Submission Review

Response to Comment 61: Multiple commenters comment on staffing concerns, including comment 16 regarding enforcement; comment 18 regarding approved E&SC plan review; comment 54 regarding level of application review; comment 141 about operators staffing; comments 155, 156 and 159 about water quality standard new source review; comment 160 about training for staff; comment 180 about additional controls; comment 233 about pre construction meetings; and comment 266 about SWPPP review. The commenter for comment 61 provides some background as to why the Division responsible for authorizations under the permit should have additional staff. Response: The permit doesn’t specify how many people are dedicated to permitting or inspections. Those decisions, which include delegation to approval of E&SC and SWM plans, are outside the scope of this permit issuance process.

f. Grouping – Public Notification Period

Response to Comment 62-63, 65: A commenter requests that the 14 day notification period not be started until the final E&SC plan verification is uploaded to the ePermits system. A commenter suggests that access to approved E&SC plans through the approval authority is problematic, to the point that it prohibits or limits public participation. A commenter requests access to all NOIs, even the approved NOIs. Response: Refer to Response to Comment 43, 45-46, and 48. A complete application will provide for informed public comments as well as full review by the Department. The full 14 days is adequate, as evidenced by EPA’s CGP and associated 14 day period. Although not part of the permit itself, using the ePortal system, the Department intends to provide access to all NOIs in process and issued authorizations under the permit.

Response to Comment 64: A commenter provides reasons why 14 days isn't sufficient to review E&SC plans and suggests that the e-Permits database should be engineered as the central repository for planning documents. Response: Refer to Comments 62-63, 65 for response to the 14 days notification period. Zoning and development decisions are controlled by the jurisdiction's approval authority. The plan approval process by this jurisdiction does take time, and those with interest in specific projects may make inquiries well in advance of the public notification period under this permit. There are several reasons why the E&SC plans are made available through the approval authority and not in a central location within the state (i.e. the e-Permits database). Examples of the reasons follow.

- The E&SC plans are in various formats.
- Plans include mark-ups, that over time are important for the jurisdiction performing inspections, but are not relevant to the approval of the NOI.
- The approval authority delegation allows the jurisdiction to be more restrictive than other counties or jurisdictions.
- The documentation storage requirements are separate from the eNOI system and maintained by the appropriate agency.

Creating a central depository for all information faces a lot of hurdles and is beyond the scope of this permit.

Response to Comment 66-67 and 76: Commenters request that the department (1) establish a comment period of 30 days; (2) require the submission of all information necessary for Departmental and public review before the 30-day comment period begins; and (3) removing any reference to a subsequent comment period. Response: Related to item 2, the Department has now modified the permit to require a complete application prior to the notice period (Note that Comment 43, 45-46, and 48 lead to changes that now require a complete application prior to public notification period.). Related to item 1, the public notification period is less, since what is being reviewed is the approved E&SC plan, established based on established and regulated standards and specs. What is being reviewed is more narrowly focused, as opposed to the traditional 30 day public comment for an individual permit in which the entirety of the permit and its conditions are subject of such review and comment. It is also consistent with the 14 days notice period in the EPA CGP. Related to number 3, the Department has the ability at any time to require an individual permit, and the Department is willing to consider input at any time to that effect. The final permit requires a completed and signed E&SC, SWPPP, Antidegradation Checklist, payment, as part of a complete application, prior to the 14 day public notification period.

Response to Comment 68: A commenter is concerned that third parties may hold up projects by presenting issues related to approved plans and thus an authorization will be delayed. Response: While the Department understands and appreciates the concerns, public comments on whether the E&SC plan does not

meet State erosion and sediment control or stormwater management standards is beneficial.

Response to Comment 69-70: Commenters ask if the exception for single family homes from public notification period for in a common plan of development can also apply to townhomes. Response: The considerations underlying the exception for a single family home do not apply to townhome development. Townhome development is more complex and the earth disturbances associated at one time are larger. In addition they are not typically identified on a Standard Plan inclusion to the E&SC for the Common Plan of Development permit authorization. Due to these reasons, townhome development necessitates the 14 day public notification period.

g. Grouping – Authorization Approval Clarifications

Response to Comment 71: A question is raised if the requirement for authorization of owner or operator is duplicative and will increase requirements on the regulated development community. Response: The requirements for coverage stem from the Federal Regulations (40 CFR 122.26(c)). You apply for coverage if you are an operator, as defined in the permit. (also Refer to Comment 23). We clarify this in the permit so that those not familiar with the Federal Regulation understand their obligations under the permit.

Response to Comment 72 and 73: A commenter asks for clarification regarding what it means to have a final approval of an E&SC, specific to a “PRD” approval stamp or an approval letter. Response: These terms may be specific to the approval authority. A final approval means the proof that the final accepted E&SC plan was signed by the approval authority and the engineer. A letter from the approval authority verifying the E&SC or SWM have been completed or a scanned copy of the signature block is acceptable proof that a final E&SC has been approved by the approval authority. In cases where the authority has waived SWM, proof of the waiver should be provided in lieu of the SWM. The permit Part II.A.5 is updated to clarify that documents required for authorization are the proof of the approval from the approval authority, either in the form of an approval letter, or a copy of the actual stamped and approved page in the document or the exemption for SWM from the approval authority. Also refer to Comment 362.

Response to Comment 74: A commenter asks II.B.1 if the NOI goes to public notification only when the final SWM/ESC is achieved? Response: The public notification starts when a completed application is received as specified in II.B.1, which requires approved E&SC plan, fee payment, and when applicable the SWPPP and Tier II checklist. This is a change from the Tentative as noted in response to Comment 66, 67 and 76. Also the NOI itself requests information (Comment 37) that would be found on an approved concept plan (SWM).

Response to Comment 75: A commenter asks if for large scale linear (highway or railroad) phased projects, if an NOI can be approved with only final ESC approval and concept Plan (SWM) approval or SWPPP for initial phases of the project. Response: The answer is similar to the Comment 74, in that the authorization cannot be approved until E&SC is approved by the approval authority. However large public sector projects are frequently designed and approved in phases or segments. These State and federal projects are approved by MDE, or through SHA's delegated program. To address these projects, Part II.A.4.a has been amended to make it clear that these linear phased State and federal projects can begin grading upon E&SC approval of the relevant phase, and approved Concept SWM Plan for overall stormwater management. Additional construction of these projects may not begin until the approval of the Final SWM. Definitions for Concept SWM Plan and Final SWM Plan have been added.

Response to Comment 77: A commenter asks if the process for submitting an approved E&SC requires the applicant including specific comments addressed from the approval agency (PRD) with the approval letter or signed documents. Response: As long as the specific comments were addressed and the E&SC plan was approved off, it is sufficient to present to the MDE proof of the approved plan.

Response to Comment 78: A commenter involved in phased projects suggests that requiring an approved E&SC prior to issuing an authorization will cause delays in construction. Response: An approved E&SC plan prior to authorizing a discharger was required under the 14-GP and is still appropriate under the 20-CP. However, the final permit does now require the documentation to be completed prior to the 14 day public notification period. Refer to Comment 66-67 and 76.

Response to Comment 79: A commenter suggests an NOI being the functional equivalent of an individual permit (Environmental Defense Center v. U.S. Environmental Protection Agency, 344 F.3d. 832 (9th Cir. 2003)), that allowing only comments on the E&SC plan is too narrow in scope. Therefore comments should be accepted on more broad aspects of the NOI. Response: While the Department disagrees with the applicability of the case cited by the commenter, the Department does allow for input during the 14 days. The 20-CP has incorporated that a complete application is filed prior to the 14 day public notification period. Refer to Response to Comment 66-67 and 76. The Department has changed the Permit to clearly state that comments may be submitted on the NOI and the applicant's ability to meet the Permit's effluent limitations and any applicable water quality standards. The Department notes that the most useful such comments would most likely relate to the E&SC plan, comments from other agencies as to their areas of statutory responsibility (such as, for example, comments from DNR on controls to protect threatened or

endangered species), and to the antidegradation review, or whether a SWPPP is required.

Response to Comment 80: A commenter asks why an authorization would be issued with a faulty E&SC plan? Response: The purpose of the approval process is to ensure the plans correctly manage erosion and sediment runoff and stormwater management through the jurisdiction and the delegation of authority. Allowing for public notification and comment on NOIs also helps to ensure the plans are not faulty.

Response to Comment 81: A commenter identifies Part II with the inserted wording “Comment Period”, which is provided for an individual permit, but was mistakenly included in the draft permit. Response: The draft permit used inconsistent language for the notification period, which also differs from EPA’s “Waiting Period”. The language in the permit regarding the 14 day waiting period is corrected to consistently reference it as the “Public Notification Period”.

4. COMMENT CATEGORY – Part III.A – Technology-Based Limits

a. Grouping – Economically Practicable

Response to Comment 82: A commenter asks for clarification about what “economically practicable” and “extent achievable” mean? Response: The source of the term is EPA’s CGP. The phrase refers to aspects beyond the requirements of the E&SC or SWM, which are mandated in Maryland. Most technologies for stormwater pollution prevention are implemented universally with no question about the cost or achievability. An example would be use of training to reduce the potential for spills that are not cleaned up properly. Training should be economically practicable and achievable through simple meeting with staff. However, a technology to utilize satellite technology and lasers to remotely identify and address spills may not be economically feasible. To what extent does the permittee consider the options? That will depend on the situation, and any determination that a practice isn’t economically practicable should be documented in case you are challenged by an inspector. If for instance you identify 3 options for controlling turbidity and choose the cheapest of the three, that meets the intent of the language. For instance, selection of a polymer to address turbidity. However, if it doesn’t achieve the objective, the next most expensive option would need to be considered etc.

Response to Comment 83: A commenter asks if allowing for economically practicability is too loose of a standard and reflects on economic benefit from building a specific project. Response: It is noted that some development does result in economic benefits and others are public investment in infrastructure. The purpose of the permit isn’t to penalize the permittee but rather to require resources be used to the adequate protection of resources as the project is undertaken.

Response to Comment 84: A commenter suggests that a turbidity standard be used rather than an economic standard. In other words, the permittee should demonstrate that they can meet the requirements of the permit. Response: The permit mirrors the EPA CGP, by including both the economic standard, and includes the Water Quality-Based Limits which are based on the State's water quality standards. Part III.B.1, the General Effluent Limitation to Meet Applicable Water Quality Standards. In Maryland regulations (COMAR) the turbidity standard is an instream standard, not an end of pipe limit. In COMAR 26.08.02.03-3, the water quality standard "Water Quality Criteria Specific to Designated Uses" is:

- (a) Turbidity may not exceed levels detrimental to aquatic life.*
- (b) Turbidity in the surface water resulting from any discharge may not exceed 150 units at any time or 50 units as a monthly average. Units shall be measured in Nephelometer Turbidity Units.*

b. Grouping – Part III.A.1 Control Measure Considerations

Response to Comment 85: A commenter acknowledges the benefits of including citations in the permit rather than relying on vague references to the regulations.

Response to Comment 86: A commenter asks to what extent the upstream run-on needs to be taken into account when designing stormwater controls. Response: When designing stormwater controls, upstream run-on is accounted for by the design standards contained within the ESC Handbook, defined in the Appendix A.

Response to Comment 87: A commenter asks about streambank erosion and scour in the immediate vicinity of discharge points. The term immediate vicinity is suggested too vague and should be clarified for enforceability with a specified linear feet from the discharge point or with narrative criteria to the same effect. Response: This language is a design consideration that deals specifically with impacts due to discharge velocity and in Maryland relies on velocity dissipation devices. The design of stormwater BMPs utilize the ESC Handbook for "Maryland Standards and Specifications for Soil Erosion and Sediment Control;" here, specifically in Section D-1 PIPE SLOPE DRAIN, D-2 STONE CHECK DAM, D-3 INFLOW PROTECTION, and D-4 FOR OUTLET PROTECTION. This section of the Manual contains very specific design considerations. Additionally, scour or erosion due to this discharge will be considered based on the observations of an inspector.

Response to Comment 88 - 90: The commenter requests clarification as to whether the permit's "stormwater controls" in Part III.A.1 (&III.A.1.a.ii.) (&III.A.1.c.ii) refers to permanent SWM features or temporary ESC features. That commenter also asks what is meant by the use of "phase" in III.A.1.c. Response: Stormwater controls E&SC and pollution prevention that are used

during the construction project. Phase in this context refers to a ground disturbance planned that requires specific stormwater controls to be put in place. By way of example, if a sidewalk is to be installed requiring controls be put in place, and later a street is being constructed which requires controls to be put in place, each being installed independently over time, then each can be considered a phase. A review of the permit for any potential confusion did identify one case where SWM is taken into account. For additional clarity Part III.2.b lists an infiltration post-construction stormwater control, meaning SWM.

Response to Comment 91: A commenter asks that when any manufactured stormwater controls are used, that the permittee should provide a list of manufactured stormwater controls being used on site to the appropriate inspection authority. Response: Any manufactured control would be called out on the E&SC plan, so a separate list isn't necessarily required.

Response to Comment 92: The commenter asks if the sentence in subsection III.A.1, with the phrase "this requirement" immediately preceding paragraphs a. through d. is in error. Response: The phrase "this requirement" references the requirement contained in Part III.A.1 "Control Measure Selection and Design Considerations". The phrase "(to design, install, and maintain stormwater controls)" was added to clarify.

Response to Comment 93: The commenter suggests that "the expected amount, frequency, intensity, and duration of precipitation" needs greater clarity. Specifically, the term "expected" should be deleted or amended so that the "frequency, intensity, and duration of precipitation" references an actual and credible source of information. Response: The source of the sizing for construction is incorporated in the ESC Handbook. For example standards for earth dikes "Use the two year frequency storm with NRCS methodologies (i.e., TR-55, TR-20), assuming the worst soil cover conditions to prevail in the contributing drainage area over the life of the earth dike", for temporary barrier diversion the ESC Handbook requires "use the two-year frequency storm elevation plus 1 foot freeboard", and in other cases designed capacity is specified such as Riprap Outlet Sediment Trap where the "storage volume is all wet and equal to 5400 cubic feet per acre of drainage area". For post construction stormwater management the Design Manual refers to universal sizing criteria which provides tables used for sizing Rainfall Depths Associated with the 1, 2, 10 and 100-year, 24-hour Storm Events. To reduce confusion on the requirements for ESC, a reference to the most recent version of the ESC Handbook for Erosion and Sediment Control and Design Manual for post-construction stormwater management, to account for any updates based on climate change projections. has been added to clarify where the expected amount, frequency, intensity, and duration of precipitation is defined.

Response to Comment 94: A commenter suggests that the term “control” in the phrase “control stormwater volume, velocity, and peak flow rates” needs greater clarity such as a definition in Appendix A or an actual numeric criteria associated with it. Response: The actual design standards and specifications are provided in great detail in the Design Manual and the Handbook. These required resources (Design Manual and Handbook) contain the specificity to design, install and maintain stormwater controls. (Refer also to Comments 13 and 93 for similar concerns). Part III.A.1 of the Permit states that “[t]hese stormwater controls at a minimum must be developed in accordance with the requirements established in Title 4, Subtitle 1 of the Environment Article, Annotated Code of Maryland (Sediment Control); and as specified in the ESC Handbook and Design Manual.”

Response to Comment 95: A commenter suggests routine maintenance on stormwater controls by the close of the next business day is not always possible, providing examples of very large storm events where complete reinstallation may be required, or where dewatering may be necessary to make a repair. They suggest there may be no forecasted rain as another reason to be allowed more time. Response: The request is that an inspector should be able to authorize extensions based on reasonable justifications. The inspectors have enforcement discretion that they can exercise in situations like this. The commenter also requests a definition of what is routine maintenance. A definition for maintenance specifically referring to the Handbook has been added as a reference to the routine maintenance requirements for each stormwater control. See also Response to Comments 211 and 275.

Response to Comment 96: A commenter requests a definition of Business Day. Response: This permit will use the definition used by EPA in its permit: “Business day – for the purposes of this permit, a business day is a calendar day on which construction activities will take place.” This is appropriate as various contractors or operators would have varying days they operate. This definition of Business Day has been added to the permit.

c. Grouping – Part III.A.2 Erosion and Sediment Controls

Response to Comment 97: A commenter asks if section Part III.A.2 is necessary since it essentially repeats the requirements in what is required for an approved E&SC plan. Response: The references are considered limits and including them in the permit is appropriate.

Response to Comment 98: A commenter suggests in Part III.A.2.b., that the permit should either require avoidance of compaction of soils or require use techniques that rehabilitate and condition the soil, but not both. Response: Part III.A.2.b has been updated to indicate either avoid compaction or require rehabilitation or conditioning as appropriate.

Response to Comment 99: A commenter asks about Part III.A.2.b.ii which references "Necessary to support vegetative growth", to what level and to what extent of coverage? Response: The ultimate test will be in the stabilization requirements for final vegetative or nonvegetative stabilization in Part III.A.2.f.

Response to Comment 100 and 101: One commenter suggests Part III.A.2.d "Minimize steep slope" is a vague provision while another suggests adding the phrase "to the extent practical" because it is perhaps too restrictive. Response: As to being too vague, the Handbook provides numerous references to steep slope considerations (including their location on plans, stabilization requirements, erodible soil constraints) which are implemented into the approved E&SC plan. The requirement to minimize steep slope disturbances means "*reduce and/or eliminate to the extent achievable...*". For linear projects it may not be possible to avoid disturbing steep slopes altogether, however evaluating your alternatives for areas with steep slopes and focusing on reducing the footprint will result in less erosion. The permit now supports the concepts in the approved plan. Any deviation or modification of an approved plan to increase steep slope work would be contrary to the permit requirements. To reduce any confusion on what a steep slope is, the definition in Appendix A will refer to the Standards and Specifications Handbook.

Response to Comment 102: One commenter asks if tracking doesn't need to be cleaned up during the day or over the weekend. Response: The permit specifically requires track-out controls and stabilization, in addition to restricting vehicle use to properly designated exit points. Track-out should be the exception if these are followed, however the permit does go further to indicate if there is trackout it must be dealt with quickly with time frames provided.

Response to Comment 103 and 104: A commenter notes that the language regarding track out, dust suppression and sediment traps in Part III.A.2. h, j , k and l is specific and clear.

Response to Comment 105: A commenter asks if Part III.A.2.o.iv regarding hosing down or sweeping stockpile debris only applies to this section. Response: This condition and requirements are specific to managing stockpiles or land clearing debris piles.

d. Grouping – PART III.A.2.a and Appendix B Stream Protection Zone (SPZ)

Response to Comment 106: A commenter notes that the inclusion of stream protection zone requirements is encouraging.

Response to Comment 107: A commenter asked how these requirements for Tier I/II affect projects already under construction with coverage under the 14GP. Response: The Tier II antidegradation review should have already been completed

under the 14GP. For continuance of coverage, you should upload the 14GP's **Construction Stormwater Antidegradation Checklist** to verify for the Department that it was completed. If you hadn't completed a checklist, or antidegradation checklist you need to submit a **20-CP Antidegradation Checklist**.

Response to Comment 108 and 111: Several commenters ask about what constitutes "accelerated stabilization"...in cases where construction matting or gravel is used for linear overhead electric projects specifically, would that constitute accelerated stabilization? Response: The Glossary of the ESC Handbook (Page GL.1) defines accelerated stabilization as "The providing of temporary or permanent cover by the end of the work day to prevent erosion." Yes, the use of a stabilized temporary surface (gravel or mat) would meet this requirement, especially in light of it being permanently restored following construction. The definition of accelerated stabilization has been added to the Appendix.

Response to Comment 109: A commenter asked if there are any grading limits outside of the 10 acre grading unit limit within SPZ and 20 acre grading limit adjacent to SPZ. Response: There are no specific references beyond the ones in Appendix B, however grading unit size will be dependent on local conditions, such as areas of highly erodible soils or steep slopes. The approval authority may even determine a smaller size of each grading unit, and the overall cumulative earth disturbance at any one time during construction based on local soil conditions.

Response to Comment 110: A commenter asks about "what constitutes a stream"? Response: The Department has added the definition of a "Stream" and "Intermittent Stream". The definition of intermittent is consistent with non-tidal wetlands (COMAR 26.23.01.01). The exclusion for ephemeral makes it clear that swales or similar conveyances cannot be mistaken for flow once a year, as the origin is strictly stormwater flow. The combination is consistent with the discussion of "buffers" in the Fact Sheet and makes it clear what the Department is referring to in the permit when it requires the identification of a "Edge of Stream".

Response to Comment 112: A commenter suggests that the Department make greater use of the additional pollution controls considered in the Stream Protection Zone, on other areas of a construction site, once their controls are demonstrated to be insufficient. Response: The use of controls may not be appropriate based on a particular situation and should be used on a case-by-case basis. However, the use of additional measures, controls, or permit provisions is not excluded from the options to consider. The permittee has the responsibility to implement any options which may be necessary to prevent the unauthorized discharges of pollution and violations of water quality standards.

Response to Comment 113 and 118 (first part): Commenters suggest that work within the Stream Protection Zone, because of the likely impact to water quality, be justified to the State on the NOI. Response: The requirements for work within the Stream Protection Zones are mandatory and are designed to protect water quality. These stormwater controls are in addition to protection required through the state's wetlands and waterways program or through local zoning or as required by the local jurisdiction. EPA's CGP implements similar requirements. For work within a Tier II watershed, the anti-degradation regulations do include additional justification in certain cases as an additional level of protection.

Response to Comment 114: A commenter asks a general question about whether the design guidance in the ESC Handbook or the Design Manual will be updated with the permit requirements. Response: While the handbook contains general information about buffers, the permit incorporates specific requirements. The ESC Handbook will be updated over time, and where there are any conflicts or improvements, those should be addressed. As discussed in the Climate Change portion of the comments, there are several good reasons to update them sooner than later. One of the focuses should be in reducing where there may be overlap between permit requirements and the handbook, so that the permit guides certain actions (such as pollution prevention) whereas the specification and design requirements drive selection of stormwater controls.

Response to Comment 115: A commenter is concerned about redundancy of county buffer requirements and Streams Protection Zones. The additional scrutiny for development within a stream protection zone will discourage projects that will have environmental benefit, such as redevelopment which will lead to water quality features such as ESD to the MEP. The commenter mentions the benefits of daylighting of previously piped streams, and incentivize the incorporation of daylighted streams and natural areas into programmed open spaces. To this end it is suggested that there should be explicit language added that indicates the stream protection zone is not a mandatory set back that prohibits impacts. Response: The definition of the stream protection zone is updated consistent with the EPA CGP and the federal requirements promulgated in the Construction and Development Effluent Guidelines and Standards (40 CFR Part 450).

Response to Comment 116: A commenter asked about Appendix B, pg 4, the exceptions in section 3, second bullet "Does this also apply for same-day permanent stabilization?" Response: Yes, the exception to Stream Protection Zone Alternatives, which should rarely be applied, would include accelerated or same-day stabilization as written. However, the local approval authorities or other permits required by the Department may provide additional requirements that provide similar protection.

Response to Comment 117: A commenter asks about the exception related to “no discharge of stormwater to Waters of this State”. Response: Sites would qualify for this exception if the applicant can show that actual discharges through the stream protection zone to waters of the State, during construction, would be prevented. ESD practices relate to post construction control measures that treat stormwater.

Response to Comment 118 (second part): A commenter indicates concerns with work within Stream Protection Zones (as noted in response above on Comment 113) and also suggests grading be limited to 10 acres for larger developments within Tier I and 5 acres for smaller development projects or those within Tier II. Response: The Handbook Page A.4 requires consideration of a reduction in the size of the grading unit within Tier II watersheds, amongst the options. EPA CGP has no specific maximum grading unit. In reality the grading unit will be determined based on highly erodible soils or based on slope. The approval authority may even determine a smaller size of each grading unit, and the overall cumulative earth disturbance at any one time during construction based on local soil conditions. Ultimately, a grading unit of 50% of the former 20 acre maximum (i.e. 2017 past standard) was chosen to reduce the grading unit in a stream protection zone within a Tier II watershed according to the Handbook while balancing that reduction with the potential costs to the permittee. Also refer to response 109.

e. Grouping – Part III.A.2.f Stabilization Requirements

Response to Comment 119: A commenter acknowledges that stabilization requirements are important.

Response to Comment 120: A commenter asks that PART III A 2. f include temporary stabilization using structural BMPs such as gravel roads and pads, and construction matting be considered under that definition. Response: The Handbook provides for temporary stabilization, however it refers to quick growing vegetation. Alternatively the Handbook refers to “Heavy Use Area Protection”, with a definition of “*stabilization of areas frequently and intensively used by surfacing with suitable materials (e.g., mulch and aggregate).*” The purpose of Heavy Use Area Protection is to “*provide a stable, non-eroding surface for areas frequently used and to improve the water quality from the runoff of these areas.*”

Conditions Where this Practice Applies: This practice applies to intensively used areas (e.g., equipment and material storage, staging areas, heavily used travel lanes). This definition “Heavy Use Area Protection” will be added to the Appendix and referenced in Part III.A.2.f about temporary stabilization.

Response to Comment 121: A commenter requests that when terminating coverage, the permittee commit to when any temporary E&SC will be removed.

They note that the Notice of Termination (“NOT”) statement includes the certification that “temporary erosion and sediment controls have been removed or will be removed at an appropriate time...” Response: The Handbook states that Temporary Stabilization (which is a quick growing cover) should be used when the growing season doesn’t allow for permanent stabilization and should be in no more than 6 months. This should have been considered by the approval authority when the plan was approved “Proposed manner and timing of temporary and permanent stabilization”. The 6 month maximum timeframe for temporary stabilization has been added, requiring any termination to agree to place permanent stabilization within 6 months.

Response to Comment 122: PART II (F)(2)(a)(i) sets out exceptions for stabilization, when the intended use of the area of the property is for instance a parking area for vehicles or an access road. The commenter is suggesting that this type of use be limited and the permittee place a bond for this purpose, or present an ecological reason to do so. Response: The permit balances water quality concerns vs considerations of the permittee. Because the exception is new to this iteration of the permit, the Department agrees with the commenter that some justification should be required. The permit requires notice to the Department and a justification for use of one of the exceptions to final stabilization.

Response to Comment 123: A commenter suggests that any facility that ceases activity for a period of one year automatically be terminated. The commenter also stated concerns about plans getting outdated. Response: The requirement for termination is that the site is stabilized. Permanent coverage ensures scrutiny by inspectors and any required monitoring or require corrective action. The reality is that some development projects occur over vast stretches of time, and this would conflict with any automatic termination. Regarding plans getting outdated, the E&SC plans do expire, and thus are subject to periodic scrutiny (COMAR 26.17.01.08). It is also a permit condition that plans must be kept up to date: Part II.E “*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.*”

Response to Comment 124: A commenter supports clarifications on monitoring of stabilized areas.

f. Grouping – Part III.A.2.m Chemical Additives

Response to Comment 125 - 127: Commenters note the complexity of knowing what additive may be used up front, since they are meant to be a last resort. They recommend eliminating the requirement to list the one upfront since there is already an approved list of products and dosing rates. Response: The Department agrees in part with this comment. The permit has been changed to require advance approval for cationic chemical additives via an NOI amendment request with the

associated SWPPP, which must be submitted a week prior to intended use. For approved anionic chemical additives an amended NOI request and a SWPPP must be submitted no later than a week after the product was first used.

g. Grouping – Parts II.N, III.A.2.n and III.F.2.d.iv Threatened and Endangered Species

Response to Comment 128: A commenter suggests that no grading should occur in areas of threatened or endangered species. Refer to Comment 118 regarding the concern about grading within a Stream Protection Zone. Response: The 20-CP NPDES permit regulates the stormwater discharges resulting from the construction activity, thus its conditions are designed to control the associated runoff. The permit language now reflects changes to address what is required by the Operator. The new notification condition is in place to ensure any work done must be coordinated with the Maryland Department of Natural Resources (DNR) to ensure protection of these important species. The NOI now requires that the applicant identify if there may be Endangered Species or Designated Critical Habitat using web-based tools. If there are, the DNR will be notified and the applicant may be required to seek additional approval from the DNR.

Response to Comment 129 - 132 and 134-135: Commenters suggest that more guidance be given when a threatened or endangered species is in the area of a construction project. Response: As discussed in Response to Comment 128, the permit has been amended to address protections for threatened or endangered species. The permit now includes requirements to use MERLIN “<https://dnr.maryland.gov/Pages/Merlin.aspx>” to identify where threatened and endangered species are located along with information on who to consult with from DNR with questions, a requirement to indicate in the NOI if they exist within the project areas, and a requirement to include on the E&SC areas where protections must take place based on consultation with DNR. The Department reserves the right to require changes to the E&SC or an individual permit based on the responses from DNR (Part II.B.2).

Response to Comment 133: A commenter suggests revising the permit language to specify that evaluation of threatened or endangered species is only required when other regulatory programs require a threatened and endangered species review. Response: An application for coverage under this permit is an appropriate mechanism in a construction project for identifying the existence of threatened or endangered species and determining if protections are required and included in the E&SC plan as required.

h. Grouping – Part III.A.3 Pollution Prevention Requirements

Response to Comment 136: A commenter asks if pollution prevention controls are required only for Tier II and whether anything is required in the application or

SWPPP to confirm the controls. Response: These requirements are for any watershed (Tier I or Tier II) to address pollutants that are not contained in the E&SC. When filing an NOI, if there are applicable requirements in this section, it will trigger the requirement to upload a SWPPP. You will need to amend your inspection report to include controls that you identify in your SWPPP.

Response to Comment 137: A commenter suggests that the language which requires an “*effective means of eliminating the discharge of spilled or leaked chemicals*” in Part III.A.3.a.i and “*a similarly effective means designed to minimize the discharge of pollutants from these areas*” are subjective, even suggesting that it be clarified “as approved by the Department”. Response: The language is consistent with the EPA’s CGP, however the CGP provided examples to reduce the subjectivity. Examples of effective means of eliminating the discharge of spilled or leaked chemicals, including fuels and oils, have been added to the Permit. The language has also been modified to clarify the requirement.

Response to Comment 138-140: Commenters request that an exception be provided for consideration for materials meant to be used outdoors. Response: The condition was adapted from EPA’s CGP, and this exception was overlooked. Therefore, it has been added to the Permit.

Response to Comment 141: A commenter suggests including language to address construction on sites that have had a history of illegal dumping, considered a public health and environmental justice protection. Response: To make it clear that illegal dumping is discouraged, Part III.A.3.c.v includes notifying the permittee that there may be local or state laws related to illegal dumping.

Response to Comment 142-143: Commenters suggest clarifying Part III.A.3.c.v language as to the types of trash would require daily cover, as dumpster covers are not typically provided. Response: The Department disagrees that the kinds of construction waste cited by the commenter should not be covered as required by the permit. In fact, EPA’s CGP contains a footnote that was inadvertently left out of the 20-CP that would clarify what is considered construction waste. Adding “Examples of construction and domestic waste include packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, demolition debris; and other trash or building materials,” and clarifying “although not uncontaminated soils”.

Response to Comment 144-147: Commenters expressed concerns about the new requirements for dumpsters or trash containers, and seek clarification regarding acceptable secondary containment options for dumpsters. Response: Considerations are provided when materials are designed to be used outside and where winds from intense storms will not mobilize them. For any contained water

which have been in contact with materials and having the characteristics in Part III.C.6.f including color; odor; floating, settled, or suspended solids; foam; oil sheen; and other indicators of stormwater pollutants, you should plan to pump and haul the water offsite to be treated.

Response to Comment 148-149: A commenter suggests “away from” or “as far away as possible” is unclear and too vague a term in Part III.A.3.c.vi regarding locating portable toilets “*away from waters of this State and stormwater inlets or conveyances*” and Part III.A.3.d.iii regarding the location of washout or cleanout activities “*as far away as possible from Waters of This State and stormwater inlets or conveyances*”. Response: The decision is the responsibility of the operator to ensure these activities do not pollute, or are placed in a position likely to pollute, waters of the state.

Response to Comment 150: A commenter suggests that application of fertilizer needs greater guidance. Response: The Department will remove the qualifier “heavy” so that the permit condition requires the permittee to avoid the application of fertilizer before rain events that would result in the excess discharge of nutrients. Additionally, note that the permit references Agriculture Article § 8-803.4 which is designated to reduce fertilizer from getting into waterways. The 8-803.4 specifies using “*fertilizer in a manner that is consistent with the recommendations of the University of Maryland Cooperative Extension Service*”. <https://extension.umd.edu/resource/fertilizer> These are the requirements of commercial fertilizer applications around the State. And although some fertilizers may be selected as granular fertilizer, they also may be used in liquid fertilizer form, or may be selected as long acting fertilizer. The benefit of this fertilizer use is to establish vegetation to reduce additional soils or their associated nutrients from discharging. The final permit has replaced the words ‘heavy rain’ with ‘rain’ event, and removes the vague language in the objection to put the burden on the operator to avoid rain events where the nutrients are likely to wash off.

i. Grouping – Part III.A.4 Construction Dewatering Requirements

Response to Comment 151: A commenter requests for clarification if a dirtbag setup would suffice as a dewatering pumping velocity dissipator. Response: The Handbook references “Filter Bag” (perhaps the same as a dirtbag) as one of the methods acceptable for dewatering. Filter bags dissipate energy and spread out discharges, however you must still ensure the discharge is at a non erosive rate.

5. COMMENT CATEGORY – Part III.B (& I.B.3) – Water Quality-Based Limits

a. Grouping – Part I.B.3 WQ and Part III.B.1 Applicable Water Quality Standards

Response to Comment 152-154: Commenters ask to clarify what the applicable WQ standards and Tier II standards are. Response: In general terms, NPDES permits are subject to both technology based limits (TBELs) and water quality based effluent limits (WQBELs). Examples of technology based limits are the required erosion and sediment controls. Water quality based limits are derived from the States water quality standards. Water quality standards support the uses intended for water bodies. In Maryland the uses are broken into categories such as waters intended to support recreation, or crabbing, or water intended as a source of drinking water or for natural trout streams. These standards are identified and implemented by the requirements of the Clean Water Act. When the water quality is better than the minimum standards required by the water quality standards, then they are identified as a Tier II, and thus those more pristine waters require additional levels of protection. When the waterbody doesn't support the proposed use, such as basic recreation or natural trout, then the waterbody is considered impaired, and the state is required to provide a roadmap to address the impairment. Our state regulations provide specific criteria required to support the uses (COMAR 26.08.02). More information is available on our website: <https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Pages/index.aspx>. Since this is referenced in a few portions of the permit, a definition of Water Quality Standards has been added to the permit.

Response to Comment 155-156: A commenter suggests including the Department's protocol for reviews for new sources (Part I.B.3) in the permit. Response: The Department has modeled changes related to new sources on the EPA CGP. Controls included in the permit are considered to be the best available technology or practices, including approved E&SC. Similar to EPA the protocols used for review by the approval agency are not included in the permit. However the Department requires more information to be provided with the NOI, such as impairments of the watershed, and in specific cases requires SWPPPs and the Antidegradation checklist, all of which contain information that will be reviewed. Approval for E&SC plans is required from appropriate jurisdictions. The Department now has a process for approval of polymers to be used at sites to reduce turbidity which the permit requires consideration of when selecting products. These are all components that will be used to evaluate NOIs for new sources.

Response to Comment 156: A commenter requests that the condition in Part I.E.4, to require an individual permit if an ESC isn't brought up to state standards, be removed from the permit. The commenter suggests this is "an impossible trigger" and that only an individual permit can fully evaluate whether a construction activity will impact water quality standards. The commenter suggests that individual permits are never required for construction projects as proof of why this condition needs to be removed. Response: The Department, in fact, has broad authority to require an individual permit at any point during the life of the construction project, whether prior or subsequent to authorization according to an

NOI, according to Part I.E of the Permit. The commenter also suggests that the trigger for alternative or individual permits never takes place, however individual permits or alternate general permits have been required for construction projects. Most often this has been based on dewatering where the water is contaminated, and either a permit from the oil control program, HT general permit is required or an individual permit from industrial permits is required. We also require the general permit when there are concrete or asphalt plants on-site. However the work done by the approval agencies to make sure plans meet the states standards is a rigorous process. It doesn't take days as suggested by the commenter, but much of that groundwork (such as approval of E&SC and SWM or the Antideg Review) is completed well before the NOI has been submitted.

Response to Comment 157: A commenter asks for clarification on what documentation is required to verify that the permittee isn't causing or contributing to an impairment of a waterbody. Response: Documentation will vary based on the site and specific conditions. The type of data and response time envisioned could include instream turbidity measurements, instreams temperature measurements. It could involve simple photographic evidence. At the point that Part I.E.6 is initiated, an inspector and Permits group will be involved to determine whether an individual permit may be more appropriate. (Similar comment Response to Comment 223 and 227).

Response to Comment 158-159: A commenter asks what water quality standard is used to determine if a discharge is deemed to cause an impairment. Response: As noted in other comments in this section, the links and descriptions of these standards will be included in the final permit. Impairments can be short term, such as visible evidence including color; odor; floating, settled, or suspended solids; foam; oil sheen are impacting the receiving water. A determination could be made either by an inspector or MS4 investigating a plume or other evidence of water pollution, as reported by the permittee or by the public. At the point of an exceedance of a water quality standard, the inspector will enforce this portion of the permit and require certain actions. Under Part III.C.8.e and 8.f (Site Inspection, Monitoring and Records), any required monitoring is required to be representative and follow allowed EPA protocols for sampling, and also those results provided to the Department's compliance program. For additional information, please refer to the responses found related to Enforcement found in the Comment Category of Permit Format or Content.

Response to Comment 160: A commenter suggests that for new sources the Department either requires an individual permit or triggers some intermediate steps, like the preparation of a SWPPP, heightened monitoring requirements, and/or additional effluent limitations. Response: All NOIs go through the Department's staff review. SWPPPs will now be required based on certain triggers to address pollutants not addressed in the approved E&SC plan. More frequent monitoring is required in Tier II watersheds. As noted in response to

comment 157, clarifications are being added to the permit regarding contaminated soils. Specific requirements have been added for practices such as fueling. Because of the staff review, the imposition of additional requirements or actions, as proposed by the commenter, are either already contained in the Permit or are unnecessary.

b. Grouping – Part III.B.2 Determination of Tier II

Response to Comment 161: A commenter notes that language in the permit in Part III.B.2 specifies a discharge to a water that is identified as Tier II, which can be interpreted many ways. Response: The designated streams segments are found in the Code of Maryland Regulations (COMAR). The Tier II review occurs for any NPDES permit, and the screening tool used to identify projects for review is the States online mapping tool which is updated to coincide with the segments in COMAR. The State provides these mapping resources for the regulated community to make it easy to determine if your project or discharge is occurring within a Tier II watershed or catchment. The permit has been updated to be consistent with the State’s proper mapping of the designated areas “if a project occurs within a Tier II watershed or catchment”. Definition of Discharge has also been updated in the Appendix to be consistent with COMAR and the state’s use of the term. Also refer to Response to Comment 273.

Response to Comment 162: A commenter suggests that the language regarding Tier II stream resources with no assimilative capacity, that additional review by the department may be necessary, be strengthened or require individual permits for all Tier II to ensure their protections. Response: The language is being updated to reflect that additional review to the Department is required according to 26.08.02.04-1. The Department always reserves the right to require an individual permit.

c. Grouping – Tier II Antidegradation Review and Appendix C Checklist

Response to Comment 163-164: Commenters note the organization of the permit to group water quality based limits, and the addition of an Antidegradation Checklist is appreciated.

Response to Comment 165: A commenter suggests that incorporating the Tier II antidegradation requirements goes beyond what is required at construction sites. Response: The Antidegradation review is required by State and Federal Regulations, and are applied to every NPDES permit issued by MDE.

Response to Comment 166 and 169-170: The commenter suggests specific additions to consider in the implementation of the antidegradation checklist.

- The first suggestion is that all construction in Tier II catchments should apply for an individual permit using analysis of the checklist to determine

appropriate conditions. Response: Individual permits may be necessary for certain situations. However, Tier II requirements (increase buffer protection, more frequent inspection and rapid stabilization) have been included in this permit, consistent with the Tier II requirements from EPA's CGP. Additionally, this permit also includes E&SC Tier II protections derived from established standards and specs in the ESC Handbook. The Department has the ability to impose additional conditions in the authorization under this permit consistent with the Tier II antidegradation review and also reserves the right to require an individual permit based on the nature of those conditions.

- The second suggestion is that for watersheds that do have assimilative capacity have clear thresholds be written into the checklist. Response: The thresholds are not specified by the commenter, with no provided examples. The checklist and permit however do provide clear guidelines derived from established standards and specs in the ESC Handbook..
- The third suggestion is that the checklist responses must be reviewed by the MDE. Response: The checklist's responses are reviewed by the Department.
- The fourth suggestion is that the results of the review and response should be published with the NOI. Response: The authorization letter with any specific requirements will be uploaded by the operator when completing the NOI, and will be available when viewing the permitting website.
- The fifth suggestion is that the Department should track implementation of the checklist including a summary report of the identified issues and resolution. Response: The Department will not be tracking the steps up to the approval. The Department will provide the Tier II checklist and determination letter and that will be available as described in the fourth suggestion above, once it is uploaded by the operator.
- Lastly the commenter points to de minimis thresholds, and requests that the Department publish appropriate de minimis thresholds that apply. Response: The Department uses a [Tier II Determination Form](https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/TierII_Exemption_Determination_Form.pdf) at "https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/TierII_Exemption_Determination_Form.pdf" to decide whether or not a specific construction project requires Tier II Review. The form provides the criteria used to define de minimis activities within Tier II catchments or watersheds.

Response to Comment 167: A commenter suggests that the Determination of Assimilative Capacity is vague, and not properly indicated on the maps provided as a resource to the applicants. The commenter asks how an assimilative capacity determination is made by the Department. The commenter states that the process of using data from DNR and input from a non-permitting program is unclear and subject to outside influences. Response: From a quick review of the maps provided, areas where there is no assimilative capacity is clearly identified with an orange coloration. Please visit the following map link to see the location of

Tier II waters and whether they have remaining assimilative capacity: <https://mdewin64.mde.state.md.us/WSA/TierIIWQ/index.html> In addition, the Department provides a table online that shows the status of assimilative capacity at all Tier II waters [“https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier_II_Updates/Antidegradation-Tier-II-Data-Table.pdf”](https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier_II_Updates/Antidegradation-Tier-II-Data-Table.pdf). Links will be included with the eNOI and provided in the permit. Code of Maryland Regulations 26.08.02.04-1(D)3-4 discusses how MDE makes a determination of Tier II assimilative capacity with additional information being offered on MDEs website at [“https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Pages/Tier-II-AC.aspx”](https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Pages/Tier-II-AC.aspx). The process of identifying Tier II waters and determining their assimilative capacity uses monitoring data collected by MD DNR, MDE, Maryland Counties, and consultants. All data used must follow consistent protocols and quality assurance/quality control procedures. These protocols and QAQC procedures were developed by MD DNR and are used as a national model for other programs. This data does not go to MDE’s permitting programs but is instead assessed by MDE’s Environmental Assessment and Standards Program. This program is responsible for assessing all readily available monitoring data that meets quality criteria to develop and assign designated uses, develop water quality criteria, determine impairments, and identify Tier II waters and their assimilative capacity. These are delegated responsibilities of the Clean Water Act which are used to help ensure that permits issued by MDE do not impair or degrade water quality. All data used for Tier II water identification and assimilative capacity determination is available upon request via a PIA.

Response to Comment 168: A commenter notes that options are unclear where there is a lack of assimilative capacity. Commenter asks if an SEJ can be avoided if certain erosion and sediment protocols are required. Commenter requests guidance on how to prepare a social and economic justification (SEJ) and whether examples could be provided. Response: Regarding how to determine if a stream has assimilative capacity refer to Response to Comment 167. When one of the State’s high quality waters begins to show signs of degradation or deterioration, the options are limited, thus the additional scrutiny by the Department. You may either avoid impacts by showing your discharges are de minimus (Refer to Response to Comment 166 and 169-170). Alternatively you may perform an Alternatives Analysis to demonstrate that all impacts are fully mitigated. The Department provides guidance on preparing an SEJ on its webpage at: <https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Pages/Tier-II-Review.aspx> . Examples of SEJs can be provided upon request. For specific questions on how to prepare an SEJ, please contact Angel Valdez at Angel.Valdez@maryland.gov.

Response to Comment 170: A commenter indicates it is unclear as to what types of discharges will not lower the water quality of Tier II waters, even suggesting

that perhaps routine landscape operations may impact them. Response: The permit requires completion of the antidegradation checklist. Specific items have greater potential to impact the stream and are flagged, such as waivers or lack of assimilative capacity. These flags trigger additional review. Routine maintenance likely would not impact these watersheds. However, specific impacts need to be carefully considered. For applicable conditions, refer to the “Tier II Exemption Determination Form”, found here https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier-II-Forms/TierII_Exemption_Determination_Form.pdf, which MDE uses to determine if an activity will require Tier II review.

Response to Comment 171: The commenter suggests that Part III.B.2 “...you must perform an antidegradation review (COMAR 26.08.02.04-1), accomplished by completing the antidegradation checklist in Appendix C.” could circumvent the referenced antidegradation review procedures in COMAR. Several other comments (requiring individual permits) are similar to and addressed in comment 166. Response: The suggested language is “...you must follow the antidegradation review procedures established in COMAR 26.08.02.04-1, including the social and economic justification (SEJ) and alternatives analysis provisions. Additionally, review of your construction controls must be accomplished by completing the antidegradation checklist in Appendix C.” The final permit incorporates the language indicating the checklist by itself isn’t an antidegradation review and includes references to the full process in COMAR 26.08.02.04-1.

Response to Comment 172: The commenter states that the language of paragraph I.B.3.b appears to be a misstatement or misunderstanding of the antidegradation law and procedures. This part indicates that to be eligible for coverage under the Permit as a “new source”, any discharges from your site to a Tier II water must not lower the water quality of the applicable water. Further the commenter suggests that Antidegradation Laws recognize that there will be impacts to water quality. The suggestion is that the language in the permit is a legal fiction that compliance with a permit condition will necessarily not impact high quality waters. Thus the state should be compelled to strike the language and require individual permits as done in Pennsylvania. Then the commenter suggests a suite of protections that should be included. Response: Consistent with COMAR Antidegradation Policy Implementation Procedures, certain allowances are provided. If an impact cannot be avoided, or no assimilative capacity remains the antidegradation review allows for the permitting of limited degradation of the water quality. The language in the permit has been updated to reflect this.

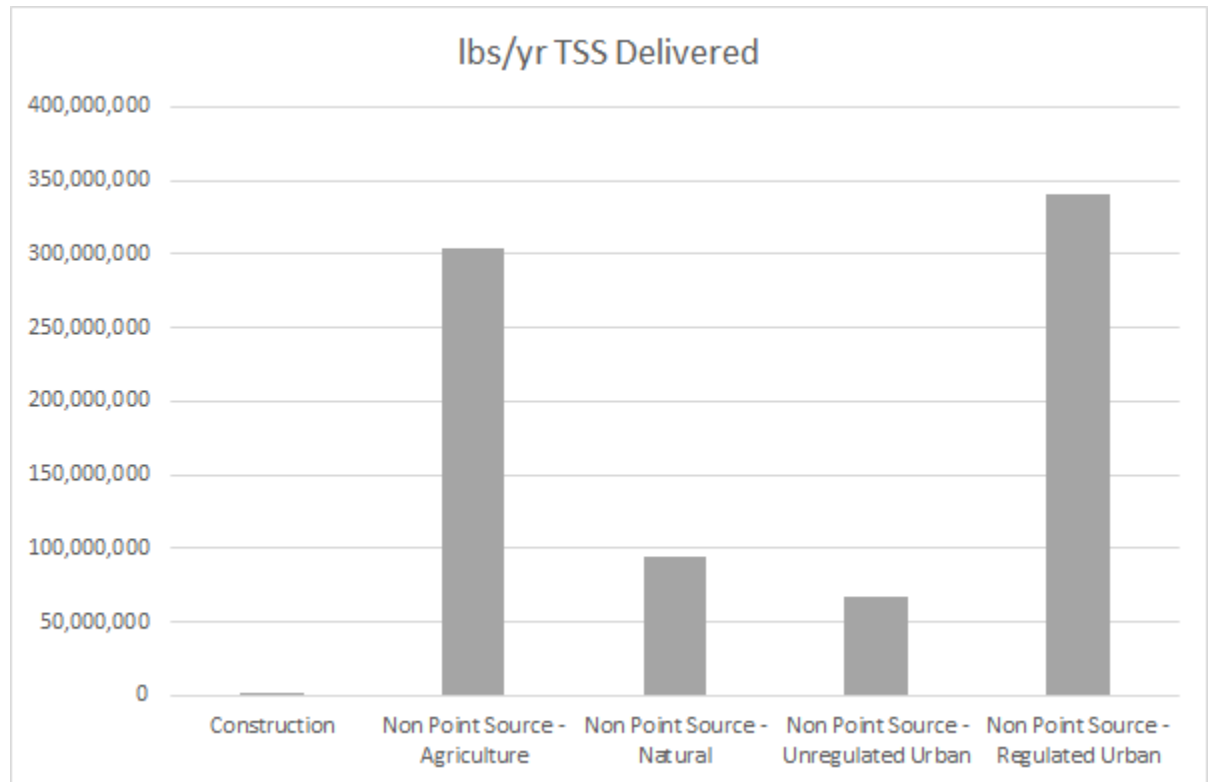
“Discharges from your site to a Tier II water will not lower the water quality of the applicable water to ensure that existing in-stream water uses and the level of water quality necessary to protect existing uses are maintained and protected (as provided in COMAR Antidegradation Policy Implementation Procedures). In the

absence of information demonstrating otherwise, the Department expects that compliance with the requirements of this permit, including the antidegradation review requirements applicable to such discharges in Part III.B.2, will result in discharges that will not lower the water quality of such waters.”

The other requests of potential enhancements (1) stabilization within 24 hours; (2) grading units no larger than 5 acres; and (3) more frequent inspections are arbitrary. The permit already required more frequent inspections (more frequent than EPA CGP), smaller grading units than required elsewhere (refer to Response 109 and 118) and stabilization (more restrictive than EPA CGP).

d. Grouping – Part III.B.3 Water Quality-Based Limits for Discharges to Impaired Water

Response to Comment 173: The commenter laments that the state has done little to study the impacts of construction on various impairments. **Response:** Each TMDL developed is the result of a review of all NPDES permits (including construction) and non point sources within impacted watersheds. The Chesapeake Bay TMDL model incorporates loads from construction in addition to other activities. The graph below shows a summary of 2018 progress NPS Edge-of-Tide (delivered) loads, with construction broken out and highlighted, summed up for MD. The data source is CAST (version CAST-2019).



The estimated loads related to construction, although minor compared to the other sources depicted above, are still substantial: 57,555 lbs/yr TN, 7,771 lbs/yr TP and 2,527,031 lbs/yr TSS.

The Chesapeake Bay Program (CBP) partnership's Urban Stormwater Workgroup provided recommendations regarding E&SC practices, which were intended to update the Bay model, and to address pollutants released into the Bay. The Bay Program recommendations were based on a review of practices from all the Bay States and DC

[\[https://www.chesapeakebay.net/channel_files/21146/attachment_d--final_long_draft_esc_expert_panel_01072014.pdf\]](https://www.chesapeakebay.net/channel_files/21146/attachment_d--final_long_draft_esc_expert_panel_01072014.pdf). It was because of the best available information from these sources that certain practices, such as the inclusion of chemical additives to precipitate suspended solids, was included. These various sources support the use of Best Available Technologies to control stormwater runoff during construction. In fact the inclusion of the practices recommended by the Bay Panel will move Maryland into a higher level of sediment removal. "Level 3 ESC: This level of performance reflects the gradual shift in several Bay states to improve performance by expanded use of passive chemical treatment within Level 2 ESC practices. Chemical treatment involves the passive use of polyacrylamide (PAM) and other flocculants."

What does this mean in terms of loads delivered to the Bay? The loading depicted above was from the 2018 scenario, which assumes construction state-wide in MD is treated with ESC level 2. Based on the 2018 progress modeled load, we're looking at a potential of 842,341 lbs/yr reduction in sediment for statewide implementation of ESC level 3. While the Chesapeake Bay TMDL and most local TMDLs developed to-date have not identified construction activities as a major pollutant source to both local and downstream waters, as further data and information is collected and research is conducted, these models will be revised and improved.

Response to Comment 174: A commenter acknowledges the permit's attention to PCBs.

Response to Comment 175: A commenter objects to the inclusion of PCB controls at demolition sites, and is concerned that these requirements will include expensive testing. Response: What the permit attempts to limit are new sources of PCB contamination. Based on evidence presented by various states, which influenced EPA's recommended controls, PCBs are contained in certain caulking or paints, which during demolition can runoff the site and into the sediments in receiving drainage areas and receiving streams. The permit requires certain actions in watersheds that are impaired for PCBs. If "*you discharge to a water that is impaired for polychlorinated biphenyls (PCBs) and are engaging in demolition of any structure with at least 10,000 square feet of floor space built or renovated before January 1, 1980, you must: a. Implement controls to minimize*

the exposure of PCB-containing building materials, including paint, caulk, and pre-1980 fluorescent lighting fixtures, to precipitation and to stormwater (Examples of controls to minimize exposure of PCBs to precipitation and stormwater include separating work areas from non-work areas and selecting appropriate personal protective equipment and tools, constructing a containment area so that all dust or debris generated by the work remains within the protected area, using tools that minimize dust and heat. For additional information, refer to 20-CP Fact Sheet); and b. Ensure that disposal of such materials is performed in compliance with applicable state, federal, and local laws.”. The 20-CP Fact Sheet pages 69-71 does provide appropriate controls to be considered. The condition doesn’t require that the developer perform any testing, but rather that they perform specific pollution prevention techniques.

Response to Comment 176: A commenter asks why the Department prioritized PCB over other potential pollutants. The assertion is that there are other pervasive and hazardous pollutants that are the result of a construction activity. Response: EPA identified PCB’s as a potential source during demolition and suggested MDE incorporate similar requirements. EPA’s rationale was compelling. The MDE permit reserves the right to require additional controls in watersheds that may be impaired for other pollutants. If a TMDL establishes a wasteload allocation or required technology for construction sites, those will be required of the operators. The Department will continue to study impairments and implement controls that address the operations involved.

Response to Comment 177: A commenter laments that the Department expresses it has the “authority” to require additional controls however this statement rings hollow and doesn’t explain how water quality standards will be protected under these provisions. Response: The Department allows for additional tools in this permit, which can be specified at any site by the Department. These include pollution prevention measures, the ability to use chemical additives to control turbidity, the requirement to complete the Tier II checklist. The commenter doesn’t suggest a specific additional action that the Department should consider. The provisions of this section are a notice that if the controls at site are not achieving adequate protection, the Department (inspectors also work for the Department) may require additional controls. Also an issued TMDL which may require additional controls for a construction site, which would be a trigger to require additional controls. This provision is an important tool that the TMDL implementation can utilize.

Response to Comment 178: A commenter suggests the provisions in this section are meaningless, since the only way that a permit could be consistent with water quality standards is if the permit resulted in no discharge, that the discharge was consistent with a waste load allocation that was part of a larger TMDL being dutifully implemented and adhered to, or that the permittee was required to fully offset such pollution. The commenter identifies the source of impairments to be

construction sites and is not aware of any TMDL document that assigns a wasteload allocation (WLA) for any site or combination of sites. Then finally urges the Department to pursue the initiative aligning for growth policy to land disturbance. **Response:** The Department does tie construction stormwater to WLAs and this information is publicly available on the Department’s website <http://wlat.mde.state.md.us/ByMS4.aspx>. An example of a TMDL in Maryland which addresses construction loads is the Back River TMDL for Sediment ([https://mde.maryland.gov/programs/Water/TMDL/ApprovedFinalTMDLs/Pages/TMDL_Final_Back_River_Sediment.aspx?target= blank](https://mde.maryland.gov/programs/Water/TMDL/ApprovedFinalTMDLs/Pages/TMDL_Final_Back_River_Sediment.aspx?target=blank));). Other stormwater permits require specific controls for impaired watersheds such as Chesapeake Bay TMDL driven restoration of impervious surfaces for industrial stormwater, or numeric WLAs for specific impaired watersheds for the mineral mine permit and coal mine permit. The conditions in this section are not meaningless, and are an important tool for TMDL development and implementation. This condition allows for specific “appropriate controls and implementation procedures” as new TMDLs are established. Lastly, the suggestion that the permit drives the aligning for growth policy is beyond the scope of the permit. However construction stormwater permit is essential for redevelopment, utility projects, stormwater upgrades, for a number of items that are beneficial in the longer term, thus is it important that we include conditions like this specific to water quality.

Response to Comment 179-180: Commenters suggest that the open requirement to require additional controls provides unfettered discretion, due to the lack of clear guidance in this provision, to require additional controls or not. “If imposition of water quality-based effluent limitations are a legitimate possibility for those covered under this Permit, then the Permit must develop this concept into clear and detailed language that sets reasonable expectations for the public and regulated community and provides clear triggers for plan reviewers, inspectors, and other agency staff.” **Response:** The permit conditions in this section gives the Department flexibility to require the controls necessary to address either local or regional TMDLs. For example, if the Department were to determine the use of polymers, redundant controls or reduced grading unit was required to meet a TMDL, this would be implemented through this provision in the permit. The language used is clear and consistent with other MDE and EPA General Permits.

6. COMMENT CATEGORY – Part III.C – Site Inspections and Records
a. Grouping – Inspection Frequency Part III.C.2, III.C.3 and III.C.4

Response to Comment 181: A commenter suggests the alternative inspection frequency of once every 4 days be changed to once every 5 days, noting that once every 4 days will always be a different day of the week, sometimes twice a week, and sometimes once a week. **Response:** The alternative of a self-inspection of once every 4 days was to provide more frequent and predictable inspections instead of the current method. This would bring about better results as issues may

be caught sooner prior to a storm event. The alternative is the method used on the 14-GP. No Change.

Response to Comment 182: A commenter appreciates inclusion of the more frequent inspection frequency.

Response to Comment 183: A commenter requests clarification if the intent of more frequent monitoring was to be in lieu of once a week and after a storm event. Response: That is correct.

Response to Comment 184 Part 1: A commenter would like flexibility in choosing between the two inspection options over the life of a project. Response: The permittee must make a selection initially when first authorized under the permit, and should discuss the choice with the inspector when at the preconstruction meeting, and if a change is desired, the permittee should notify the inspector. Keep records indicating when compliance was notified. In comparing this section with EPA, an exception was missed for linear projects. The permit has been updated to include requirements if the operator is changing inspection frequency. An exception for linear projects has been added, allowing for stabilized areas to be reduced inspection frequency and eventually cease under conditions where stabilization is confirmed consistent with the EPA CGP.

Response to Comment 184 Part 2: A commenter suggests that inspections after a rain event be more specific. Response: EPA's CGP provides clarity on this point: "*Within 24 hours of the occurrence of a storm event*" means that you must conduct an inspection within 24 hours once a storm event has produced 0.25 inches within a 24-hour period, even if the storm event is still continuing. Thus, if you have elected to inspect [weekly] in accordance with Part [III.C.2.a] and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you must conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm." An inspection frequency clarification was added consistent with the CGP for rainfalls that occur over several days.

Response to Comment 185: A commenter suggests that regardless of which inspection option selected, an inspection 24 hours after a storm event still be required. Response: The permit contains two options for a permittee's self-inspections. The more frequent option is consistent with the EPA CGP and other states. This provides a proactive option to address issues prior to a storm. The required inspection report also requires the permittee to note how recent a storm event has occurred. No Change.

Response to Comment 186: A commenter notes III.C.2 rainfall-based inspection is a helpful addition.

Response to Comment 187 and 190: The commenter then identifies an inconsistency as to when to record the rain in the log. Response: This is confusing. Part III.C.7.f has been simplified to simply state that if the inspection was based on a storm event, to record the amount of rain (conditions during the inspection as well as the date and last recorded precipitation daily total rainfall of 0.25 inches or greater).

Response to Comment 188-189: A commenter suggests revising the language of the permit to read “nearest” weather station instead of the current terminology, “representative of their location.” Response: The permit requires self monitoring via a rain gauge or obtain the storm event information from a weather station that is representative of your location.

Response to Comment 191: A commenter notes the inclusion of increased inspection requirements in Tier II watersheds is encouraging as are the recognition of 0.25 inch storm events.

Response to Comment 191.5-194: Commenters object to use of calendar days in reference to discharges to sensitive waters, and suggest clarifying language related to when an inspection may occur. Response: The Department agrees that flexibility is necessary to account for storm events occurring on non-business days. Therefore, the relevant language has been amended so that the final permit requires 2 inspections per week for portions of property within a Tier II watershed, and one of these should be performed when reasonably possible within 24 hours of a storm event.

Response to Comment 195: A commenter requests that the inspection form be updated to include space to record monthly inspection status and locations. Response: The inspection form is not an addendum to the permit; however, the most current version has been updated to include space for such information.

b. Grouping – Inspection Requirements Part III.C.6 and Report Part III.C.7

Response to Comment 196: A commenter notes that the clarification in signs of visible erosion was a good inclusion.

Response to Comment 197-198: Commenters request that the public be able to comment on the Inspection Form. The commenter also requests that there be an option for permittees to use another version of an inspection form that is equivalent to the one made available by MDE and this option be added to the text of the permit. Response: MDE has several forms in reference to permits and these forms reflect the conditions and requirements of the permits that MDE regulates. MDE supplies the inspection form to ensure conformity throughout multiple sectors that are required to have an authorization for the permit. No Change.

Response to Comment 199-200: A commenter requests clarification on the signature requirements for the inspection reports. Response: The inspection form has been revised to include a signature/date field at the end of every inspection form page. Also related to response to Comment 39 and 40, a Duly Authorized has been added that can sign off on inspections or other reports required by this permit.

Response to Comment 201: A commenter requests more than 24 hours to complete an inspection report after performing an inspection. Response: Twenty four (24) hours is sufficient to complete an inspection report. The Department suggests that the permittee make the request for any extension to an inspector to deal with a specific condition.

c. Grouping –on-site Documentation Part III.C.8 and Part III.D.3

Response to Comment 202, 205-206: Commenters request clarification on how to make documentation or signage available on a highway project, large linear project or area wide projects, when there isn't a physical structure, logical location for signage or storage room for documents at the site. Response: The Department acknowledges that the posting of a notice of permit coverage as required by the permit may be difficult based on the size of the project. To account for such situations, the permit has been updated so that for larger linear construction projects, the notice must be located so that it is visible from the public road that is nearest to the active part of the construction site, and it must use a font large enough to be readily viewed from a public right-of-way. For linear construction projects that extend over miles, the permittee must discuss the notification process during the preconstruction meeting with the inspector.

For onsite records retention, the permit has been updated to require records retention at a readily accessible location within a reasonable distance from the site, approved by the Department during the preconstruction meeting.

Response to Comment 203: A commenter believes that the Department's "expensive upgrade to an electronic document management system" should be used to store items listed in Part III.C.8.b. which are the NOI and records of all data used to complete the NOI, the approved erosion and sediment control plan, the approved stormwater management plan, a copy of this General Permit, a copy of updated SWPPPs (if applicable), a copy the antidegradation checklist (if applicable), a copy of the general permit authorization, a copy of transfer of authorization documents (if applicable), all inspection reports and enforcement actions issued to the permittee from any appropriate enforcement or approval authority, including the Department, the delegated enforcement authority, or the U.S. Environmental Protection Agency; and Written reports of all inspections conducted by the permittee. In addition the commenter finds it troubling that a mailing address is provided to submit information upon request. Response: Many

of these documents originate electronically from MDE's website (the General Permit) or are sent electronically through MDE's eNOI system (the NOI, the permit authorization, transfer documents) or are stored in the States electronic data management system (inspection reports and enforcement actions). However other documents such as actions by the local jurisdiction, approved E&SC or SWM, originate in other data systems. The State has not developed a system to house all the documents on behalf of the permittees. The requirement for on-site records is that they need to be available to the permittee or to document compliance when an inspector visits the site. On-site paper may be efficient for small operators. Changes are required by the permit for corrective actions, and can be made in real time via simple markup. However, permittees also may update and store these documents electronically. This is why the option is available for an operator to maintain records electronically. Larger operators have invested in systems to manage their environmental records. In either case though, it is critical that these records are maintained and on-site for either the operator to refer to, for training purposes or for an inspector to verify compliance. The address provided to mail documents is provided for consistency, but based on the comment, it may be appropriate to email documents and thus they can request an appropriate email address when the situation allows it. The final permit Part III.C.8.f provides an option to email documents upon request.

Response to Comment 204: The commenter asks what is an environmental system? **Response:** Environmental management systems (EMS) are available through various software integrators and have been noticed by inspectors when on construction sites. They allow records to be kept and updated by the operator at a central location.

Response to Comment 207: A commenter requests that we add Electronic Maintenance of Records for Corrective Action Reports in Part III.D.3. **Response:** This request is consistent with other options to retain records electronically. Part III.D.3.d is modified to read: "*d. You must keep a copy of all corrective action reports at the site or at an easily accessible location, either physically on-site or electronically accessible through your environmental system so that it can be made available at the time of an on-site inspection or upon request by the Department.*" The following text has been added as a new item under Part III.C.8.b: "*xi. Corrective action reports completed in accordance with Part III.D.3*". The final permits allows for Corrective Action Reports to be stored electronically.

7. COMMENT CATEGORY – Part III.D – Corrective Actions

a. Grouping – Corrective Action Triggering Conditions Part III.D

Response to Comment 208: A commenter explains that it is unclear as to whether an event requiring corrective action is a violation of the permit. The commenter requests that if the underlying condition is a violation to make sure

that is specified elsewhere in the permit. Response: As acknowledged by the commenter, Part VI.A “Duty to Comply” which acknowledges that failure to take any required corrective actions constitute an independent, additional violation of this permit and the Clean Water Act. As such, any actions and time periods specified for remedying noncompliance do not absolve parties of the initial underlying noncompliance. However, where corrective action is triggered by an event that does not itself constitute permit noncompliance, there is no permit violation provided you take the required corrective action within the relevant deadlines.

Answering this by evaluating each of the triggering events:

- The first event: “*A stormwater control needs repair or replacement (beyond routine maintenance required under Part III.A.1.d)*”. Having a control in need of repair, such as a rip, or in need of replacement, isn’t by itself a permit violation, however not conducting the repair or replacement required by these actions is. The corrective action and timeframe provide for violations.
- The second event: “*A stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly*”. In this case, the permit Part III.A.1 does require that “You must design, install, and maintain stormwater controls required in Parts III.A.2 (sediment) and III.A.3 (pollution prevention) to minimize the discharge of pollutants in stormwater from construction activities”, and under also Title 4 that would be a violation. That would by itself be a violation of the permit. The corrective action and timeframe provide for additional violations.
- The third event: “*Your discharges are causing an exceedance of applicable water quality standards*”. In this case, per Part III.B.1 “*Discharges must be controlled as necessary to meet applicable water quality standards*”, this would be a violation by causing an exceedance of water quality standards. The corrective action and timeframe provide for additional violations.
- The fourth event: “*A prohibited discharge has occurred (see Part I.D)*”. In this case, the prohibited discharge per I.D “*Any unauthorized non-stormwater discharges must be covered under an individual permit or alternative general permit*” would by itself be a violation of discharging water that isn’t authorized by this permit. The corrective action and timeframe provide for additional violations.
- The fifth event: “*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 commenter’s two examples: “a rainfall over the design capacity of the controls” or “another occurrence outside of the control of the permittee” would both fit this case. The above conditions are sediment discharges and sediment in position likely to discharge which are both water pollution violations. The Part III.D.1 simply states that you “*must take corrective action to address any of the following conditions identified at your site*”. No change is required related to that portion of the comment. The corrective action and timeframe provide for additional violations.

Response to Comment 209: A commenter is concerned about Part III.B corrective action trigger for the Department to require additional water quality-based controls “where additional controls are necessary to comply with a wasteload allocation in an EPA-established or approved TMDL”. The commenter urges the Department to replace this language with a meaningful provision based on the way TMDLs are implemented in actuality, including potentially requiring an analysis by the permittee of any applicable waste load allocation and of how various pollution events would relate to that waste load allocation or to the overall TMDL attainment. Response: The Part III.B corrective action states “*If at any time you become aware, or the Department determines, that discharges are not being controlled as necessary to meet applicable water quality standards, you 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.*” There may be a misunderstanding of how the corrective action is triggered, as it isn’t based on a TMDL. However that section does allow the Department to include additional controls as necessary to meet applicable water quality standards, not based on a corrective action, but as a matter of authorization. This may come in the form of required additional controls in a PCB impaired watershed, or required use of polymers in a specific sediment impaired watershed. As noted by the commenter, this option wasn’t in previous permits and therefore not utilized in any TMDL. No change.

Response to Comment 210: A commenter suggests that the triggers requiring corrective action are not sufficient to trigger additional controls. The commenter goes further to suggest that corrective actions only be triggered by the state or local inspection finding evidence. Response: There are limits of when an inspector can be on-site, and thus some of the deadlines and expectations of the Department are required in permits to require actions in lieu of an inspection. Standard conditions allow for inspections, however to make it clear, that when an inspector requires an action, that not following it is a permit violation as well, the following is being added as also found in EPA's CGP "*CORRECTIVE ACTION REQUIRED BY THE DEPARTMENT You must comply with any corrective actions required by the Department as a result of permit violations found during an inspection provided under Part IV.D.*" The requirement to comply with any corrective action required by the Department as a result of permit violations during an inspection has been added.

Response to Comment 211 and 213: Commenters are concerned with requirements specified under "Corrective Actions" based on ambiguous terminology of repair. They request clarification on the difference between routine maintenance and a repair. One commenter goes on to eliminate the Corrective Action section, and to incorporate this section into other parts of the permit. Response: The first part of the comment deals with repair vs maintenance. The suggestion is that the Department expects the myriad of permittees, BMP inspectors, and practitioners to distinguish the difference between "Repair" and "Maintenance" which are potentially synonymous terms and can easily be misinterpreted as one being the same as the other. However the term maintenance is clearly delineated in the States E&SC Handbook, which is the basis for the design of the practices. The handbook indicates the routine maintenance for each of the practices should be included in the E&SC plan. If documenting this in the E&SC plan is hard to access, the operator could alternately keep a SWPPP or other plan for on-site personnel to follow.

The second part of the concern is the term "*Corrective Action*". The objection is using the term "*Corrective Action*" rather than "*Prevention of the Discharge of Significant Amounts of Sediment*". The Department uses the term "Corrective Action" consistently on all General Permits, taking the lead from the EPA. It is a broad ranging term that has been used industry-wide to identify anything that needs to be maintained, repaired, installed, reinstalled, removed, or addressed in any way. A corrective action is not necessarily in itself a permit violation, but rather an agreed upon determination that situations do require corrections and that those do require time. However, ineffective or untimely corrections may constitute a violation. A definition of what represents routine maintenance has been added to distinguish the difference between maintenance and repair. See also Response to Comments 95 and 275.

Response to Comment 212: A commenter asks if Part III.D.1.b “stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly” applies to permanent features (SWM facilities) or does this relate only to temporary ESC? Response: Please see the permit’s definition of “stormwater control” in Appendix A. The term is inclusive, and covers both erosion and sediment control and stormwater management. A definition has been added (refer to Response to Comments 88-90, 94 and 271).

Response to Comment 214 and 221: A commenter asks how the site operator is supposed to know if they are causing an exceedance of applicable water quality standards. A commenter suggests expanding the requirements to verify if your discharges are causing an exceedance of applicable water quality standards, with explanatory language and details that are meaningful for a permittee, an inspector, and the public. Response: Other commenters suggest this is fairly easy to do, when examining waters that are turbid and full of sediment from construction sites. The state does have a complete set of water quality criteria in COMAR that clearly indicate what the standards are. The Department can also take a role in evaluating receiving waters, as can counties or municipalities in their municipal stormwater discharge permits, which have illicit discharge detection program requirements. Citizens may also report issues related to receiving water quality. The commenter goes on to note that the other triggering conditions are much clearer with regards to sediment in runoff. As noted in the enforcement and water quality standards responses, the permit issued contains the non-numeric standards and a definition of the standards which point back to the standards established in regulation (Refer to *Grouping – Part I.B.3 WQ and Part III.B.1 Applicable Water Quality Standards*).

Response to Comments 215 - 216: The commenters suggest that the condition referencing turbidity be removed from the permit, noting that numeric turbidity criteria were removed from EPA’s CGP after being challenged. A commenter suggests that achieving that criteria in your permit is almost impossible and that the financial consequences of the condition are substantial. The comment suggests that the requirement to take corrective action “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,” is in conflict with and more stringent than the federal permitting program. The commenter asks that if this language isn’t removed it be supplemented with “*This corrective action will not be triggered whereby the approved erosion and sedimentation control measures at the site have been implemented, are properly maintained, and any stormwater discharged has been managed by them.*” Response: Turbidity is one of the State’s Water Quality Criteria. Refer to *Grouping – Part I.B.3 WQ and Part III.B.1 Applicable Water Quality Standards* for discussion on the criteria. The permit does now allow for some additional options to control turbidity such as the use of chemical additives or polymers. This condition and the corrective actions

and practices required are meant to protect Maryland's water resources for all those who enjoy fishing, swimming or just enjoy the beauty of waters near where they live or recreate.

Response to Comment 217: A commenter suggests that the triggering requirement be modified to encompass streams that run not only through or along a site, but also downstream. Response: The corrective action is meant to correct the discharge and any violations of the permit's conditions. Thus, the corrective action applies to the construction site as the point of discharge. No change.

Response to Comment 218: A commenter suggests that the State adopt a numeric turbidity criteria to be used in evaluating impacts of construction. Response: Although the state does have numeric standards for turbidity, they are instream numeric standards, not end of pipe standards. The standards will be pointed to in the water quality based limits part of the permit. "<http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.03-3.htm>". The instream standard in the State's regulations "(a) Turbidity may not exceed levels detrimental to aquatic life. (b) Turbidity in the surface water resulting from any discharge may not exceed 150 units at any time or 50 units as a monthly average. Units shall be measured in Nephelometer Turbidity Units". Refer to *Grouping – Part I.B.3 WQ and Part III.B.1 Applicable Water Quality Standards* for additional background on water quality standards.

Response to Comment 219: A commenter suggests that work on-site should be stopped when discharges are turbid unless they show infeasibility. Response: The permit provides reasonable timeframes to address the situation and provides new tools for operators such as the use of polymers, the consideration of buffers, and does confirm who is responsible for meeting the requirements in the permit. The Department has a number of enforcement tools, which are not laid out in the permit.

Response to Comment 220: A commenter notes that inspections during wet weather is essential in determining the impacts to local waters. Response: The option for more frequent inspections is meant to catch issues before they exist, however wet weather inspections are still an option. The corrective actions also have triggers for evidence of runoff from the site.

b. Grouping – Corrective Action Deadlines Part III.D.2

Response to Comment 222: A commenter suggests removing deadlines as being unreasonably burdensome and unnecessary. Response: These deadlines were present in the 14GP and have not proven to be unreasonably burdensome or unnecessary since that permit was issued in 2015. Removing the requirements would be harmful to the environment as they provide consequences to not addressing conditions within the timeframes required.

Response to Comment 223 and 227: A commenter noticed PART III(D)(2) includes the encouraging provision that corrective action may be triggered by observations of “any person.” The commenters request that greater guidance on what is required by the public in order to “include some detail here as to what is required to assure a citizen observation can be verified.” The commenter notes that in the past, photographs and video have been provided. Response: This is not a new provision, but was also in the 14GP. However it does provide for additional triggers that are useful tools when reporting to MDE. The new elements included a stormwater control needs repair or replacement (beyond routine maintenance required under Part III.A.1.d); or a stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly; or the discharges are causing an exceedance of applicable water quality standards; or a prohibited discharge has occurred (see Part I.D). The suggested photographs or video are acceptable documentation to initiate an inspection, as would any oral or written reports with sufficient detail to describe the triggering event.

Response to Comment 224: A commenter suggests removing the requirement for documenting actions in a logbook, since the word logbook isn’t mentioned elsewhere in the permit. Response: The term was used in the same context in the 14GP. If the permittee doesn’t document that actions were undertaken somewhere, then they cannot verify for an inspector that they were complying with the permit. The permit adds flexibility that records can be in a logbook, a SWPPP, or in electronic form.

Response to Comment 225: A commenter asks if Part III.D.2.a is within one calendar day or business day. Response: The permit is updated to clarify Part III.D.2.a is one business day.

Response to Comment 226: A commenter suggests an alternative to Corrective Actions as proposed. The proposal includes an automatic trigger, and in addition the Department would provide detailed guidance on what sort of corrective action measures will be required of permittees if a second or subsequent pollution event is discovered, including a menu of escalating actions for each subsequent discovery. In addition the Department would include mandatory stop work orders as one potential response to provide some deterrent value short of a formal enforcement action. Response: When triggering events occur the permittee should implement corrective actions to address the issue without intervention by the Department. Only situations in which the corrective actions do not address the issue should require the Department’s attention. This is consistent with the approach in EPA’s CGP. The process as described in the Permit will allow the Department to resolve the issues underlying the triggering events.

Response to Comment 228: A commenter suggests in Part III.D.2.a, that the word “immediately” be defined, and that the wording “may be considered to be a violation” be changed to “will be considered a violation”. Response: The term “immediately” refers to corrective actions in a myriad of situations which take varying amounts of time; thus, the Department needs the ability to evaluate each situation on a case by case basis and use its best professional judgment and enforcement discretion in determining whether a violation has occurred.

c. Grouping – Corrective Action Report Part III.D.3

Response to Comment 229 and 231: Commenters request that MDE include as part of the permit a standardized form for a Corrective Action Report. Response: This will be provided upon request.

Response to Comment 230: A commenter suggests that corrective action notices be sent to the Department electronically to ensure staff are notified appropriately and also be posted online to provide sufficient notice to the public and increase efficiency of government operations. Response: Requiring documents onsite does not preclude a permittee from providing such notices to the Department electronically. The Department is striving to provide additional tools for reporting issues to the Department as well as sharing this information with third parties.

8. COMMENT CATEGORY – Training Part III.E and Preconstruction (Part II.C.2)

a. Grouping – Preconstruction Meeting Part II.C.2

Response to Comment 232-233: Commenters ask if the requirement to schedule a preconstruction meeting applies to homebuilding activity when a residential homebuilding buys finished lots from a developer and files for permit coverage relating to vertical construction, or if the Preconstruction meeting requirement is only for Land Development / Mass Grading? Response: The following items are not an extensive list of topics covered during the preconstruction meeting, but they are items that need to be verified prior to commencement of construction activities: schedule for construction and verification of inspection schedule and requirements, review of plans, details, and specifications, notation of any features that are non-standard, documentation of pre-construction meeting between installation contractor(s), approving jurisdiction representative, field inspection personnel, and any other concerned parties, review and identification of critical stages of construction that must be inspected prior to proceeding to the next step in the construction sequence, and identification of specific points of contact who are in a position to review and authorize modifications to materials or design during construction. Therefore, every effort should continue to be made to reach the MDE Compliance Program two weeks prior to the start of construction activities and soil disturbance should not commence prior to the preconstruction meeting. You can only request the meeting, and if the inspector agrees it isn't necessary to meet, decline to hold the meeting.

Response to Comment 234: A commenter acknowledges that the preconstruction meeting requirement in subsection II.C.2 is a helpful addition.

Response to Comment 235: A commenter requests clarification in the language for the requirement to contact the Compliance Program whether that is the local authority or MDE. Response: The permit is issued clarifying to contact MDE's Compliance Program two (2) weeks prior to starting construction to schedule a preconstruction meeting.

b. Grouping – Site Responsibilities and Training Part III.E

Response to Comment 236: A commenter requests that the permit specify that the qualified person needs to be on-site at a frequency and duration sufficient to ensure compliance with the requirements of the approved Plans and the permit. Response: The Department agrees with this suggested language - the permit language is modified to specify that the qualified person needs to be on-site at a frequency and duration sufficient to ensure compliance with the requirements of the approved Plans and the permit.

Response to Comment 237: A commenter asks how many members are required on the stormwater team. Response: The answer depends on the complexity of the site. This could be made up of one person or a larger team, however sufficient to ensure compliance with the permit.

Response to Comment 238: A commenter notes that it is rarely practical that the design engineer be part of the stormwater team. Also, the group that installs the erosion and sediment controls are specialized subcontractors and are only on-site for a very limited time. Response: In these cases, the team needs to have sufficient background in the design to be able to ask questions if they are not functioning or to fix them properly when they are not working. However not having team members on-site that can solve problems is an issue that needs to be carefully considered. The permit language now states that individuals responsible for compliance with the design, installation etc be involved, rather than the designer specifically.

Response to Comment 239: A commenter is confused about the wording in the section that a permittee must “ensure that such personnel understand any requirements of this permit that may be affected by the work they are subcontracted to perform.” The commenter suggests that the permit isn't affected by the work, the work is affected by the permit. Response: The condition is rephrased to state that the permittee must “ensure that such personnel understand any requirements of this permit that may affect the work they are subcontracted to perform”.

Response to Comment 240: A commenter suggests that more specificity be provided in the training section. Response: The permit makes the permittee responsible to implement the training requirements so that discharges meet the permit's requirements. If there are issues with controls, maintenance, etc, it is the responsibility of the permittee to bolster or improve the relevant portions of the training to ensure permit compliance.

Response to Comment 241: A commenter recommends that completion of a preconstruction meeting with the local approval authority would constitute appropriate training for the stormwater team. Response: The time and make-up of the training is flexible, but the result is that your team understands what is required of them to be compliant.

9. COMMENT CATEGORY – Part III.F – SW Pollution Prevention Plan (SWPPP)
a. Grouping – Joint Liability

Response to Comment 242-244: Commenters were concerned with the term joint liability in Part III.F.1 and Part I.B.1.b. Response: The selection of words was from a version of EPA's CGP prior to finalization. This wording is being updated to be consistent with the final EPA CGP and avoids adding any unintended confusion. Part III.F.1 can be updated consistent with the later text in EPA CGP "*Where there are multiple operators associated with the same site, they may develop a group SWPPP instead of multiple individual SWPPPs. Regardless of whether there is a group SWPPP or multiple individual SWPPPs, each operator is responsible for compliance with the permit's terms and conditions. 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.*" Several references to joint liability were updated to be consistent with updated Federal Permit language in Part I.B.1.b and Part III.F.1.

Response to Comment 245: A commenter asks for clarification on Part III.F.2.a requirement to include a list of all other operators who will be engaged in construction activities, whether this will apply also to other residential home builders building on individual lots in a community where another residential home builder is building on other individual lots. Response: For a common plan of development, the SWPPP should be coordinated with the other operators if using shared controls such as concrete washout or access areas where there is potential trackout. For certain the developer of the common plan should be able to coordinate a shared document that could be referred to. Comment 259 was

similar. The language concerning a group SWPPP has been updated, and is hopefully clearer. Part III.F.2.a has been updated to clarify that a list of all site operators must be maintained either by each operator individually. Alternatively a group list can be maintained by the main developer.

Response to Comment 246: A commenter, in addition to requesting addressing the concept of shared liability (refer to responses above in this grouping) suggests removing the definition of a shared control from Appendix A. Response: Although the term and concept of share liability has been removed, it doesn't remove the need to work with other contractors or operators to ensure shared controls are not compromised. No change.

b. Grouping – Stormwater Pollution Prevention Plan (SWPPP) Contents

Response to Comment 247: Commenters note that the level of detail for required Stormwater Pollution Prevention Plans is encouraging.

Response to Comment 248: A commenter suggests increasing the requirement for SWPPPs to every operator, not those singled out in the draft. Response: As detailed in the Fact Sheet, the permit uses approved E&SC plans for control of sediment at sites; however, a SWPPP provides clarity and organization, for both the permittee and an inspector, for more complicated sites and sites which have a higher likelihood of discharging toxic pollutants.

Response to Comment 249-250: Commenters suggest that SWPPPs are burdensome and unnecessary for all construction projects, and as an alternative the state requires certain BMPs. Response: As noted by the commenter, fueling stations and individual activities that occur during construction are not typically accounted for in contemporary stormwater management and sediment control plans. SWPPPs are an important tool, even when specific BMPs are called out in the permit, as it allows the Developer to document in an easily understood fashion, which BMPs are relevant to their operation. The Department has been contacted by developers requesting SWPPP templates for the 14GP for use in the State, which indicates that SWPPPs are important tools that the industry understands. In fact it isn't unusual to find SWPPPs at many sites by national builders. We know in many cases the E&SC isn't sufficient, for example where there are potentially contaminated soils at LRP sites, where SWPPPs are already routinely used. The intent of SWPPPs are to address gaps between E&SC and the permit requirements. Thus the focus of SWPPPs is on areas not addressed through E&SC, which would be redundant. Thus the triggers chosen should reduce any burden on most projects. The level of complexity required to create the SWPPP to address these activities is less than the commenter suggests. In fact, once the developers have a SWPPP and if they have the similar activities at other sites, they can begin to develop their own SWPPP template for those activities. Controls or BMPs are included in the permit so even copying the language to the

SWPPP would ease the process. If an operator needs to modify a BMP or practice, increase training, or if an operator finds that certain BMPs are not necessary at their site, the SWPPP provides their plan for successful implementation.

The commenter though makes a strong argument for avoiding requirements for SWPPPs, at least for smaller construction projects, solely due to gravel or aggregate or other building materials present on-site or fertilizer required for revegetation, or even concrete washout. Other stormwater permits such as the industrial stormwater or MS4, use 5 acres as a threshold for additional controls. To avoid redundancy between the E&SC plan and SWPPP, the permit is being issued removing the SWPPP requirement for projects less than 5 acres solely based on gravel or aggregate or other building materials present on-site, fertilizer required for revegetation or concrete washout.

Inconsistent requirements for contaminated soils have been updated in Part II.A.2, Part III.F.1 and Part I.D.6 of the permit and examples of how to check for contaminated soils provided.

Response to Comment 251: A commenter asks if a SWPPP template will be available. Response: MDE has provided SWPPP template for operators largely based on EPA's CGP SWPPP. This isn't mandatory to use, as operators may have a SWPPP they find is successful either in other States, or after evaluating the provided SWPPP the permittee trims it down specific to their way of doing business. The benefit of using the template is it will be consistent with other operators so that inspectors can more easily review the requirements in it.

Response to Comment 252: A commenter questions the reliance on local approval authorities who have the approval responsibility of E&SC plans and laments an overall lack of sufficient pollution controls and a stream protection zone concept that offers far too much flexibility to actually protect streams. Response: The delegation of authority and reliance on plans that are approved locally has significant benefits. Local soil and water conservation districts, and municipal planners, are a valuable resource, as they will have a necessary understanding of the local site and soil conditions. Municipalities may also have enforcement authority over a project under municipal ordinances. Refer to Grouping – PART III.A.2.a and Appendix B Stream Protection Zone (SPZ) for specific clarifications regarding this aspect.

Response to Comment 253-255 and 257-258: Commenters note that SWPPPs haven't been used on projects in the past. They ask if they are now required or generally used for their own purposes. Response: To evaluate if SWPPPs are now required, please see Part III.F.1 for the list of conditions. If developers do want to maintain SWPPPs for other reasons, those are not prohibited.

Response to Comment 256: A commenter asks if a SWPPP can be created after filing an NOI, for instance when using chemical additives. Response: After the initial NOI was submitted or the approval issued, if the permittee determines that a condition exists requiring a SWPPP (e.g., accommodating use of chemical additives), the permittee should request an amendment or modification through the ePermit system.

Response to Comment 259: A commenter notes that the requirement to include 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, may be expecting too much for an operator to identify all other operators on-site and their areas of control is not realistic. Response: Reference comment 245, which has modified this requirement so that you would only include a list of all other operators who will be engaged in construction activities at the site and working within your area of control; and, identify the areas of the site over which you and each of these operators have control.

Response to Comment 260: A commenter notes that the signature of SWPPPs in Part III. F.4.c is not discussed in the draft permit. Response: The documentation for delegation of authority is to be handled as an internal document filed by the stormwater team with the site project files. The documentation process for delegation of signatory authority for signing of SWPPPs has now been outlined in the permit.

Response to Comment 261: A commenter recommends PART III.F.2.d.i referring to site map include “Boundaries of the property, or right-of-way”; since linear utility projects are typically carried out on easements. Response: The SWPPP site map includes right-of-way as an alternative to property boundaries for linear utility projects.

Response to Comment 262: A commenter suggests that more sophisticated online maps such as the State’s MERLIN map, that provides additional information about the proposed site of disturbance, be required. Response: The map and the elements contained in the permit have historically met the Department’s needs. The Department does make use of many maps to verify impairments or other elements in the permit. The specific source of the vicinity map isn’t as important as the usability by the permittee and an inspector. The critical thing for a SWPPP Site Map is that it is understood by the resources on-site. In addition to the vicinity maps provided by the applicant, the Department utilizes the most up to date electronic resources available. The following links are examples of maps used:

Designated Use Class

<https://mdewin64.mde.state.md.us/WSA/DesigUse/index.html>

TMDL <https://mdewin64.mde.state.md.us/WSA/IR-TMDL/index.html>

Watershed

<https://mdewin64.mde.state.md.us/WSA/TMDLWaterSheds/index.html>

Other maps include: MDE's LMA LRP Map and 303d Map

Response to Comment 263: A commenter notes that map requirements in Part III.F.2.f.i., is inefficient and redundant, since that information is already included in the approved E&SC plan series of maps. Response: Allowing a reference to the approved Plans when all the information listed in this section of the permit is part of the approved Plans is appropriate. The intent isn't to require duplicative maps that serve no purpose, but rather to delineate important information on maps. The SWPPP may either refer to the E&SC map when all information required is on that map, however provide an additional map separate and distinct from the E&SC plan when required.

Response to Comment 264-265: Commenters ask for more guidance regarding Class V Underground Injection Control (UIC) wells. Response: According to 40 CFR 144, most Class V wells are authorized by rule and do not require a permit. Because Maryland has Primacy for the UIC program, the WWPP Groundwater Discharge Permits Division can be contacted if there are questions as to if a permit is required. The Department's Land and Materials Administration's (LMA's) Oil Control program issues remediation permits that involve Class V wells and the voluntary clean up program issues approval letters for certain projects. The Water and Science Administration Sediment, Stormwater and Dam Safety (SSDS) oversees most UIC for stormwater which requires notification to satisfy an inventory requirement, whereas Groundwater Discharge Permits Division would for any other industrial discharges. However for many sites it is not required per federal regulations. Please see 40 CFR § 144.24.

Response to Comment 266: A commenter suggests the Department to amend subsection III.F.3 to require SWPPPs to be posted online. Response: Documentation is required by the operator on-site or easily accessible as well as by the inspector who may be dealing with a specific issue with the operator. SWPPPs often contain information that must be reviewed prior to being made publicly available, such as confidential business information (refer to Comment 267). Because of the sheer volume of SWPPPs being maintained and updated by the operators, it isn't feasible for the Department to constantly review and publish them all online. The PIA provides public access to specific SWPPPs.

Response to Comment 267: A commenter concerned with confidential business information (CBI), suggests that any formal request for a SWPPP should be requested from the permittee so that CBI may be removed, which is standard -- standard practice throughout the NPDES industry. Response: It is envisioned that formal requests for SWPPPs would be made by MDE to the permittee, who must provide their updated SWPPP with CBI removed within the time frames provided

in the permit. In addition the Department will review this and protect CBI when it is identified.

10. COMMENT CATEGORY – Request for Definitions and Mistakes Made

a. Grouping – Standard Term or Condition

Response to Comment 268: A commenter suggested the permit should give notice to the applicant of the minimum penalty to be assessed for certain common violations at the site by the inspector. Response: The permit includes the maximum penalties provided under the Clean Water Act in the standard terms and conditions (Part VI). The commenter desires other penalties or procedures for enforcement to be included in the permit. However the permit itself doesn't establish the penalty. The Department evaluates each situation on an individual basis and, for potential violations of Maryland law, determines appropriate penalties according to § 9-342 of the Environment Article.

Response to Comment 269: A commenter notes that a standard term in the permit language regarding reopening a permit due to a change in requirements brought on by a change to “any applicable effluent standard or limitation issued or approved under Sections 301, 304, and 307 of the Clean Water Act and suggests that this section should include a reopener provision for applicable changes to State law also. Response: If State Law were to be amended and required the Department to revisit the terms and conditions of this permit, it would do so.

b. Grouping – Definition Clarification Requested

Response to Comment 270: A commenter suggests adding a definition for 'assimilative capacity'. Response: A definition for “Assimilative Capacity” has been included.

Response to Comment 271: A commenter suggests adding a definition for “Stormwater Control.” Response: A definition for “Stormwater Control” has been included.

Response to Comment 272: A commenter suggests amending the definition for “Dewatering” to include “producing groundwater from well-point etc.” or adding a separate definition for Construction Dewatering.” Response: The definition for “Dewatering” has been updated to include “groundwater from well point”.

Response to Comment 273: A commenter points to inconsistencies with respect to State Law with the comparable definitions in the Water Pollution Control statute. In Appendix A, “Discharge of a Pollutant” is defined inconsistent with the definition of “discharge” contained in 9-101(b) of the Environment Article. Similarly, “Pollutant” is defined more narrowly in the Permit than the definition

provided in 9-101(g). Response: Updated definitions are included in Appendix A. Also refer to Comment 161.

Response to Comment 274: A commenter suggests that the Definition for “Chemical additive” for consistency in this list, state 'See Additive.'" Response: Slight change to reference under “Chemical Additive” in Definitions.

Response to Comment 275: A commenter requests that both words “Maintenance” and “Repair” be defined, since the 20-CP applies Parts III.A.1.d(ii) and III.A.1.d(iii) state significance to both regarding corrective actions. Response: Definitions for “Maintenance” and “Repair” have been included. See also Response to Comments 95 and 211.

Response to Comment 276: A commenter asks if the definition for “Construction activity” would also apply to landscaping installation, maintenance, and removal. Response: From EPA’s FAQ "Construction activity" does not include routine earth disturbing activities that are part of the normal day-to-day operation of a completed facility (e.g., daily cover for landfills, maintenance of gravel roads or parking areas, landscape maintenance) nor activities under a state or federal reclamation program to return an abandoned facility property to an agricultural or open land use (as opposed to demolition of something in order to build something new). Also reworking planters that are part of the landscaping at a building is landscape maintenance and not construction. In either case, the clarification is specific to maintenance.

Response to Comment 277: A commenter asks about the definition of “Construction site” and if it would be easier to define by limiting the boundary by the limit of disturbance. Response: Although most of the activity may be inside the limit of disturbance, there may be activities regulated outside of it such as equipment staging yards, materials storage areas, and excavated material disposal areas.

Response to Comment 278: A commenter asks if “Construction support activity” definition is intended to expand the need for NPDES coverage to remote sites not directly connected to the construction site. Response: The permit is required for discharges of stormwater from “construction support activities,” which include construction-related activities that specifically support the construction activity and involve earth disturbance or pollutant-generating activities of their own (e.g., activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, borrow areas). In cases where the E&SC doesn’t address this construction activity, a SWPPP should be prepared consistent with this permit and the application for coverage under it.

Response to Comment 279: A commenter asks if the term “Control Measure” definition means permanent or temporary measures? Response: The permit has

been updated to consistently use the term “Stormwater Control” instead of “Control Measure”. (Refer to Comment 271) Stormwater Controls include BMPs or other methods of prevention pollution, including E&SC and for phases projects may include post-construction practices.

Response to Comment 280: A commenter asks about a conveyance channel, and what it means to safely convey something. Does this mean safely for property, life or environmental resources? Response: Yes, it could mean any of these. According to its definition in the Permit, a conveyance channel is a channel designed to safely convey stormwater flow within and eventually out of a construction site. The design itself should take into account any number of characteristics to meet the requirements of this permit.

Response to Comment 281: A commenter asks if ESC Plan should be defined in the Appendix. Response: This is actually detailed early in the permit Part II.A.4.a, and a central requirement for permit coverage.

Response to Comment 282: A commenter recommends for definition EPA TMDLs to add a cross reference to Total Maximum Daily Loads definition. Response: This is easily found under TMDL. Cross references are included when an item is hard to find.

Response to Comment 283: A commenter recommends adding cross reference to photos for various turbidity values. Response: This would depend on printer or display settings and could vary. The method for determining turbidity is more descriptive. A turbidity criteria has been added. The photos or an equivalent will be added to training material and added to our website.

Response to Comment 284: A commenter asks if “Impervious surface” definition would include gravel areas for heavy use per the ESC Manual. Response: The definition does include any surface used for vehicular traffic.

Response to Comment 285: A commenter points to inconsistencies in the term discharge to impaired waters. Response: The concern is that the operator may not know how to determine if the waters are impaired, however MDE clarifies this on the NOI by providing a mapping resource consistent with state Regulations. When a watershed is included in a Bay or local impairment, it is brought up on the screen. This definition is consistent with the EPA’s CGP.

Response to Comment 286 and 291-292: In reference to the Definitions “Includes or including” and “Site” and “Small residential lot” the commenters suggest the term is confusing or isn’t needed and to delete. Response: Based on this comment, a review was performed to identify and remove phrases that are defined here but not used. Several unused phrases in the Appendix were removed.

Response to Comment 287 and 289-290, 294-295: A commenter notes that some acronyms are included, but that they are not necessarily defined such as “NPDES”, “RCRA”, “SWPPP”, “SDS”, “SWM Plan”. Response: That is true, at times this is the case.

Response to Comment 288: A commenter asks why Permanent stabilization is included in the definition, but not final stabilization. Response: The reason is that the terms permanent and final stabilization are referred to in the permit, and specifically permanent stabilization is a requirement for termination. This definition clarifies that the two (permanent and final) are equivalent. Also as noted in the permit text, permanent (ESC Handbook Section B-4-5) or temporary (ESC Handbook Section B-4-4) stabilization are further defined in the Handbook.

Response to Comment 293: A commenter asks if a storm event as defined in the appendix should include where it is measured and by what entity. Response: The definition isn’t a permit condition, but meant to provide context for various permit conditions that may specify those elements.

Response to Comment 296: A commenter asks if there should be a definition for Tier I Waters. Response: Since Tier II and Tier III are set aside with unique requirements, they are defined. Tier I can be assumed to be waters that are not designated as Tier II or Tier III.

Response to Comment 297: A commenter asks if under the definition of TMDLs, whether wasteload allocations, load allocations, and margin of safety should also be defined. Response: Although important concepts, they are described in detail under the programs that determine TMDLs and thus not required to be laid out in this permit Appendix.

Response to Comment 298: A commenter suggests modifying the definition of “Upset”. Response: This is one of the Stand Terms for all permits and the language is defined by the EPA.

Response to Comment 299: Regarding the definition of Vehicle Wash Water, a commenter suggests deleting the phrase ‘and to make them look presentable to the public’. Response: This is consistent with EPA CGP and is descriptive.

c. Grouping – Mistakes

Response to Comment 300: A commenter notes that “Waters of This State” should not have a capital T in This. Response: The definition does come from COMAR 26.08.01.01, and the commenter is correct. Correction made for “Waters of this State” throughout the permit for consistency.

Response to Comment 301: A commenter notes Part I.B.1.c appears to be missing in the opening clause prior to the enumeration of subparagraphs i through iv. Response: This entire Part I.B.1.c is a duplicate of that found in Part I.C.1.c, and as noted in Comment 21 in the response document, it is now removed from I.B.1.c.

Response to Comment 302: A commenter notes Part I.E.3 reference to the industrial stormwater general permit is not given its proper name and there is an extra period at the end of the subsection. Response: The proper name General Permit For Discharges of Stormwater Associated With Industrial Activity is added and extra period removed.

Response to Comment 303-304: A commenter notes Part II.A.1 refers to Part II.4, Part II.7 and Part II.8 and these should have been Part II.A.4, Part II.A.7 and Part II.A.8. Response: Changes made.

Response to Comment 305: A commenter notes Part III.A.1 contains a sentence that begins “ESC Handbook serve as...” but should be changed to “serves”. Response: Change made.

Response to Comment 306: A commenter notes Part III.C.8.b states that “[d]uring the entire period of permit coverage, you shall maintain the following records, which shall available...” should read “shall be available”. Response: Change made.

Response to Comment 307: A commenter notes Part III.D.2 text needs to be properly enumerated, specifically the language that follows subparagraphs b.i through b.iv. Response: Change made.

Response to Comment 308: A commenter notes Part III.F.2.c (Nature of Construction Activities) appears to be misplaced and recommends that the text be moved from Part III.F.2.c to become the fifth and final bullet point under Part III.F.2.c.vi. Response: Change made.

Response to Comment 309: A commenter notes Part III.F.2.f.ii refers to an “Alternative 3”, which is not in the Appendix and should be corrected. Response: Change made.

Response to Comment 310-312: Commenters note Part III.F.2.j and Part III.F.4.c, refers to Part I.F.5, however the correct reference should be to Part II.A.8. Response: Change made.

Response to Comment 313-315: Commenters note STANDARD PERMIT CONDITIONS referenced as Part VI should be Part IV. Response: Change made.

Response to Comment 316: A commenter notes that Standard Permit Conditions M, Upset details the Conditions Necessary for Demonstration of an Upset is unclear since it is not related to an upset. Response: To provide clarity on the reporting requirements when a permittee is demonstrating an upset, Part IV.M.3 should be updated to read: “The permittee submitted a 24-hour notification of upset within 24-hours of becoming aware of the upset in accordance with the reporting requirements of Corrective Actions above. The term and the references have been corrected.

Response to Comment 317-318: “Treatment Chemicals” definition appears within the definition for Toxic Waste. Response: This is a typographical error and has been corrected.

Response to Comment 319: A commenter noted in Appendix C (Antidegradation Checklist), the page numbers were all “Page 2 of 6.” Response: This has been corrected.

11. COMMENT CATEGORY – Request for Additional Input on Four Topics

a. Grouping – Proposed Climate Adaptations Requirements

Response to Comment 320: A commenter suggested the Department’s proposed changes would not resolve all concerns that result by a changing climate. Response: The Department intends to continue to listen to input and adapt to changes in climate based on good science. Although the 2011 Handbook has climate considerations, it is expected that future updates to the required controls will be updated with specific adaptations. The changes proposed in the permit allow the Department’s work on the Handbook to be fully implemented in the permit. Refer to the Grouping – Climate Change Impacts Need to be Considered for further discussion.

Response to Comment 321, 323-324, 328-330, 333-334, 337: Commenters suggest it isn’t practical to update SWM or ESC every 3 years. Such a change would impose delays and costs for marginal environmental improvement. Response: Once the Department has fully vetted options to address climate impacts and has updated specifications, construction activities must take these into account. These changes do take place in a transparent fashion and those entities impacted should be involved in the process of updating the Handbook. The intent of addressing changes for construction sites based on changes in climate is not to delay or cause additional costs, but rather to address weaknesses in E&SC. The commenter assumes that the changes are substantial. That will be determined over time. Although changes will certainly impact E&SC, there will also be other impacts for the operator to consider such as SWM and local flooding (culvert design or sewer sizing), and these changes are expected to be more

involved. This permit and its purview are based on E&SC and disturbances during the construction phase. COMAR 26.17.01.08 (F) is specific to E&SC. This part of the regulation is titled “Expiration of Approved Erosion and Sediment Control Plans”. This simply states that “*Approved erosion and sediment control plans remain valid for 3 years from the date of approval, except surface mines and landfill plans, which remain valid for 5 years.*” It goes on to state that “*Erosion and sediment control plan approvals may be extended or renewed by the approval authority.*” There is no mention of SWM in this portion of the regulations. However the developer should integrate erosion and sediment control environmental site design into the stormwater management plan as appropriate. It should be pointed out that the costs of property damage due to flooding must also be considered by the entity involved in the construction project. For sites built out that don’t take into account climate impacts, retrofits may eventually be required. These are not a result of this permit, but are based on the reality of the evolving situation we live in. Since this permit deals with E&SC it is to be expected that if specifications change, at some point the projects underway will need to take them into account. The three year mark is not arbitrary, but actually related to recertification required in Maryland.

Response to Comment 322: Commenter points out that plans don’t expire, however the approval of the plans does expire. The language proposed needs to be more specific. Response: COMAR 28.17.01.08 states PLANS remain valid for 3 years.

Response to Comment 323: Commenter points out that required E&SC inspections that occur regularly address issues more effectively than changes to specs based on models. Response: This is a very good observation. The permit actually goes beyond the typical E&SC inspection, and includes the evaluation of the runoff and potential impacts on local waters required by this NPDES permit. The permit does rely on regular inspections and resulting corrective actions to adapt to the realities of what is occurring on sites. However, approved E&SC plans are valuable, and if the State determines additional controls are now essential based on changes in climate, those must be weighed and implemented as appropriate. The 2011 ESC Handbook leaves additional inspections (outside the weekly post storm event) up to the approval authority and gives recommendations for sensitive areas

Response to Comment 325-327: Commenters discuss sizing criteria for 2-year or 10-year storms, and whether this will be included in the ESC Handbook. They also ask whether the Handbook will be statewide or specific to certain watersheds. Response: The changes related to adapting to climate changes would be the changes that need to be updated per this permit condition. E&SC is integrated into the Environmental Site Design SWM Planning. Examples of how 2-year or 10-year storms are addressed in the 2011 handbook, a sediment basin is designed to store 1 inch of run off per acre (3600 cu ft) with pipes and matting to withstand a

2-year 24 hour storm event. Sediment basins are converted to SWM. SWM must store 2 year or 10 year storm. For example, page G.5 of the 2011 ESC Handbook gives an example to PIPE OUTLET SEDIMENT TRAP site design criteria example stating “*Ensure that the capacity of the barrel and riser is sufficient to pass the peak rate of runoff from the 10-year frequency storm.*”

Response to Comment 329, 331-332, 335-336, 338: Commenter points out a need for flexibility such as a grandfather clause, exemption or MEP. Another alternative would be to require the 3 year evaluation of E&SC for projects where the construction hasn’t begun or construction contract not awarded. Another alternative suggests an initial 3-year extension be allowed without revision, but future extensions be required to update. Response: Grandfathering isn’t applicable since it would require a change in COMAR. However to acknowledge there are circumstances where updates may not be practical, working through examples is appropriate with the local approval authority. The condition has been update to indicate that where the construction hasn’t begun or construction contract not awarded, a full reevaluation must take place. When construction has begun, you must implement sediment control to the maximum extent practicable as determined by the appropriate approval authority.

Response to Comment 339, 341-343: Commenters ask to clarify what is meant by Design Manual or ESC Handbook. Response: The definition of the terms have been added to the permit.

Response to Comment 340: Commenter requests that the permit either use E&SC or ESC consistently. Response: The final permit has been updated to be consistent with the use of the abbreviation E&SC when referring to controls implemented, and ESC Handbook when referring to the specifications.

Response to Comment 344, 347: The commenter notes that the 2011 ESC Handbook doesn’t contain sufficient requirements to address changes in climate. Response: The permit relies on the specific requirements in the ESC Handbook to consistently specify requirements for construction sites. The 2011 ESC Handbook considers Climate (storm frequency, intensity, duration) and the influence on the runoff, soil erosion, and infiltration. The 2011 handbook requires flexibility and adaptation. Climate change is an evolving scenario, and changes are required to address design considerations. Each subsequent update of the ESC Handbook will provide a consistent methodology for site design. What this requirement attempts to do is make sure that once the ESC Handbook is updated, changes are implemented to reflect the best practices available. However design considerations are just a component of protections. As Comment 323 references, constant adaptation is required as climate changes. The important additions in the permit are the required corrective actions, which are similar to the referenced permits from other states. Relying on even an updated design manual or handbook would be short sighted, without some type of corrective actions.

Response to Comment 345-346: The commenter acknowledges the link between permit and the ESC Handbook, however suggests the handbook be updated more often, even annually. Response: The suggestion is appreciated. Updates will be made based on best available science and done transparently. The 2011 ESC Handbook does already offer flexible guidance for the approval authority to include additional control measures to protect resources.

b. Grouping – Proposed Threatened and Endangered Species

Response to Comment 348: A commenter appreciates the proposed revisions, but requests further clarification to include the entire project area. Response: The consideration for consultation does encompass the Project area. The term Project does encompass the planned areas of disturbance and is defined in Appendix A.

Response to Comment 349: A commenter is concerned that MDE is delegating regulation of threatened or endangered species to DNR. They also request more specificity. Response: DNR currently is the agency responsible for protections for these species. This is not new. What is clear though is that it is not well understood when to or how to engage with DNR and complete such a consultation. The language in the permit provides more specificity on how and when to determine when concerns do require a consultation and direct the permit applicant to the correct contacts in DNR to complete a consultation.

Response to Comment 350: A commenter notes that they already engage with DNR when projects impact wetlands, under the JPA. They ask if this is in addition to that process. Response: DNR is the agency to consult with, and if already engaged under the JPA for portions in wetlands, the other areas of disturbance should also be evaluated. If that wasn't clear in the past, the increased specificity has been successful in conveying the requirements.

Response to Comment 351: A commenter suggests coordination with DNR prior to submitting an NOI will delay projects. Response: Consultation is required prior so that adequate protections can be considered for threatened or endangered species present. For most permittees, they often consider the NOI and approval the last step prior to commencing construction. Therefore this consultation is important prior to putting shovel to ground and the timing appropriate.

Response to Comment 352-353, 358: Commenters suggest concerns with requiring DNR review beyond the LOD, to include the surrounding area and ecosystem. Response: The Department's authority in the permit doesn't extend beyond the construction site. This is defined in the permit. *“Construction Site or Site – the land or water area where construction activities will occur and where stormwater controls will be installed and maintained. The construction site includes construction support activities, which may be located at a different part*

of the property from where the primary construction activity will take place, or on a different piece of property altogether.” In addition, construction activity is defined in the permit. *“Construction Activity – earth-disturbing activities, such as the clearing, grading, and excavation of land, and other construction-related activities (e.g., stockpiling of fill material; placement of raw materials at the site) that could lead to the generation of pollutants.”* As pointed out in response to Comment 348 this specific condition refers to the definition of Project area as found in the Appendix A.

Response to Comment 354-356: Commenters ask what type of documentation is required to demonstrate consultation has occurred. A commenter states that such requirements are already identified and included on SWM and E&SC plans.

Response: The implementation for the permit is the inclusion on the NOI of a check box to indicate that species are present and also that consultation has occurred. The Department expects that any construction restrictions would be incorporated into E&SC plans. This would not be an additional consultation, if consultation had already taken place under NEPA for the Project area. Any “taking” of a threatened or endangered species requires DNR’s concurrence or permit. DNR does have access to the portal, has the opportunity to review pending authorizations during the public notice period and if they object to a specific project where consultation hadn’t taken place, they can request a review of documents. MDE doesn’t intend to do any further review as this is the purview of DNR.

Response to Comment 357: A commenter requests that the ESC handbook be updated to indicate must investigate rather than a “consideration”. Response: The handbook is not a regulation that either requires or lets a developer off the hook for Federal or State requirements. Ignoring protections for these species is likely to cost the developer in the long run, and is best considered upfront.

Response to Comment 359-360: Commenters suggest implementing a similar process used for an Alaskan permit. Response: The DNR provides the consultation for these essential protections. This permit isn’t a regulation nor does it intend to over-reach and include additional requirements. MDE and DNR will continue to work together to ensure species are protected. Similar to EPA, the implementation in Maryland will ensure the agency responsible (DNR) is aware of projects and that their concerns are addressed.

c. Grouping – Proposed Requirements for Complete Application Package

Response to Comment 361, 375: A commenter is concerned that providing a complete application up front will cause delays. Response: There is significant interest in projects that impact the community, which is why the 14 day public notification period has existed in previous permits and also by EPA in their CGP approval process. The public expects and deserves a complete picture during the

notice period. Without complete packages being delivered upfront, citizens are forced to request delays for them to review E&SC. If the E&SC plan is up to state standards there should be no additional delay and citizens will be able to double check work.

Response to Comment 362: A commenter suggests that instead of E&SC plan approval, that SWM Concept approval be required to start the 14 day public notice period. Response: The existing permit required final E&SC plan approval prior to issuing coverage. This is found on page 6 of the 14-GP “demonstrating that the ESC plan for the project has been approved by the appropriate approval authority”. It also required an approved SWM prior to commencing construction. This is also found on page 6 of the 14-GP “*Persons who obtain coverage under this general permit shall, prior to commencing construction, develop and obtain approval from appropriate approval authority of:*” .. “*stormwater management plans (unless exempted by the following law or regulation or obtaining a proper waiver from the approval authority)*”. To be clear, the proposal sent for comment was that the final E&SC plan is required prior to the 14 day public notice period. As noted by the commenter, projects may have an approved E&SC, associated with a SWM Concept approval. Most often these are indicated on the same plan set. This is often enough to get a grading permit or to begin grading, however prior to more advanced construction, a final SWM is still required. This has been clarified in the permit. There are some cases where sites are exempt from E&SC. A note added in the permit clarifies that in cases where a construction project is exempt from E&SC and SWM plan requirements under Title 4, the project requires NPDES permit authorization, so a SWPPP may be used in lieu of an approved E&SC plan.

Response to Comment 363-364, 366: Commenters ask what processing means, and why some processing cannot begin during the notice period. A similar comment asks if there is an automatic approval on the 15th day. Response: The use of eNOI tools allow for elements to be evaluated automatically. That type of automatic processing would still happen. However, an approval may not happen until after the public notice period. Depending on workload permitting staff may do additional processing of the permit, prior to the end of the 14 days. The permit though wouldn’t allow final issuance of a registration prior to the 14 days. On that 15th day, depending on staff workload, the approval can be issued and all efforts will be made to stay on top of the queue to facilitate a quick turnaround. However, there is no guarantee it will happen on the 15th day.

Response to Comment 365: Commenters ask if they can begin the NOI process prior to completing all approvals and receive a permit number as required by certain local authorities. Response: The NOI can be prepared over time; however the 14 days will not begin until the package is complete. The so-called permit number is created after all information is complete and the authorization is

granted. The Department will be in communication with the plan approval authorities to address the new procedures required under this permit.

Response to Comment 367: Commenters ask how they will know the package is complete and the 14 day notice period has begun. Response: Just as it occurs now, projects that are on notice period are visible in the portal, and an email is sent confirming this to the signatory.

Response to Comment 368, 374: A commenter wants access to more than approved E&SC to review, and to allow the public to review all documents. Response: The complete package includes a completed NOI, the certification of E&SC, along with other documents as required such as the antidegradation review and SWPPP. The public is free to comment on any aspect of the package as it relates to the construction activity. However, to provide certainty to the applicant, the E&SC will be held to that state's standards, which is the primary set of controls related to construction.

Response to Comment 369: A commenter is concerned that the public review of their application will result in many changes to their already approved E&SC and then create a delay in schedule. Response: As noted above in response to Comment 368, as long as the E&SC plan is prepared to the state's standards, that part of the application should not result in any delays. The 14GP was written in a way that the public didn't have access to review plans, so that if there were errors they couldn't be addressed.

Response to Comment 370-371: Commenters agree with the requirement for complete E&SC prior to the 14 public notice period. Response: The commenters provided additional rationale to support the proposed approach.

Response to Comment 372: A commenter requests clarification on what is included on the antidegradation review and who signs it. Response: The permit does clarify who signs the checklist. Any site that MDE has been consulted for full antidegradation review will also get a letter that can be uploaded with the other NOI documents.

Response to Comment 373: A commenter requests clarification on what acreage is required on the NOI. Response: The NOI requirement is the maximum disturbance. This may be the best estimate based on the final projects LOD.

Response to Comment 376-377: Commenters request more time, up to 30 days, to review and comment on documents. The suggestion is that the public notice period is meant to provide meaningful engagement. Response: The selection of the 14 days is a public notice period for the particular NOI. At that time deficiencies in the E&SC can be investigated and addressed. Public comment relates to the public participation process for the development of this permit. This

is the process this response document is closing out. This permit (the 20-CP) has undergone substantial comment from industry and third parties. The public participation for 20-CP was extended to the maximum provided for a permit which totaled 120 days.

d. Grouping – Water Quality Standards and CGP Turbidity Benchmarks

Response to Comment 378-379: A commenter is frustrated by the 14GP’s lack of water quality based limits, and agrees with the inclusion of narrative limits in the proposal. Such limits should lead to better treatment or consideration of the discharges. Response: The comments really get to the importance of establishing criteria that are protective of the state’s water resources.

Response to Comment 380, 382: A commenter is generally supportive of including the narrative conditions related to the state’s water quality standards, however, suggest this still too vague. Response: The comments received during the Tentative Determination did confirm that the public isn’t familiar with COMAR or the water quality standards. This was also one of the items we tried to address when we created the Tentative Determination, to try eliminating references to COMAR and incorporate the actual requirements into the permit. However, to try incorporating the entirety of the water quality standards in the permit would be potentially more confusing. Thus, the portions that are most closely related to construction were chosen in the narrative standards. In cases where the public were to identify issues with that receiving water related to the narrative conditions, the state could verify the actual instream criteria and make a determination. Numeric methods are discussed in the comments related to benchmarks, however the non-numeric standards for a good backstop.

Response to Comment 381: A commenter objects to narrative criteria as this could lead to subjective claims that shut down job sites and may actually cause more lengthy exposure of job sites to stormwater. Response: The state’s water quality standards are set up to provide better clarity on what the goals are for our water resources. Whether they are explicitly provided in the permit or just maintained in COMAR, the standards are there for all to access. What is objectionable to citizens who use the resource would be a violation of the intent of the permit. Behind the narrative standards are numeric standards that can be used to more specifically validate instream criteria. Even in the case of a shutdown job site, per COMAR 26.21.01.29 C.5, the permittee still must “*take steps to abate the violation or violations and to comply*”.

Response to Comment 383: A commenter asks for additional clarification as to what frequency of verification is a permittee held to, such as the kind of monitoring or the tolerance of changes that occur or how to differentiate what changes are caused by the project versus what is from the surrounding area. Response: The intent of the inspection frequency in the permit is to provide

adequate review of site conditions so that they don't degrade and cause an exceedance of a water quality standard. Of course, if the community can see impacts, we would expect that the operator would see impacts as well. If not, an inspector will be on-site and bring it to your attention. The approval authority can also require additional inspections and should consider doing so per the ESC Handbook.

Response to Comment 384: A commenter asks to define “color for aesthetic purposes”. Response: The color water quality standard from COMAR has been added to the definitions in Appendix A.

Response to Comment 385: A commenter asks what parts of the EPA CGP are being evaluated for turbidity benchmarks. Response: The draft language provided for additional comments referenced the specific sections of the EPA CGP being evaluated.

Response to Comment 386: A commenter suggests that the EPA CGP has requirements that are unachievable related to visual turbidity. Response: EPA issued their final EPA Construction General Permit (EPA CGP) when the Department was still considering a final determination. Of significant interest to the Department was the additional clarity added for turbidity. The basis for any benchmarks would take into account EPA's determination, in addition to conditions in Maryland. Below is this evaluation and decision regarding choice of benchmarks for the 20-CP.

The EPA CGP requires turbidity benchmark monitoring for sites discharging dewatering water to sensitive waters (sediment-impaired or designated high quality waters). – The 2022 EPA CGP requires targeted sampling of dewatering discharges to sediment impaired waters or waters designated as Tier 2, Tier 2.5 or Tier 3 waters (referred to in the permit as “sensitive waters”). Under this new requirement, operators must collect at least one turbidity sample of the dewatering discharge each day a discharge occurs and compare the weekly average of the results with a benchmark turbidity value of 50 Nephelometric Turbidity Units (NTU). EPA derived this benchmark threshold based on a review of water quality standards for states and certain territories where EPA is the permitting authority, other NPDES dewatering permit conditions, literature related to the effects of turbidity on aquatic life, and public comments received during the comment period on the proposed 2022 EPA CGP. EPA is also providing operators with the flexibility to request an alternate benchmark for their site that is higher than 50 NTUs if the operator has information demonstrating that the higher number is supported by the receiving water's water quality standard for turbidity. For clarity, EPA emphasizes that the benchmark threshold for turbidity is not an effluent limit. As such, an exceedance of the benchmark threshold does not itself constitute a

permit violation. Rather, the benchmark threshold acts as a warning sign to the operator that changes may be needed in the dewatering controls to improve pollutant removal and protect water quality. Accordingly, if the weekly average of the turbidity samples exceeds the benchmark (or an alternate benchmark based on state WQS), the operator is required to conduct follow-up corrective action designed to lower the turbidity levels in the discharge. The new corrective action provisions for a benchmark exceedance require the operator to immediately take all reasonable steps to minimize or prevent the discharge of pollutants until a solution can be implemented, including safely shutting off the dewatering discharge depending on the severity of the condition; determining whether the dewatering controls are operating effectively and whether they are causing the conditions; and making any necessary adjustments, repairs, or replacements to the dewatering controls to lower the turbidity levels or remove the visible plume or sheen.

For the 2022 EPA CGP, EPA is focused on turbidity monitoring for sensitive waters because sediment is a major cause of impairment of the nation's waters. Excessive sediment can impair waterbody uses such as aquatic life, navigation, recreation, and sources of drinking water. The monitoring requirements for dewatering discharges to sediment-impaired waters will help ensure that such discharges do not further contribute excess pollutants to waters that are impaired for sediment and that existing uses are maintained and protected. Turbidity monitoring will provide operators with a baseline and comparable understanding of dewatering discharge quality, potential water quality problems, and dewatering control measure effectiveness. These data will supplement information provided through the daily inspections during dewatering activities and allow EPA to review the pollutant concentrations in dewatering discharges. See Part 3.3, 5.1.5, and 5.2.2 of the EPA CGP permit. EPA includes an extensive discussion of the rationale behind the decision to include benchmark monitoring for dewatering discharges to sensitive waters in their permit and a more thorough discussion of the key parts of these requirements. See Section VI, Part 3.3 of their fact sheet. EPA has also provided additional technical assistance resources for operators to use in implementing these provisions. For example, EPA has developed a Monitoring and Inspection Guide for Construction Dewatering, available on EPA's website at <https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates>, which provides guidelines on how to correctly monitor for turbidity, determine if the weekly average exceeds the benchmark, and, if so, how to proceed with corrective action, as well as how to comply with the permit's dewatering inspection requirements.

Why EPA Selected Turbidity as its Benchmark Pollutant The specific parameter that is being used for the monitoring requirements is turbidity.

Turbidity is the measure of the scattering and absorption of light when it enters a water sample. The quantity of suspended particles in water helps to determine turbidity levels as do particle shape, size, and color distributions. Suspended particles can include clay, silt, colloids, finely divided organic and inorganic matter, soluble colored organic compounds, plankton, and other microscopic organisms. Turbidity levels are typically expressed in nephelometric turbidity units (NTUs). Higher NTU levels indicate more turbid water. See Table 2-1: Sediment and Turbidity Terminology, Environmental Impact and Benefits Assessment for Final Effluent Guidelines and Standards for the Construction and Development Category (EPA, November 2009).

EPA is focusing on turbidity as the monitoring parameter from treated dewatering discharges for a number of reasons.

- First, the simplicity of measuring turbidity offers advantages over other sediment parameters such as total suspended solids and suspended sediment concentration. As EPA explained in its Development Document for Final Effluent Guidelines and Standards for the Construction & Development Category (November 2009), “Turbidity is a simple measurement that requires only the use of a turbidimeter and can be conducted in the field. Readings are made in nephelometric turbidity units or NTUs. Turbidity measurement does not require any sample preparation, other than shaking the sample bottle before analysis. The sample is simply poured into a glass tube and placed inside the calibrated instrument. The result is read directly from the instrument. There are also a variety of digital turbidity probes, which can be coupled with a microprocessor-controlled data logger and combination meter/data loggers available that can be used to automatically read and log turbidity values in-situ.” Unlike other sediment parameters that require samples to be analyzed at a laboratory, turbidity can be measured and the results generated instantaneously. This offers advantages to the management of a dewatering discharge where elevated turbidity levels are found because the results are available in real time, and the operator will be able to take immediate action if necessary to temporarily shut off the discharge.
- Second, turbidity levels in the aquatic environment, as well as sediment in general, have well-studied impacts on water quality and organisms. A variety of organisms, including aquatic plants, invertebrates, amphibians, and fish, are affected by elevated sediment and turbidity levels. High levels of sediment and turbidity affect aquatic ecosystems by reducing photosynthetic activity, reducing food availability, burying habitat, and directly harming organisms. Organisms may relocate, sicken, or die. Organism loss can alter the composition of the aquatic community. See p. 2-11 of

Environmental Impact and Benefits Assessment for Final Effluent Guidelines and Standards for the Construction and Development Category (EPA, November 2009). For further discussion of the effects of sediment and turbidity on aquatic species and habitat, see generally Section 2.3 of the Environmental Impact and Benefits Assessment, cited above. Additionally, according to EPA's Assessment TMDL Tracking and Implementation System (ATTAINS), sediment and turbidity comprise a significant percentage of impaired waters in the United States. See Section 2.6 of the Environmental Impact and Benefits Assessment.

- Third, turbidity can be an effective indicator of the effectiveness of treatment controls at construction sites. Turbidity is an indirect measurement of the amount of sediment present in water, therefore, reductions in turbidity in the discharge translate into reductions in sediment in the discharge. Dewatering controls can be highly effective in removing soil particles and other contributors to sediment from dewatering activities. If high turbidity levels are present in samples taken of dewatering discharges following treatment by sediment controls, this would be an indicator that the dewatering controls are not effectively controlling sediment in those discharges. Turbidity in discharges could also be an indicator of total organic nitrogen, phosphorus, zinc, iron, and manganese. See Environmental Impact and Benefits Assessment for the C&D Regulation (EPA, November 2009, p. 4-23) available at https://www.epa.gov/sites/production/files/2015-06/documents/cd_envir-benefitsassessment_2009.pdf.
- Fourth, as noted previously, EPA found it compelling that nine States have NPDES dewatering permits that already include requirements for the measurement of turbidity, while a few of these include turbidity discharge limitations. The States requiring turbidity monitoring are Alaska, Arizona, California, Hawaii, Montana, Nevada, Wyoming, and EPA's dewatering permits for Massachusetts and New Hampshire. Each permit takes varying approaches to turbidity monitoring. For instance, Montana establishes different turbidity monitoring requirements based on the type of receiving water (i.e., Category A – Minimal impact, including discharges to ephemeral waterbodies and storm sewer systems, dry intermittent waterbodies, and large rivers; Category B – discharge turbidity limited to prevent impact (most restrictive protection for any receiving waters including perennial and flowing intermittent rivers, lakes, reservoirs, wetlands); and Category C – Real-time turbidity demonstration (most flexible for longer projects or projects that may occur during periods with more turbid receiving water). Each waterbody category is assigned different turbidity limits and monitoring frequencies. See Part

II.A.1 and Tables 1-4 of Montana's 2020 Construction Dewatering Permit. By contrast, Alaska requires its permittees to monitor both the dewatering effluent and downstream in the receiving water before commencing the dewatering operation, and then once per week afterwards. Alaska also establishes different effluent limits depending on whether the waterbody is freshwater or marine, and whether there is a mixing zone. See Table 4-Effluent Limits and Monitoring Requirements for Discharges to Waters of the U.S. of Alaska's 2019 General Permit for Excavation Dewatering Permit.

Rationale for EPA Establishing a weekly average 50 NTU as the Turbidity Benchmark EPA arrived at the adoption of a 50 NTU benchmark threshold following a review of water quality standards for States and certain Territories where EPA is the permitting authority, other stormwater general permits, and literature related to the effects of turbidity on aquatic life. A review of the information EPA considered is included in Summary of Water Quality Impacts and Criteria for Turbidity (EPA, 2021), available at <https://www.regulations.gov/docket/EPA-HQ-OW2021-0169>. EPA typically establishes benchmarks in stormwater general permits using EPA's CWA section 304(a) national recommended aquatic life ambient water quality criteria. EPA's recommended criteria for suspended sediment and turbidity is based on the 1986 Quality Criteria for Water (otherwise referred to as the "Gold Book"). The Gold Book's water quality criterion for freshwater aquatic life states, "Settleable and suspended solids should not reduce the depth of the compensation point for photosynthetic activity by more than 10 percent from the seasonally established norm for aquatic life." However, this criterion has not been frequently adopted or used by States (EPA, 2006). Review of the state water quality standards for States and Territories where EPA is the permitting authority demonstrated that most States include narrative criteria and/or criteria expressed as a percentage or increment above the natural background for turbidity. Only Puerto Rico includes fixed numeric water quality criteria for turbidity (i.e., 10 NTU for Class SB waters³⁷ and 50 NTU for Class SD waters³⁸). Previous water quality standard reviews by EPA (1980, 2003) revealed similar trends indicating that most States rely on narrative or natural background based criteria. A benchmark threshold of 50 NTU is within the range of fixed numeric turbidity criteria established by other States and Territories and was one of the most frequently established fixed numeric criteria (EPA 1980, 2003). For States that included fixed numeric water quality criteria for turbidity, EPA (1980) indicated that those criteria generally ranged from 10 to 50 NTUs/JTUs (or "Jackson Turbidity Units"), depending on the applicable designated uses. However, two States had higher criteria (California's standards included criteria for ocean waters ranging from 75 to 225 NTU; New Jersey's standards included an instantaneous maximum criterion of

110 JTUs). EPA (2003) indicated that fixed numeric criteria for turbidity ranged from 2 to 20 NTU in States with the most stringent numeric criteria and 20 to 150 NTU in States with the least stringent fixed numeric criteria. Numeric criteria of 10 NTU and 50 NTU were the most frequently applied fixed numeric criteria, applied in six States and five States, respectively. EPA notes that a complete list of current water quality standards for the States and Tribes where the CGP applies can be found at <https://www.epa.gov/npdes/turbidity-benchmark-monitoringdewatering-under-construction-general-permit>. Natural background-based criteria are difficult to implement as benchmark thresholds in a general permit given the additional sampling required (effluent as well as upstream receiving water) and the natural variability of turbidity in receiving waters. Implementation of a floating benchmark threshold would effectively constitute a “moving target,” making it difficult for operators to design controls capable of maintaining the turbidity of dewatering discharges below the threshold under all receiving water conditions. Turbidity effluent limits and benchmarks in NPDES permits range in levels that are both lower than and higher than 50 NTUs. Washington’s Construction General Permit establishes a turbidity benchmark of 25 NTUs, with different types of corrective action required if turbidity levels are between 26 and 249 NTUs, or if they are 250 NTUs or greater. See Section S4.C.5. If the discharge is to water listed as impaired for turbidity, fine sediment, or phosphorus, the benchmark levels are replaced with a numeric turbidity effluent limit of either 25 NTUs or the water quality standard for turbidity (i.e., no more than 5 NTUs over background turbidity when the background turbidity is 50 NTUs or less, or no more than a 10% increase in turbidity when the background turbidity is more than 50 NTUs). See Section S8.C.2. California establishes a turbidity effluent limit in its Los Angeles Region 2013 Construction Dewatering Permit of 150 NTU maximum daily, and 50 NTU average monthly, while Alaska establishes an overall cap of 65 NTU for discharges. By contrast, Montana establishes a maximum daily limit of 20 NTU, and a 10 NTU monthly average limit for rivers, lakes, and wetlands. Application of the most stringent State criteria (e.g., within the range of 10 to 20 NTU) may be overly stringent, whereas application of the least stringent criteria (e.g., up to 150 NTU) may not be sufficiently protective of water quality for many receiving waters. Based on the above, selection of a benchmark threshold at the midrange of the State criteria should be appropriate for implementation in a general permit to protect receiving water quality. A benchmark threshold of 50 NTUs is consistent with the turbidity benchmark in the 2021 MSGP, which is based on “Combination of simplified variations on Stormwater Effects Handbook, Burton and Pitt, 2001 and water quality standards in Idaho, in conjunction with review of DMR data.” Previous versions of the MSGP included a benchmark of 5 NTU over background turbidity levels; however, EPA revised the benchmark in the 2008 MSGP to a fixed value

of 50 NTUs to “ease the monitoring burden for permittees, and to better address regional differences.” (2008 MSGP Fact Sheet) According to the 2008 MSGP Response to Comments, “The new benchmark of 50 NTUs for their permit requires the permittee to monitor only the outfall. Establishment of a background condition in receiving waters can be complex and require additional monitoring. Rather than incorporate these requirements into the general permit EPA elected to establish an absolute benchmark which is more easily evaluated by permittees’ pollution prevention teams.” EPA also reviewed existing scientific literature on the potential effects of different levels of turbidity on aquatic species. Review of the literature suggested that varying levels of turbidity can have negative effects on aquatic life, both directly and indirectly. Observed effects include decreased feeding, food availability, and habitat availability, and increased susceptibility to disease and death. One study reported that the behavior of juvenile coho salmon is disrupted at 30 NTUs, while growth is affected at 25 NTUs (Canadian Council of Ministers on the Environment, 2002). Another study reported altered fish behavior between 10 and 30 NTUs (Canadian Council of Ministers on the Environment, 2002). The growth of bay grasses and other aquatic plants were shown to be affected between 15 and 25 NTUs (Maryland DNR, n.d.; Lloyd, 1987), reducing available habitat and dissolved oxygen for fish and invertebrates. Additional literature-based information is summarized in EPA’s Summary of Water Quality Impacts and Criteria for Turbidity (EPA, 2021), available at Response to Public Comments EPA NPDES 2022 CGP available at <https://www.regulations.gov/docket/EPA-HQ-OW-2021-0169>. While these studies provide valuable data points, this does not necessarily make them the most appropriate benchmarks to use for the purposes of their permit. Appropriate benchmark values will necessarily depend on site-specific conditions, including the type of sediment, sediment concentration, duration, particle size, shape, and chemical characteristics, water temperature, other stressors, and the interactions of these factors. EPA also considered the fact that organisms can acclimate to higher turbidity levels that are short term in duration. It is also unlikely that there is an absolute value above which effects are likely to occur for certain species. EPA does not currently have turbidity data from its EPA CGP permittees to compare the quality of treated dewatering effluent with the 50 NTU benchmark. As part of its research into possible turbidity monitoring approaches, EPA contacted the States (Montana and Hawaii) that require reporting of turbidity monitoring as part of their permit coverage. From the turbidity data they shared, it is difficult to draw many conclusions from the reported levels, owing to the vastly different factors that may be contributing to the results, such as whether the dewatering discharge is from ground water or accumulated stormwater and the soil type. However, similar to what EPA would require, both States require sampling of turbidity levels after treatment at the point of

discharge. Acknowledging all the variables that may prevent EPA from drawing any definitive conclusions from the data, EPA finds it relevant that the average and median turbidity values from the Montana³⁹ data was 15.9 NTU and 5.7 NTU, respectively, while the average and median values from the Hawaii data⁴⁰ was 52.3 NTU and 4.1 NTU, respectively. To EPA, this information suggests that the 50 NTU threshold would be achievable in those States and that the trigger for corrective action would apply in some circumstances. Beyond this limited observation, however, EPA acknowledges that it would likely need a larger data set from monitoring that is subject to the same or similar requirements to say how many sites have turbidity levels higher or lower than the 50 NTU threshold. One of the advantages of including the 50 NTU benchmark in the permit is that EPA will be able to evaluate the data it receives during the 5-year permit term to determine whether its assumptions about the 50 NTU benchmark were correct and whether it should be modified to a different threshold in the future.¹

Rationale for MDE Establishing a daily maximum 150 NTU as the Turbidity Benchmark

- **Use of Benchmarks:** EPA's approach for implementing benchmarks with required Corrective Actions, is a proven methodology for stormwater.
- **Minimize use of polymers:** If the benchmark is not attainable at a site solely using conventional treatment technology, most sites will resort to using chemical additives (polymers) for flocculation and coagulation to improve settling. Therefore if a benchmark isn't deemed achievable by those authorized, these chemical additives may be used in excess. The Department's policy on polymers is to minimize their use whenever possible. Establishing a benchmark that emphasizes the optimization of conventional sedimentation practices rather than polymer use would best fit this policy.
- **Focus on water quality standards as a basis, rather than a technology basis for a limit:** At the time we are issuing this permit, there is no substantial data to verify if EPA's benchmark is achievable, however the Department received comments from industry that this is not achievable in Maryland. Even within Maryland, there is significant variability in turbidity observed discharging from construction sites. Sites with high clay contents tend to have problems getting sediment to settle out using traditional E&SC. In absence of a technology basis, the state chooses to settle on the water quality standards.

¹ EPA rationale in selection of benchmarks for turbidity in the final EPA CGP.

- **Utilize a daily maximum similar to the other State issued permit Benchmarks, if an acute or daily maximum is specified in Regulation.** Rather than select a weekly average, when discharges may not even occur daily, The Department focuses on acute or daily maximum criteria when discharges are intermittent since chronic criteria are based upon continuous exposure. Discharges under the EPA CGP are also precipitation-driven, so there is likely to be increased mixing capabilities in the receiving waters during times of discharge. A focus on a daily maximum also suggests more immediate action can be taken.

Response to Comment 387-389: Commenters believe that the EPA benchmarks, as numeric evaluations of turbidity, are superior to narrative limits. Commenters believe EPA's CGP should serve as a baseline. In addition to the approach used by EPA, the commenter believes examples from Idaho and Georgia should be considered. Response: The request for additional comments was focused on the EPA permit. In summary the commenter supports moving forward with a similar approach in Maryland, however requests the state consider other alternatives in the future.

Response to Comment 390-391: A commenter suggests that the required monitoring involves equipment that creates additional costs and this should be considered. Response: The purchase and use of turbidity meters is an additional burden. Meters available through a simple Google Search, range from \$600 to \$1000 dollars. There are additional costs in EPA's approach as well, since dewater requires daily monitoring and potentially use of polymers to control turbidity. They also mention color as another cause for concern, in that other equipment may be required. This same equipment can be used at multiple sites. There really is no alternative for evaluating turbidity, unless the state were to rely on narrative standards. In truth the numeric benchmarks protect the industry from false claims, if the site is in compliance.

Response to Comment 392: A commenter suggests addressing turbidity at sites could lead to delays in construction, which in turn would increase the time a site is exposed to stormwater causing additional environmental harm. Response: The goal is to ensure that discharges are not impacting water quality. It is evident that the current system of relying strictly on controls isn't working. Sites should be following temporary stabilization guidelines. Far too many citizens are concerned with the current results and thus the state needs to evaluate new approaches. The approach being considered doesn't require lab analysis and delays in getting responses. The approach allows the site to operate in a way that inspectors can agree with, thus potentially reducing sites getting shut down for similar issues, since the permit now addresses turbidity with agreed upon approaches for treatment.

Response to Comment 393: A commenter asks if the permit would address when an outside source, not the permittee, is responsible for water quality. Response: The permit addresses discharges from the construction site. If there are other sources impacting water quality of a receiving stream, those must be identified and addressed by the State. The clarifications added to the 20-CP permit also help clarify what the permittee is responsible for, which were not present in the 14-GP.

Response to Comment 394: Several commenters are concerned about the mention of temperature in the permit, since there are no identified controls in the E&SC handbook that address temperature. Response: The State and stakeholders will need to work together to identify practices that protect cold water habitat, and develop guidance and potential modification to the existing E&SC handbook. One key consideration is minimizing disturbance and maintaining natural features. The lack of clarity is largely due to the short term impacts of the actual construction activity. However it is most often the long term SWM that impacts stream temperatures. The permit however cannot be issued without considerations for water quality standards, and as provided in COMAR 26.08.02.03-3(A) and (D), (E), (F) and (G), various receiving streams include additional protections that we must afford.