



**MARYLAND DEPARTMENT OF THE ENVIRONMENT**

Water and Science Administration  
Wastewater Permits Program  
1800 Washington Boulevard, Suite 455  
Baltimore, MD 21230-1708

**FINAL**

Response to Public Comments

Regarding

General Permit for Stormwater Associated with Industrial Activity

State Discharge Permit Application No. 20-SW

NPDES Permit No. MDR00000

Final: Nov 8, 2022

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## **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 ASSOCIATED WITH INDUSTRIAL ACTIVITY (Maryland General Permit No. 20-SW), which authorizes the discharges of stormwater associated with industrial activity, to Waters of this State.

The Maryland General Permit No. 20-SW replaces the previous industrial stormwater general permit, Maryland General Permit No. 12-SW, which expired on December 31, 2018.

Notice of a tentative determination regarding this permit was published by the Departments Water and Science Administration (WSA) in 2021 during the weeks of January 13 and January 22 in newspapers across the state of Maryland. The notice was published in the Maryland Register on January 15, 2021. The Department held a public hearing regarding the tentative determination on Wednesday, March 3, 2021. Notice of the hearing was included in those publications. The public comment period concluded on April 19, 2021. This document summarizes the comments received during the public comment period 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 requires Stormwater Pollution Prevention Plan (SWPPP) updates based on changes in climate (new information and experiences with major storm events). The technology based limits (Part III.B.1) includes options to improve soil hydrology by adding organic matter to reduce the volume of stormwater runoff. The guidance for No Exposure certifications has been amended to acknowledge that all electric fleets have less potential to leak when waiting for service.

### **Changes related to comments on Lack of Enforcement.**

The permit requires benchmarks to be reported the first quarter after getting coverage.

### **Changes related to comments on Environmental Justice**

The permit requires operators within areas identified with an EJ Score greater than 0.76 to submit a comprehensive annual report to the Department.

### **Changes related to comments on Part I (Applicability).**

A reference to the Vehicle Washing General Permit has been added to the permit.

### **Changes related to comments on No Exposure Exemption.**

The permit allows the submission of photos in lieu of a professional engineer for operators with less than five acres, except in areas identified with an EJ Score greater than 0.76 or in flood plains. The guidance for No Exposure certifications has been amended to reflect operations that pose less risk such as transportation facilities that conduct minor vehicle maintenance that do not involve the replacement of lubricants or fuels; electric vehicle maintenance; and new transportation facilities that provide parking inside for all vehicles.

### **Changes related to comments on Part II (Authorization) Deadlines.**

The permit renewal will provide 6 months for facilities to update their 12-SW SWPPPs to comply with the 20-SW permit and apply for continued coverage.

### **Changes related to comments on Part III.B.1 (Technology Based Limits).**

Definitions and approval process when utilizing “Chemical Additives” and “Cationic Chemical Additives” has been added to the permit..

### **Changes related to comments on Part III.B.2 (Water Quality Based Limits).**

Requirements regarding monitoring for impaired waters have been reformatted and the Natural Background Determination has both been updated consistent with the EPA Multi-Sector General Permit (MSGP). If a new industrial activity intends to operate in a Tier II watershed, the permittee is required to comply with 26.08.02.04-1.

### **Changes related to comments on Part III.C (SWPPP).**

The permittee may maintain a copy of their SWPPP in electronic format, as long as it is available for persons on-site.

**Changes related to comments on Part IV (Corrective Actions and AIM).**

The permit provides an improved process for addressing exceedances of benchmarks by increasing requirements and defined end points. Conflicting language related to deadlines has been updated. The permit contains a process flowchart. The permit is simplified from the draft TD, in that it now has 3 levels, down from 4. References to the EPA MSGP Appendix Q have been removed. The situation where the final level repeats is addressed in the permit, requiring additional actions. Abnormal events exception and alternative benchmarks for copper and aluminum are included in the permit. The conditions for the natural background exception have been changed to be consistent with the EPA Final MSGP. Chemical additives may be considered to achieve benchmarks.

**Changes related to comments on Part V (Inspections, Monitoring and Reporting).**

The permit updates benchmarks for aluminum and selenium for Subsector K1 for flowing (lotic) waters consistent with EPA MSGP. References in Sector AD.e are corrected. Under Part V.A.3. requirements for visual monitoring require that the samples must be representative of the stormwater discharge. Arsenic samples must be “total recoverable”. Signature requirements are clarified for the Comprehensive Site Compliance Evaluation, Part V A.2, Part II C.2 and Part IV C.3.

Several cross-reference errors were corrected, and other minor clarifications were provided.

**RESPONSES TO SPECIFIC COMMENTS**

**1. COMMENT CATEGORY – Climate Change.**

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 and Construction Stormwater 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 the Department’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 storm event 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 will reflect any recent effects of climate change. The update is scheduled for completion in 2-3 years.

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. This process will take time, but when completed it will be required across the State. The Department's WSA's broader climate change adaptation strategy can be found at: [https://mde.maryland.gov/programs/Water/Pages/WSA\\_Climate\\_Change.aspx](https://mde.maryland.gov/programs/Water/Pages/WSA_Climate_Change.aspx)

## **Grouping – Changes in Climate Impact on Water Quality**

**Response to Comments 1 - 3:** The commenters are concerned that the advent of climate change will bring new challenges to the Chesapeake Bay watershed as described through various models and therefore hinder progress made on the Chesapeake Bay TMDL and needs to include a reopener to commit to modifying the permit based on future changes in the Bay Model or Phase III WIP. In addition, the commenter recommends updating the design manual based on revised data which is addressed in Grouping – Changes in Designs or Plans based on Changes in Climate. The commenters also suggest implications of flooding which are addressed in Grouping - Flooding Risks. Response: The modeling related to climate changes suggest a likely increase in nutrient and sediment loads and the Department is taking steps to address these increases. The Department originally developed a Phase III Watershed Implementation Plan (Phase III WIP) for the Chesapeake Bay that exceeded nutrient planning targets and will apply surpluses toward additional climate change goals, which will address much of the increased loads. However; 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. With regard to the proposed reopener, the permit already contains this as a standard condition under Part VI.Q, the “Reopener Clause for Permits.” If the Department deems it crucial to implement upsized on-site controls, then this clause would allow for the permit to be reopened.

**Response to Comment 4:** The commenter references the 2014 Chesapeake Bay Watershed Agreement, and provides a recommendation for monitoring to gather more information in order to assess the impact of increased extreme storm events on industrial stormwater. The commenter refers to a PIA as proof that the Department has not assessed how climate change impacts on industrial stormwater will contribute to Bay pollution loads. Response: The Department has assessed the impact of industrial stormwater on nutrient and sediment loads to the Bay. Industrial stormwater is extremely small in comparison to atmospheric, agricultural, and municipal wastewater loads to the Bay. As such, climate change impacts related to industrial stormwater at a Baywide scale are expected to be small. (Refer to Response to Comment 86).

The loads for each sector were included as supplemental information to the WIP Phase II WIP, which shows the percent contribution of industrial SW towards the total non-point source (NPS) baseline load and Total (PS + NPS) baseline load. The following represent the loads accounted for. Notice the small contribution from this sector as compared with the other sectors.

Sector	Total Nitrogen Load (lbs/yr)				
	% Contribution	2009 (Baseline)	2025 Cap /Allocation	Reduction	Reduction %
Agriculture	51.3%	62,761,671	51,276,849	11,484,823	18%
Air	1.3%	1,630,392	1,630,392	0	0%
Forest	15.3%	18,752,516	18,974,217	-221,701	0%
Industrial Stormwater	0.3%	331,760	264,458	67,302	0%
Septic	6.7%	8,222,853	5,516,225	2,706,628	33%
Urban	25.0%	30,528,529	25,439,939	5,088,591	17%
<b>TOTAL</b>		<b>122,227,722</b>	<b>103,102,079</b>	<b>19,125,642</b>	

Total Phosphorus Load (lbs/yr)					
Sector	% Contribution	2009 (Baseline)	2025 Cap /Allocation	Reduction	Reduction %
Agriculture	63.4%	4,693,795	4,247,727	446,068	10%
Air	1.4%	102,437	102,437	0	0%
Forest	6.4%	472,493	478,273	-5,779	0%
Industrial Stormwater	0.3%	25,675	16,919	8,756	34%
Septic	0.0%	0	0	0	0%
Urban	28.5%	2,111,911	1,582,453	529,458	25%
<b>TOTAL</b>		<b>7,406,311</b>	<b>6,427,808</b>	<b>978,503</b>	

Total Sediment Load (lbs/yr)					
Sector	% Contribution	2009 (Baseline)	2025 Cap /Allocation	Reduction	Reduction %
Agriculture	59.6%	2,087,188,283	2,087,188,283	0	0%
Air	0.0%	0	0	0	0%
Forest	9.8%	343,133,132	343,133,132	0	0%
Industrial Stormwater	0.3%	9,826,505	9,826,505	0	0%
Septic	0.0%	0	0	0	0%
Urban	30.4%	1,063,502,437	1,063,502,437	0	0%
<b>TOTAL</b>		<b>3,503,650,356</b>	<b>3,503,650,356</b>	<b>0</b>	

At a smaller geographic scale, the Department has evaluated the regulation and permitting of industrial stormwater and has observed the positive benefits at sites based on the permit's conditions. The Department evaluates performance not based on old data, but the results of benchmarks that have been included in the existing permit since 2014. The Department plans to continue using these benchmarks and adding additional benchmarks for industrial sectors that were not subject to them in the past. The 20-SW has a whole new series of monitoring elements including monitoring of pollutants related to impairments. The 12-SW resulted in the restoration of impervious surfaces to benefit the Chesapeake Bay and local waters, analogous to MS4 permit requirements. The maintenance of those practices continues with the 20-SW. The monitoring and the permit requirements in the present permit require reductions based on actual monitoring, not based on models. In addition to required monitoring, the permit results in transparency, as all benchmark monitoring is required to be put into NetDMR (electronic reporting system) and is available through EPA's Enforcement and Compliance History Online (ECHO) website. The commenter may be concerned specifically with the traditional Bay pollutants of nutrients and sediments. However, the required benchmarks include constituents specific to each industry sector including toxic metals and organic compounds and Chemical Oxygen Demand (COD). The Additional Implementation Measures (AIM) added in this permit include deadlines with increasing requirements that promote reductions of pollutants or face a consent order.



**Response to Comment 5:** The commenter requests that the Department issue a permit that is protective of water quality consistent with the CWA obligations. The commenter believes that issuing the permit without adaptations for present-day climate impacts fails technical and legal sufficiency, and requests that the Department take more time to review information submitted by the commenter. Response: The 20-SW is substantially similar to EPA's MSGP, and the other states. The 20-SW is meant to be protective and implement best practices available for pollution prevention. The additional monitoring, the additional AIM measures, and the additional impaired water monitoring are all meant to provide even more protection and to adapt to emerging situations, including those caused by climate change. The commenter is expressing concern regarding stormwater management structure designs. These are not part of this permit's purview, but are addressed more broadly through the MS4 programs, which regulate urban stormwater runoff. The commenter does not suggest any specific changes to the 20-SW that would improve pollution prevention or would improve monitoring or assessment of climate change impacts.

#### **Grouping – Changes in Designs or Plans based on Changes in Climate**

**Response to Comments 6 - 7:** The Commenter suggests the Permit must provide for a mechanism to adapt the Permit as State Agencies and Partners release new data and impact assessments. The commenter provides reference to SB 227/HB 295 of 2021 related to stormwater management regulations and suggests including requirements to update SWPPPs, especially based on climate related changes in storm intensities, similar to the latest EPA MSGP. The commenter also recommends more analysis of industrial stormwater based on changing climate patterns. The commenter is also concerned with climate changes to the Phase III WIP related to the Bay TMDL. Response: As stated in the preamble to this Climate Change section, the Department remains committed to tracking studies and information regarding climate change. Refer to Response to Comments 1-3 related to the Phase III WIP and permit re-openers. The language requiring an updated SWPPP, and ongoing requirements based on new information and experiences with major storm events has been added to the final permit. Regarding ongoing verification of the effectiveness of permits or changes in design specifications due to climate change, refer to Response to Comments 8-14.

**Response to Comments 8 - 14:** Commenters are concerned that the Department is basing the conditions in the permit on old science and focus on IDF curves and various design constraints. Commenters here also mention flooding impacts which are addressed in the Grouping – Flooding Risks. Response: The comments are relevant to the design of post-construction stormwater management (*e.g.*, restoration of impervious surfaces) which mitigates the impacts of development on hydrology and associated pollutants. Post-construction stormwater management, however, is distinct from the primary purpose of the NPDES industrial stormwater permit program, which is to reduce the discharge of pollutants associated with industrial activity. The permit requirements for restoration of impervious surfaces is still in place, and is discussed later in the responses. That is, if

monitoring data or observations expose a problem, adaptive actions must be taken to remedy the problem immediately regardless of the rainfall characteristics. Ideally, when pollution prevention is effective, regardless of the volume, duration, or intensity, the pollutants associated with industrial activities will be prevented from discharging. With this in mind, pollution prevention includes an exemption from implementing controls and monitoring for operations that have “no exposure” to stormwater. This exemption is an incentive to ensure all potential pollutants at the facility are located in a sheltered building. Maryland has differed from other jurisdictions in that the State requires 3rd parties to verify industrial operations meet these requirements. Another area (refer to Response to Comment 55) where Maryland differs from EPA guidance is for transportation facilities. Maryland’s guidance document recommends permit registration for these facilities rather than No Exposure Certification, since vehicles sitting outside waiting for maintenance may leak. However, with the advent of concerns over climate change, many fleets are considering converting to electric vehicle fleets. Acknowledging that these fleets have less potential to leak and to be supportive of the effort to convert fleets and reduce greenhouse gas emissions, the guidance is being updated to provide the exemption for transportation facilities that are all electric.

**Response to Comments 15 - 16:** The commenters desire updated design information for stormwater control measures and for permit conditions related to climate change. The commenter explains at length that “good engineering practices” should take climate change into account. The commenter hopes that the practices developed by the Maryland Climate Leadership Academy can help to shape a listing of such practices. Commenters recommend that the Department incorporate language that expressly includes climate impacts among the factors necessary to comply with good engineering practices. This should include proper preparation for future climate change events in the design, construction, and modification of industrial sites. In addition, they suggest that permit reviewers should have climate change training to ensure they are accurately evaluating every permit for proper climate and precipitation changes. Response: Design criteria for any construction of new facilities, or for the restoration of impervious surfaces, requires the practices contained in the State’s Design Manual. As stated in the preamble of this section, once the manual is updated to incorporate any changes related to climate change, it is self implementing. Beyond the restoration of impervious surfaces and construction of any new buildings, the permit now lists controls to consider related climate change and this is discussed in the next section regarding flooding risks. In addition, this permit implements adaptive changes by requiring benchmarks to determine effectiveness of controls with required AIM measures.

### **Grouping – Flooding Risks**

**Response to Comments 17-18:** A commenter objects to Part III.B.1.a.viii, which requires enhanced control measures to be considered in consideration of flooding. Response: To be clear, this permit is required regardless of where the activity occurs. This permit is not 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.

A recent flooding event (September 2020) that impacted a recycling center in Mount Rainier demonstrates the impacts of flooding and the urgency to take this into consideration. Mount Rainier is largely built in flood-prone areas. To better protect citizens and businesses, the city has been raising/modifying a levee. The various improvements and vertical raise of 0.5 to 3 feet to meet federal freeboard requirements (100-yr storm plus 3 feet) will allow it to be re-certified by FEMA. During the September storm, flooding occurred on both sides of the levee. The recycling center had to be out of operation while recovering from the flooding. As this example illustrates, businesses and homes that have historically been located in these areas are subject to increased flooding. As mentioned by the commenter, the permit has incorporated new design considerations (Part III.B.1.a.viii). The new requirements include:

adapting operations to address climate change impacts by implementing structural improvements, enhanced pollution prevention measures, and other mitigation measures, to minimize impacts from stormwater discharges from major storm events that cause extreme flooding conditions, such as the following:

- Reinforce materials storage structures to withstand flooding and additional exertion of force;
- Prevent floating of semi-stationary structures by elevating to the Base Flood Elevation (BFE)<sup>2</sup> level or securing with non-corrosive device;
- When a delivery of materials is expected, and a storm is anticipated within 48 hours, delay delivery until after the storm or store materials as appropriate (refer to emergency procedures);
- Temporarily store materials and waste above the BFE level;
- Temporarily reduce or eliminate outdoor storage;
- Temporarily relocate any mobile vehicles and equipment to upland areas;
- Develop scenario-based emergency procedures for major storms that are complementary to regular stormwater pollution prevention planning and identify emergency contacts for staff and contractors; and
- Conduct staff training for implementing your emergency procedures at regular intervals.

The Department is currently investigating ways to identify discrete geographic scale areas that are prone to 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>

As discussed above, recent down-scaling of climate change models suggest that these IDF curves are continuing to change. However, predictions from these models on the scope of change vary greatly, especially when the results are for specific locations. One important reason for this variation is that local flooding is associated with smaller, more localized storms and most climate change models analyze more global effects.

Increased local flooding associated with climate change is an important public safety and health concern. While it is a factor, increased rainfall is not the only driver of local flooding as the design and maintenance of stormwater infrastructure may also contribute to local flooding. The Department is reviewing up-to-date precipitation data and design research to determine what steps must be taken to address these factors. However, current research does not identify specific solutions, and developing the appropriate updates to regulations and design criteria takes time. See “Grouping - No Exposure” regarding additional flood plain considerations.

**Response to Comment 19:** The commenter is concerned about how the Part III.B.1.a.viii requirements for enhanced control measures to address extreme flooding could be costly and does not support their inclusion. Response: The enhanced control measures to address extreme flooding conditions requirements are consistent with EPA’s implementation and are deemed to be important protections of state waters in light of climate change.

### **Grouping – Department Should Compare Other State Implementations**

**Response to Comment 20:** Commenters request that the Department evaluate other jurisdictions and entities' response to climate change related to post construction stormwater management. They provide specific examples to consider. Each of these were reviewed and responses provided below.

- 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 the Department to track and communicate with the authors of this study and analyze whether the projected curves should be immediately incorporated into this permit through a reopener. Response: The 20-SW requires 20% of the untreated impervious surfaces to be treated using all methods available in the Design Manual or through the accounting guidance and allows for trading as an incentive for additional work

performed under the permit. Under Part VI.Q, the “Reopener Clause for Permits,” if the Department under an applicable TMDL deems it crucial to implement increased-capacity on-site controls due to the changes incorporated into the Design Manual sizing criteria. This clause would allow for the permit to be reopened. However, this permit focuses on industrial stormwater, whereas the studies focus on urban stormwater runoff.

- 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 that the Department track and collaborate with this workgroup as necessary to implement the appropriate standards into the MS4 (we assume this means the 20-SW) 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 Stormwater Design Manual to account for climate change. That said, this permit focuses on industrial stormwater whereas the studies focus on urban stormwater runoff.
- 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-SW that is the subject of this public comment process. The manual only pertains to the city as a design manual for infrastructure, and is not a permit of general statewide applicability that applies to multiple and different types of industrial facilities.
- 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 reveals that bridge design is not directly applicable to the instant permit.
- 5) Maryland’s Eastern Shore. The commenter refers to this study which recommends “upgrad[ing] 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: Department 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 found that it is not directly applicable to the permit currently under public review.

- 6) Anne Arundel County, Maryland. The commenter notes that the County updated the 1-year storm designation to 2.7 inches in 2017. Response: Maryland’s specifications for a 1-year, 24-hour storm event is already set at 2.7 inches (Design Manual at 2.11). There is no recommendation with this comment.
- 7) New Jersey - Executive Order 100. This Order directs the New Jersey Department of Environmental Protection (“NJDEP”) to incorporate climate change in stormwater regulations, among other things. NJDEP issued an administrative order that sets deadlines for meeting NJDEP’s obligations under EO 100. NJDEP also updated its Stormwater Best Practices Manual in March of 2021 to address climate change. Response: The practices relate to requirements for urban stormwater runoff, and as mentioned in previous comments the Design Manual in Maryland will likely change as well. However, this permit focuses on industrial stormwater whereas the studies focus on urban stormwater runoff.
- 8) 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, including 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; however, it does not relate directly to the current permit under public review.

**2. COMMENT CATEGORY – Lack of Enforcement.**

**Response to Comment 21:** The commenter asserts that the permit language is unclear as to what constitutes a violation and is therefore unenforceable but provides no suggested change. Response: The permit contains language, similar to that found in other states, and in the federal permit, to allow enforcement of conditions. The new AIM (Additional Implementation Measures) requirements do provide clearer timeframes as to when benchmarks must be met. Many comments were received which did suggest improvements in language and the Department responded to these suggestions and made changes to the permit where appropriate throughout this response document.

**Response to Comment 22:** The commenter is concerned about low rates of enforcement of non-compliance. The commenter suggests more enforceable language. If the permit conditions are not enforced then the permittees are not incentivized to comply and the permit is not a valid permit pursuant to the CWA and Maryland’s authorization under the Act. Response: The Department routinely inspect industrial facilities throughout the State and provides inspection reports that include required corrective action for a facility in non-compliance. Where non-compliance continues the Department initiates informal or formal enforcement actions. See response to Comment 21.

**Response to Comment 23:** The commenter suggests that the Department “Must Take Strong, Deterrent-Based Enforcement Actions Against Noncompliant Industrial

Stormwater Permittees.” The commenter provides several ideas on how the Department may accomplish better compliance including not renewing permit coverage for facilities in non-compliance, increasing penalties for where restoration has yet to take place, and increasing penalties for illegal discharges to areas with impaired waters, drinking water supplies, or Tier II use waters. Also, the commenter suggests enhanced penalties for EJ communities. **Response:** See response to Comment 22. The 20-SW contains two additional enforcement provisions not previously contained in the 12-SW. The AIM process provides a firm backstop which forces permittees to address benchmark exceedances within specified timeframes. Additionally, the 20-SW does not relieve operators who did not meet their Chesapeake Bay restoration requirements in the 12-SW from meeting these 12-SW permit terms (Part III.A.e of the 20SW). These non-compliant permittees may be required to be covered by a consent order in order to obtain coverage under the 20-SW. See COMMENT CATEGORY – Environmental Justice for additional discussion on this topic.

**Response to Comment 24:** The commenter suggests that the Department seldom takes formal enforcement actions against non-compliant permittees. The commenter states that widespread noncompliance is a result of insufficient deterrence. In addition, the commenter believes that the Department must require permittees to be in compliance with previous discharge permit coverage requirements (*e.g.*, the 12-SW) prior to obtaining coverage under 20-SW. **Response:** The permit is enforceable. See Response to Comment 26 for similar concerns. Regarding consequences for permit violations, permit Part VI, “The Standard Conditions,” includes the following enforcement provisions:

**Part VI.A. Duty to Comply** You must comply at all times with the terms and conditions of this permit, the provisions of the Environment Article, Title 7, Subtitle 2 and Title 9, Subtitles 2 and 3 of the Annotated Code of Maryland, and the Clean Water Act, 33 U.S.C. § 1251 et seq. Any noncompliance with any of the requirements of this permit constitutes a violation of the Clean Water Act, and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit coverage. As detailed in Part IV (Corrective Actions) of this permit, 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 established in Part IV.

**Part VI.T. Action on Violations** The issuance or reissuance of this permit does not constitute a decision by the State not to proceed in an administrative, civil, or criminal action for any violations of State law or regulations occurring before the issuance or re-issuance of this permit, nor a waiver of the State’s right to do so.

**Part VI.U. Civil Penalties for Violations of Permit Conditions.** In addition to civil penalties for violations of State water pollution control laws set forth in Section 9-342 of the Environment Article, Annotated Code of Maryland, the Clean Water Act and EPA regulations at 40 C.F.R. Part 19 provide that any person who violates Section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under Section 402 of the Act or in a permit issued under Section 404 of the Act, is subject to a civil penalty not to exceed \$37,500 per day for each violation. Statutory penalties of the CWA are subject to the Civil Monetary Penalty Inflation Adjustment Rule (40 CFR 19.4).

**Part VI.V. Criminal Penalties for Violations of Permit Conditions.** In addition to the criminal penalties for violations of State water pollution control laws set forth in Section 9-343 of the Environment Article, Annotated Code of Maryland, the Clean Water Act provides that:

1. Any person who negligently violates Section 301, 302, 306, 307, 308, 311(b)(3), 318, or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, or in a permit issued under Section 404 of the Act, is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both; In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to a fine of not more than \$50,000 per day of violation or by imprisonment of not more than two years, or both;
2. Any person who knowingly violates Section 301, 302, 306, 307, 308, 311(b)(3), 318, or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, or in a permit issued under Section 404 of the Act, is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than three years, or both; in the case of a second or subsequent conviction for a knowing violation, a person shall be subject to a fine of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both;
3. Any person who knowingly violates Sections 301, 302, 306, 307, 308, 311(b)(3), 318, or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, or in a permit issued under Section 404 of the Act, and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury, is subject to a fine of not more than \$250,000 or imprisonment for not more than 15 years, or both; in the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both; an organization, as defined in Section 309(c)(3)(B)(iii) of the Act, shall, upon conviction



of violating the imminent danger provision be subject to a fine of not more than \$1,000,000 for a first violation and up to \$2,000,000 for second or subsequent convictions;

**Part VI.W. Administrative Penalties for Violations of Permit Conditions.**

In addition to administrative penalties for violations of State water pollution control laws set forth in Section 9 342 of the Environment Article, Annotated Code of Maryland, the Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

1. Class I Penalty. Not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$37,500).
2. Class II Penalty. Not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$16,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$187,500).

**Part VI.X. Penalties for Falsification and Tampering** Per the Environment Article, §9343, Annotated Code of Maryland, any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with or renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. Per the federal Clean Water Act, any person who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under the Act, or who knowingly makes any false statement, representation, or certification in any records or other documents submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not

more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

**Response to Comment 25:** The commenter provides specific examples of where permit conditions were clearly violated and yet not enforced, particularly in Baltimore and Prince George's County at various landfills or scrap yards, facilities with toxic pollutants. The commenter also points to missing DMR data which suggests additional reporting violations. **Response:** See also Response to Comment 22. Failure to submit required DMRs is a violation of the permit and may be subject to appropriate enforcement actions.

**Response to Comment 26:** The commenter provides examples of multiple violations at sites which are repeated and suggests that this is due to the lack of on the spot fines or other quick consequences. The commenter suggests that the Department must ensure that these facilities come into compliance prior to reissuing coverage under the 20-SW permit. **Response:** The Department continues to work with facilities and apply appropriate enforcement actions, in addition to compliance assistance. The permit is complex and often this involves some onsite training in addition to enforcement. See Response to Comment 22.

**Response to Comment 27:** The commenter is concerned that the permit does not provide for sufficient "Oversight or Review and Approval," instead relying on the permittee to determine its own compliance. **Response:** If a permittee is not complying with permit conditions, the permittee is required to initiate corrective actions in order to come into compliance. The Department is focused on the outcomes of the permittee's corrective action. If the permittee continues to be in non-compliance, the Department can implement enforcement actions. The language and examples provided do not prevent the Department from taking enforcement actions if the Department determines that a permittee did not implement a required corrective action or the repair or corrective action did not achieve permit compliance. However, one area that can be improved would be in providing more timely access to DMR data. The draft permit provided ample time to begin testing benchmarks, which was a carryover from the 12SW. This 6 months is no longer required, as those permittees with NetDMR don't need additional time, even those who have new benchmarks have ample time to get access to NetDMR Reducing the time from to the next quarter after getting coverage ensures the public that samples are being evaluated as well as provides compliance with information that may be used for prioritizing site visits.

**Response to Comment 28-29:** The commenter believes that the term "minimize" in the permit is vague and not enforceable and is therefore enforceable. **Response:** The term "minimize" is defined in the 20-SW. It incorporates "best management practices" and "best industry practices." A permittee's deviation from best management practices or best industry practices is a violation of the 20-SW and may result in the Department initiating enforcement actions.

**Response to Comment 30:** The commenter identifies Chesapeake Bay restoration requirement sites that have not completed restoration and recommends compliance

action. **Response:** The commenter is correct, and compliance actions will be required to allow permittees to continue with coverage. See also response to Comment 23.

### 3. COMMENT CATEGORY – Environmental Justice.

**Response to Comments 31 and 35:** The commenter insists that the Department must ensure that the impacts of climate change on industrial facilities do not increase the harm to overburdened communities. The commenter is concerned that changing precipitation trends due to climate change will increase stormwater runoff and exacerbate existing disparities in Maryland. Commenters suggest soliciting input from overburdened communities as well as the Commission on Environmental Justice and Sustainable Communities (CEJSC), considering the cumulative impact of pollution, and tailoring the permit to account for environmental justice needs. **Response:** In regards to climate change concerns, please see comments in “*CATEGORY – Climate Change*”. Regarding getting input from all stakeholders, reissuance of the permit does require public notice and input from all stakeholders. Input was received by several of the communities and organizations that the Department is actively engaged with (examples are this and similar comments in the “*CATEGORY – Environmental Justice*,” the comments in the “*Grouping – No Exposure Exemption*,” and comments in “*Grouping – Signage*”).

The commenter suggested working with the Commission on Environmental Justice and Sustainable Communities (CEJSC) on specific permit conditions. The CEJSC is broadly tasked with reviewing and analyzing Maryland laws and policies pertaining to environmental justice issues. The insights of this group are valuable. The Department has reviewed the reports provided from the CEJSC. The CEJSC Annual Report 2020 provides several specific references to permits and their intention to provide specific advice. The CEJSC Annual Report 2020 evaluates the advantages and disadvantages of various screening tools including EPA’s EJScreen, UMD’s EJScreen, and CalEPA’s CalEnviroScreen. At the CEJSC’s meeting on March 21, 2021, “Devon Dodson discussed this and the idea that the Commission will ultimately need to recommend which screening tool is best for Maryland to use.” (March 21, 2021, from: <https://mde.maryland.gov/programs/Crossmedia/EnvironmentalJustice/Documents/CEJSC%20Minutes%203.23.21.pdf>) The Department is involved in the effort to select a screening tool for use in permitting decisions which will inform the CEJSC. At the time this response was being drafted, the Department used its best professional judgement and ultimately decided to use UMD’s MD EJScreen Mapper. In addition the commenters' comments were provided to Devon Dodson for consideration. The CEJSC points to the benefits of using mapping tools for permitting decisions. The commenters agree, and actually recommended using the Maryland EJScreen Mapper, which we are utilizing in our decisions regarding this permit and incorporating the tool output into specific permit conditions. The Department intends to continue to work with and to solicit input from the CEJSC on the permit and potential impacts on overburdened communities.

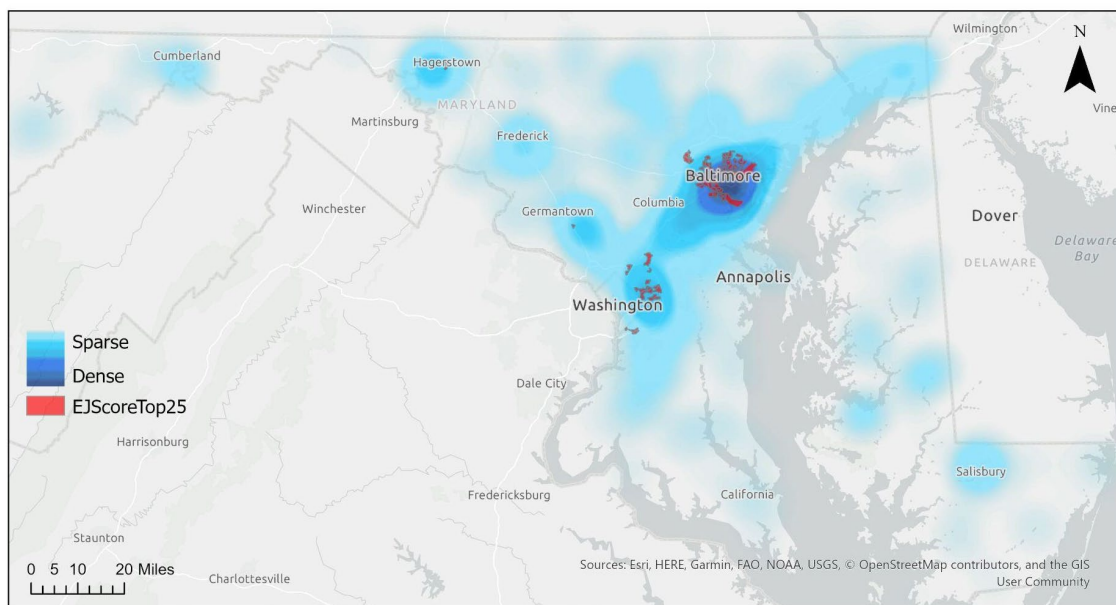
In meetings with representatives of the commenters, it was suggested that the Department consider the mapping tool developed by the University of Maryland (Dr. Sacoby Wilson

and Jan-Michael Archer) to use as a screening tool (<https://p1.cgis.umd.edu/ejscreen/>). In comparison with EPA's EJ screening tool, this mapping tool does allow aggregation of many layers into an EJ Score that is simpler to understand and implement. The Department chose to use this tool to evaluate industrial activities and potential actions related to EJ in the various communities in Maryland.

The following maps breakout census tracts with an EJScore of  $\geq 0.76$ , an ArcGIS layer (which are the same representations of data as presented on the mapping tool found online) provided by Dr. Wilson. The Department understands that those communities with a 0.76 or above EJScore represent the communities that are confronted with environmental justice concerns that are more significant than 76 percent of other census tracts in Maryland.

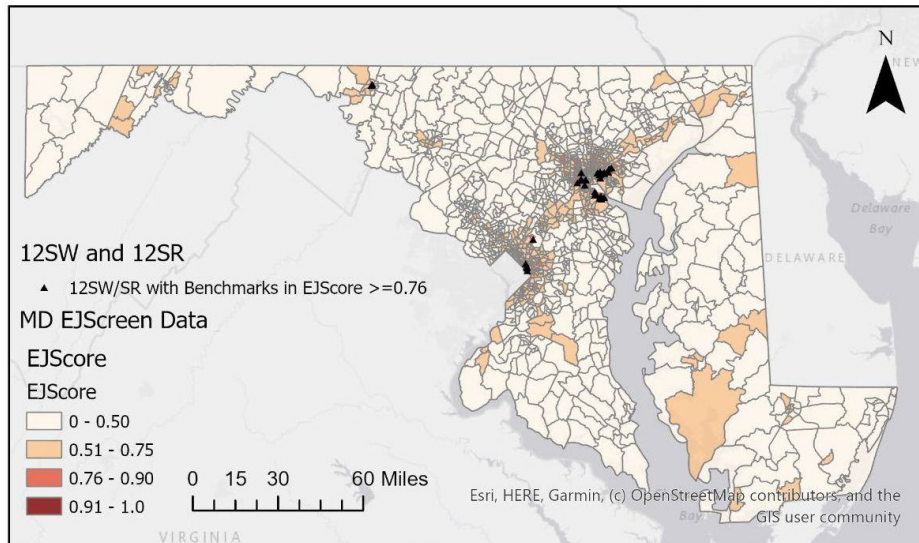
Below is an image of a map that highlights the density of general permittees (referred to as a "Heat Map") overlaid with census tracts that have an EJScore  $\geq 0.76$ . From this map there is a correlation between the densest concentrations of industrial facilities and the census tracts for the communities with the largest environmental burden.

Heat Map of General Stormwater Permittees and Census Tracts with an EJScore  $\geq 0.76$



Within these tracts are 147 12-SW permitted facilities, which would represent the types of facilities that are the focus of the commenter's concerns. They represent 13% (147 out of 1,121 12-SW permitted discharge sites) of 12-SW industrial stormwater permitted facilities in Maryland. Of those 147, there are 40 12-SW permitted facilities that are subject to benchmarks (*i.e.*, they must report stormwater discharge sampling results) as well as Additional Implementation Measures. In Comment 33, the commenter states that census tracts with an EJScore  $> 0.75$  represents those of the greatest environmental justice concern. Therefore, the Department's analysis is consistent with that of the commenters. Also, the maps below identify these 40 facilities.

### 12SW and 12SR Sites in Census Tracts with EJScore $\geq 0.76$



MD EJScreen Data retrieved 08-03-2021 from Dr. Sacoby Wilson at the University of Maryland

What is clear from the commenters' concern is that enforcement is key. Since the permit cannot specify how often a Department inspection will take place, how can the Department create more transparency for operators in these areas?

One method that could provide greater transparency and greater focus for compliance would be to require the submission of comprehensive annual reports to the Department for those 40 operators subject to the Additional Implementation Measures. While these 40 operators are presently required to maintain these reports on-site, requiring their submission to the Department will provide greater transparency and greater focus for compliance. Comment 32 introduces concerns of noncompliance in overburdened census tracts, specifically in Baltimore City, which this effort works to alleviate. Making these reports readily available for the Department's review, by requiring submission to the Department, will likely lead to more inspections of these facilities. In addition the Compliance Program currently considers environmental justice as a factor in prioritizing inspections.

Permittees will be required to determine if their facility is located within these EJ Priority areas. To implement this, a static image of the EJScore map by census tract will be provided. Based on the commenter's concerns, the 20-SW permit requires any of the 147 facilities (and any new facilities) in communities with an EJScore of  $\geq 0.76$  (those communities with greater environmental burdens) to identify this on their NOI. In addition, those 40 operators (and any new facilities) who have NetDMR accounts are required to annually submit their Comprehensive Site Evaluation to the Department for review. An EJScore of  $\geq 0.76$  indicates that the given census tract faces more burdens than 75% of other census tracts in the state of Maryland. In addition, the Department

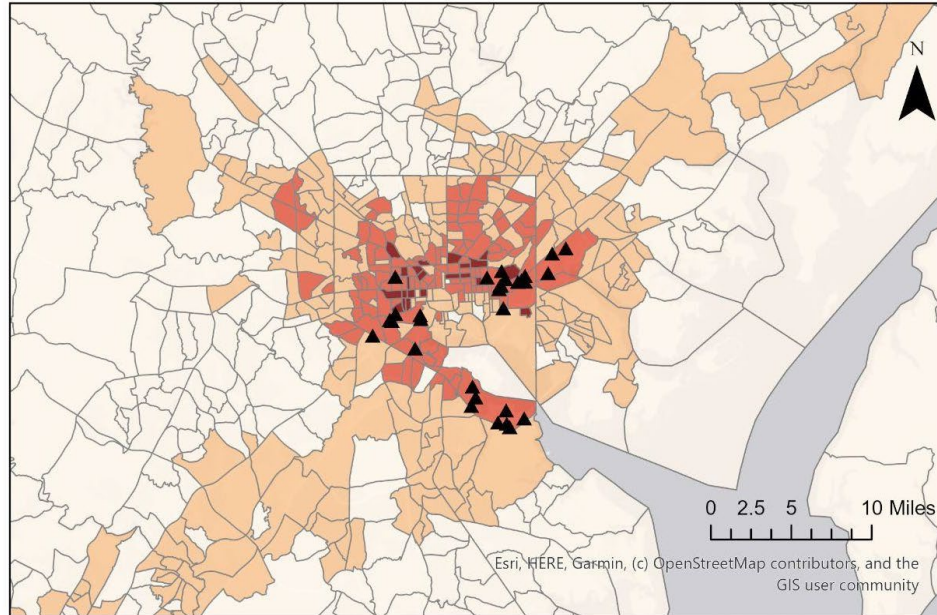
requires operators applying for No Exposure Certification in these areas to have 3rd party certification when they are less than 5 acres.

**Response to Comment 32:** The commenter is concerned that the 20-SW Permit is not enforceable and will allow noncompliance in communities already overburdened with pollution. Further, the commenter suggests that benchmarks are not as enforceable as numeric effluent limits. Response: The Department's general stormwater discharge permits are and continue to be enforceable. That being said, the Department continually reevaluates and improves enforcement mechanisms. In this vein, the 20-SW permit has added Additional Implementation Measures (AIM) that will further support enforcement. (Refer to similar comments in "*COMMENT CATEGORY – Part IV (Corrective Actions and AIM)*"; Refer also to Response to Comment 31). The AIM addition provides a set path of compliance actions for each facility that does not meet its benchmarks, making the permit much easier to enforce. The AIM additions are consistent with other states' approaches and EPA's approach in the MSGP. Enforceability is discussed further in "*COMMENT CATEGORY – Lack of Enforcement*". Ensuring these measures are taken by permittees in the presence of benchmark exceedances will alleviate disproportionate burdens.

**Response to Comment 33:** The commenter states that industrial stormwater contamination disproportionately harms overburdened Maryland Communities. The commenter utilized the Maryland EJScreen to perform analysis on permitted facilities in Baltimore. Commenter notes that facilities are clustered in census tracts with high environmental justice burdens, and that facilities with the 12-SW or 12-SR are in more burdened tracts compared to other permits. Further, the commenter found that noncompliance is more prevalent in communities with more industrial stormwater permittees. The commenter concludes that there exists a strong connection between the number of permitted facilities, noncompliance, lack of enforcement, and environmental justice burdens. Response: The Department is committed to implementing environmental justice (EJ) into its permitting considerations. As noted in Comment 31, the Department is utilizing the Maryland EJScreen Mapper to perform analysis of 12-SW permitted facilities and environmental justice. The map below shows the facilities subject to the new procedure in Response to Comment 31, specifically those located in Baltimore City

since the commenter focused on this area.

12SW and 12SR Sites in Baltimore Census Tracts with Benchmarks and  
EJScore  $\geq 0.76$



MD EJScreen Data retrieved 08-03-2021 from Dr. Sacoby Wilson at the University of Maryland

12SW and 12SR

▲ 12SW/SR with Benchmarks in EJScore  $\geq 0.76$

MD EJScreen Data

EJScore

EJScore

0 - 0.50

0.51 - 0.75

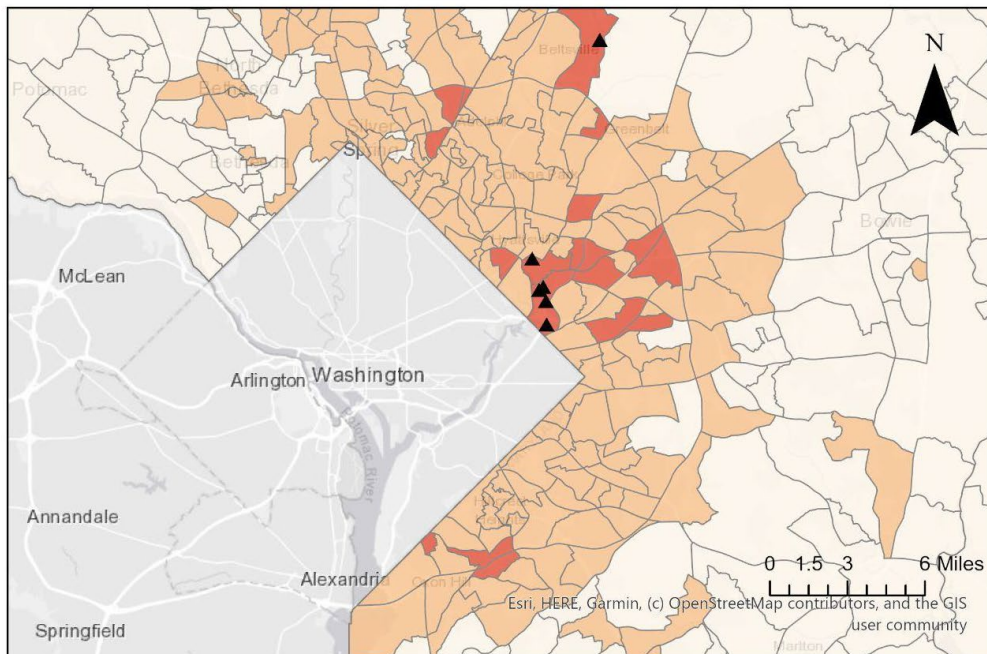
0.76 - 0.90

0.91 - 1.0

As stated in Response to Comment 31, the Department will require industrial stormwater (20-SW) permitted facilities in census tracts with an EJScore  $\geq 0.76$  and that are subject to benchmark requirements to submit their annual Comprehensive Site Evaluation to the Department. These facilities represent those posing the greatest risk to communities with environmental justice concerns consistent with the commenter's concerns. In response to the commenter's concerns of noncompliance in overburdened communities, and considered in Response to Comment 31, submission of these evaluations will result in more inspections. As for the lack of enforcement discussed with the 12-SW, this goes beyond the scope of the permit itself. Compliance and Enforcement mechanisms are separate from this permit.

**Response to Comment 34:** The commenter directs the Department to complete an environmental justice assessment by using a readily available tool or other methodology. The commenter suggests the Department review and revise permit terms to mitigate existing burdens. Additionally, the commenter suggests imposing additional benchmark requirements on facilities in burdened communities or who pollute near burdened communities. Response: Outlined in the “Maryland Department of the Environment Environmental Justice Policy and Implementation Plan,” the Department is creating a cumulative impact assessment mapping tool to be used at all levels of decision making within the Department. Until that tool is developed and usable, the Department is using MD EJScreen as the commenter suggests. Below are additional examples of facilities located in the most burdened census tracts that are subject to the new procedure detailed in Response to Comment 31. Response to Comment 33 shows those facilities responsible for the new procedure that are located in Baltimore City.

12SW and 12SR Sites in Washington Area Census Tracts with Benchmarks and EJScore  $\geq 0.76$



MD EJScreen Data retrieved 08-03-2021 from Dr. Sacoby Wilson at the University of Maryland

12SW and 12SR

▲ 12SW/SR with Benchmarks in EJScore  $\geq 0.76$

MD EJScreen Data

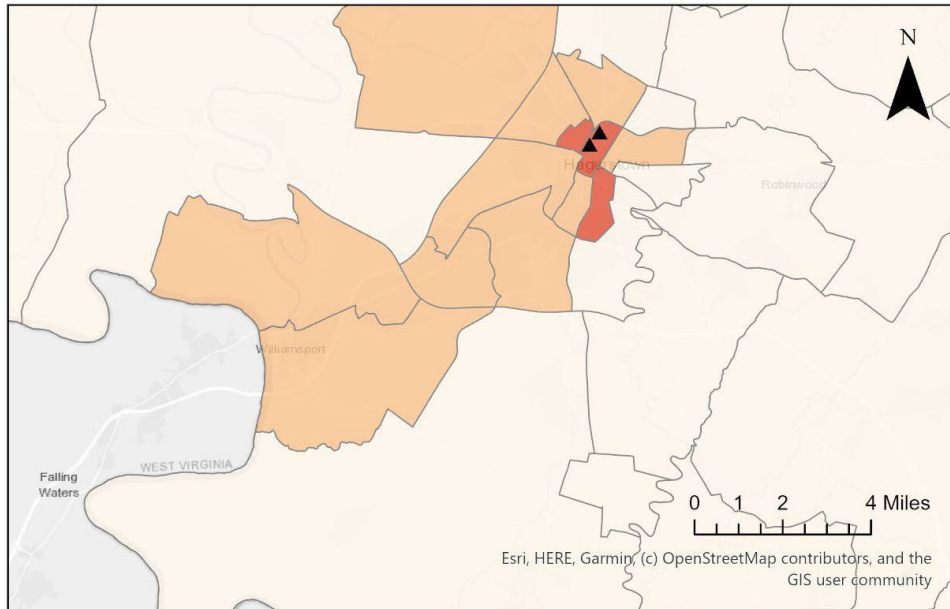
EJScore

EJScore

- 0 - 0.50
- 0.51 - 0.75
- 0.76 - 0.90
- 0.91 - 1.0



12SW and 12SR Sites in Hagerstown Census Tracts with Benchmarks and  
EJScore  $\geq 0.76$



MD EJScreen Data retrieved 08-03-2021 from Dr. Sacoby Wilson at the University of Maryland

12SW and 12SR

▲ 12SW/SR with Benchmarks in EJScore  $\geq 0.76$

MD EJScreen Data

EJScore

EJScore

- 0 - 0.50
- 0.51 - 0.75
- 0.76 - 0.90
- 0.91 - 1.0

Response to Comment 31 details the analysis performed with this tool and the new procedures being implemented for a selection of facilities. This tool will continue to be used for decision making analysis within the Department.

**Response to Comment 36:** The commenter broadly suggests that the inadequate regulation of industrial stormwater threatens the health and safety of vulnerable Marylanders. The commenter includes specific laws and refers to regulations that provide authority to consider occupational health and deny permit coverage to facilities that pose undue risks of hazardous pollution. The commenter references *In re Petition of Assateague Coastal Trust*, case no. 482915-V, and notes that the Department has an established EJ Policy and Implementation Plan. The commenter states that public participation must be central to the Department's regulatory process. In addition, the commenter contemplates the inadequacy of the permit in protecting water quality,

designated uses, and public health. The commenter then summarizes and suggests that the Department conduct a cumulative impacts assessment and tailor the Permit in response. The commenter also suggests involving the CEJSC in (a) contributing data to the cumulative impacts assessment and (b) tailoring the permit to correct enforceability deficiencies and respond to communities. Response: The Clean Water Act, 33 U.S.C. §§ 1251 through 1376, prohibits the discharge of pollutants into waters of the United States, unless EPA issues an NPDES permit. EPA may delegate its NPDES authority to a state, 33 U.S.C. § 1342(b), and has done so to the State of Maryland, which has vested that authority in the Department. The Department thus issues NPDES permits that authorize discharges under both federal and State law. The focus of the NPDES program is the regulation of discharges to waters. The regulation and the resulting permits provide a framework which is adequate to provide a basis for limits that are protective. In addition to the permit, the Department provides guidance as well as template documents and training. To ensure compliance, the Department also requires inspections. The framework is more complex than just a regulation. The Department has developed a workgroup to implement the processes detailed in the Environmental Justice Policy and Implementation Plan. One subgroup specifically focuses on enhancing the Department's community outreach efforts. The Department is committed to involving the public in its permitting process. The permitting program will continue to take input from this subgroup, as this will be an ongoing effort. For this permit, the maximum amount of time was allowed for public comment (90 days) and a public hearing was scheduled. Notices were included in newspapers, and through the Maryland Registry, as well as through the Department's newsletter. In addition, the Department reviewed criticisms of the program, incorporated improvements from the National Academies study, in addition to holding multiple meetings with representatives of the organizations providing this specific comment. The process of issuing the permit provides opportunities for the public to provide input to address inadequacies. The comment period has provided a number of improvements and these are addressed through the responses and changes to the permit. Inadequacies are identified and addressed every time a permit is reissued. The Department utilized MD EJSscreen's EJSscore layer to assess the overall environmental justice burden on Maryland communities. See Response to Comments 31 and 35. Regarding the specific recommendations to consult with the CEJSC, see Response to Comments 31 and 35. See Response to Comment 33 on concerns surrounding benchmarks, corrective actions, and permit enforceability.

**Response to Comment 37:** The commenter warns that pollution from industrial stormwater dischargers is a public health threat. The commenter is concerned about a multitude of public health concerns, and urges the Department to ameliorate disparities by reducing pollution sanctioned in the permit. The commenter provides extensive holistic arguments against various industries by documenting various air emissions from landfills or scrap yards. The commenter suggests industrial stormwater is the fastest growing segment of Bay pollution. Heavy metals are a particular area of concern, and the commenter states their adverse health effects on both aquatic life and humans. The commenter notes that many facilities under the industrial stormwater general permit are located in census tracts with a MD EJSscreen EJSscore that is in the top 25th percentile,

indicating greater cumulative burdens than other communities. They then suggest that the Department must work to ameliorate these disparities. The commenter also encouraged the Department to increase permit enforceability to hold facilities accountable. Response: Congress considered which activities represented the greatest potential for water quality impacts by selecting the SIC Codes required to have permit coverage. Those form the basis of the Department's permitting authority. There is no disagreement that industrial stormwater discharges pose risks to the receiving waters. targets certain activity. However, the industrial stormwater permit is not limitless. The predominant focus of the NPDES permit program is to eliminate the discharge of contamination into water. Although there are several other comments included in this section, the point that pollution impacts human health is well documented. NPDES requirements protect various uses of the receiving streams for Use Class I: Water Contact Recreation, and Protection of Nontidal Warmwater Aquatic Life; Use Class II: Support of Estuarine and Marine Aquatic Life and Shellfish Harvesting, Seasonal Migratory Fish Spawning and Nursery Subcategory, Seasonal Shallow-Water Submerged Aquatic Vegetation Subcategory, Open-Water Fish and Shellfish Subcategory, Seasonal Deep-Water Fish and Shellfish Subcategory, Seasonal Deep-Channel Refuge Use; Use Class III: Nontidal Cold Water; Use Class IV: Recreational Trout Waters; and Public Water Supply. Other hazards such as air pollutants and fire hazards are the subject of other pollution mitigation programs.

The commenter's suggestion that industrial stormwater pollution is growing is contrary to what is happening in the field. Industrial stormwater since the 12-SW was issued has been increasingly under scrutiny.

- In 2014, the Department first applied benchmarks to measure facility discharges. The benchmarks exist as an incentive for the facilities. If benchmarks are met, they can get them removed, which reduces costs. Facilities that are required to report benchmarks also receive extra scrutiny from the Department and the public to meet their goals. The 20-SW permit actually increases the number of Sectors subject to benchmarks. The intent is to continue to reduce the discharges of pollutants.
- The types of industries in Maryland are also shifting and the emerging pharmaceutical industry, wine, and beer industry to mention a few, produce less pollution. The printing industry has largely eliminated many of the toxic chemicals used for printing, and packaging reduces the potential for them to spill and then to impact waters.
- The number of facilities that apply for "no exposure" is also growing. The industrial facilities that qualified for "no exposure" in September 2016 totaled 308 facilities, 11.32% of total active general permits. This increased to 454 industrial facilities, 14.07% of total active general permits, in August 2021. The number of facilities qualifying increased as did the overall percentage. The facilities eligible for a "no exposure" certification represent a growing percentage of total active general permits. As such, the exposure of stormwater to industrial materials is actually decreasing.

- The permit in 2014 led to restoration of impervious surfaces which has been implemented at industrial facilities, leading to decreases in the Bay pollutants.

The factors above are leading to reductions in pollutants related to industrial facilities, not an increase as indicated by the commenter.

The commenter's point to EJScores  $\geq 0.76$  as a specific concern. The new procedure being implemented by the Department for facilities in census tracts with EJScores  $\geq 0.76$  will help to protect public health in vulnerable communities. As stated in Response to Comment 31 and 35, the use of census tracts in the top 25th percentile for EJScore is consistent with the commenter's suggestion. For further information about this new procedure and the analysis performed using MD EJScreen data, see Response to Comment 31 and 35.

See Response to Comment 32 and "*COMMENT CATEGORY – Lack of Enforcement*" for responses to enforceability concerns.

#### 4. **COMMENT CATEGORY – Part I (Applicability) and Appendix A.**

**Response to Comment 38:** The commenter requests that due to parked vehicle cumulative impact, that Sector AD be expanded to include commercial vehicle storage lots (i.e. dump trucks, concrete mixing barrel trucks, concrete batching trucks, flatbed trucks, tractor trailers, bulldozers, backhoes, bobcats, forklifts, and uncovered hitch trailers) for i) facilities owned by permitted facilities, ii) those not associated with permitted facilities. These commercial rented spaces do not have installed stormwater mitigation systems or controls nor do they regulate the use of their lots where the following activities associated with industrial facilities also occur such as stockpiling of uncovered industrial manufacturing supplies, storage of other industrial equipment and vehicle parts, large scale vehicle maintenance and repair activities, dumping of industrial waste materials to clear vehicles for use on the next job, and land owners have often removed trees and other vegetation from these lots and have not installed stormwater controls while creating these commercial vehicle storage lots. Response: As noted by the commenter, these activities are considered commercial operations and as such are not regulated as industrial operations. Commercial operation discharges may be subject to local MS4 stormwater discharge permit programs, and discharges from these areas are also subject to any local regulations or requirements. However, if these identified commercial operations serve as freight operators for local or long distance hauling of materials and they perform maintenance on their fleet, then these otherwise commercial operations are covered under Transportation Sector P.

**Response to Comments 39-40:** The commenter requests that material or equipment storage facilities used in support of the industrial activity (auxiliary facility) of a permitted industrial facility, that is not contiguously located, be included in the same industrial sector code and be required to have either a General or an Individual discharge permit. Response: To evaluate the regulatory status of an auxiliary supporting non-

contiguous facility, the Department would determine the applicable SIC code, if any, for the primary and the auxiliary facilities. Where an auxiliary facility does not have an applicable SIC code, the auxiliary facility would assume the primary facility's industrial SIC code, except where otherwise excluded, or listed in 40 CFR 122.26(b)(14).

**Response to Comment 41:** The commenter suggests that the permit include a specific reference to the Department's vehicle washing permit which may not require vehicle washing water be routed to a sanitary sewer. Response: This is a valid suggestion and reference to the Vehicle Washing Permit has been added to the permit.

**Response to Comment 42:** The commenter is confused by the option for asphalt and concrete plants to apply for coverage under (a) this permit, or (b) the Department's permit tailored to that industry and directs the Department to notify the industry not to apply for this permit. Response: The Department did make a concerted effort to get all plants under the "MM" permit, however there are plant operations that prefer the "20-SW" permit, instead of the "MM" permit, even though the 20-SW has a higher fee. As long as a plant has no process water (which would require separate permit coverage) the conditions are the same. They may be covered by either permit but not by both.

**Response to Comment 43:** The commenter requests that Sector AD.a (municipally operated public works) be allowed to graduate out of coverage under this permit. Response: If the municipally operated facility no longer performs vehicle maintenance or does not engage in other qualifying industrial activities, the municipality can terminate the permit for that facility by notifying the Department (*i.e.*, a Notice of Termination). The municipality can also consult with the Department to determine if there are alternative ways to ensure appropriate permit coverage. Generally, the Department can reevaluate its determination concerning Sector AD applicability to municipally operated facilities.

**Response to Comment 44:** The commenter notes that the U.S. Composting Council has requested a composting specific SIC code that would change the State's benchmark requirements. Response: The Department worked closely with the compost industry during the implementation of the State regulations related to composting, in an effort to ensure clarity on appropriate benchmarks. At that time, the Department reviewed the benchmarks and deemed them appropriate based on monitoring by the EPA and other states. Present benchmarks would not change if a new composting-specific SIC code is created for composting facilities. If a composting facility requests to change its SIC code to a new composting-specific SIC Code, which is not in Appendix A of the 20-SW Permit, the Department would require unchanged benchmarks under Sector AD of Appendix A.

### **Grouping – No Exposure Exemption**

**Response to Comment 45:** The commenter suggests that the State mandate that facilities applying for a "no exposure" certification submit photographic evidence to support

claim(s). Response: To receive a “no exposure” certification, the Department requires the submission of a third-party certification that includes notes, photos, maps and other sufficient evidence to support the request for no exposure certification. The Department is now requiring third-party verification only for those facilities that are 5 acres or larger. For facilities that are smaller than **5 acres**, the suggestion that **photos be required** in order to receive a “no exposure certification” is a reasonable request. The 20-SW Permit has been updated to allow use of photos in lieu of a professional engineer for operators with less than 5 acres, except in areas identified as EJ concerns (refer to Response to Comment 31 and 35) or in flood plains (refer to Grouping – Flooding Risks).

**Response to Comment 46:** The commenter suggests requiring that the Maryland State Department of Assessment and Taxation (SDAT) Real Property Tax Account Number(s) be used as the identifier for the facility in an application in order to avoid confusion regarding the identification of the correct facility. The commenter provides an example where two facilities use the same street address but are located and operated on different land parcels. Response: The Department requires the submission of both the street address and accurate GPS coordinates of the facility. The street address and GPS coordinates are more than sufficient to avoid any confusion similar to the commenter’s example.

**Response to Comment 47:** The commenter suggests the Department require the submission of an application for a no exposure certification annually and require certain Department actions where a no exposure certification is not timely submitted. Response: The Department requires the submission of a no exposure certification once every five years consistent with Federal Regulation 40 CFR 122.26(g). However, if circumstances change and the conditions for a no exposure certification no longer apply, then the facility must request 20-SW Permit coverage or it would be subject to enforcement for unpermitted discharges. Any no exposure certified facility that anticipates changes in circumstances should apply for and obtain 20-SW Permit coverage prior to the change of circumstances. If the Department is notified that a facility that received a no exposure certification should not have been exempted or should no longer be exempted because pollutants are being exposed to stormwater, then the Department would inspect the facility, and if appropriate issue a citation for operating without required 20-SW Permit coverage.

**Response to Comment 48:** The commenter requests that complaints filed against facilities holding a “no exposure” certification result in the following actions: i. An unannounced site inspection by a Department inspector. ii. Upon site inspection findings 1. On a finding of non-compliance, the no exposure certification shall be revoked and the facility ordered to comply with the terms of the permit for the remainder of the permit cycle. 2. Level applicable fines for non-compliance. Response: That is the current approach available to the Department. The levying of any fines is fact specific and beyond the scope of the permit conditions.

**Response to Comments 49 - 50:** The commenter suggests that operators that failed to comply with their permit or violated the terms of their no exposure certification shall be required to apply for alternative permit coverage and not be eligible to recertify for a no exposure certification for the remainder of their permit cycle. Response: There is no restriction as to who can apply for a no exposure certification. However, the permit and the regulations are clear, any unpermitted discharge is subject to enforcement, including potential penalties. Further, the no exposure certification incentivizes operators to eliminate all stormwater contact with any pollutants, which is the goal of the NPDES program. However, if the operator has materials exposed to stormwater, they must apply for permit coverage.

**Response to Comments 51 - 52:** The commenters suggest additional consideration for commercial vehicles. One comment indicates that the Department should be “more concerned about oily run-off from a Car-Max used car lot with hundreds of cars” than a fleet of well-maintained trucks waiting for tune-ups. Another comment suggests that the Department require “coverage of the open bed or trailers of commercial vehicles stored on-site used to transport production materials, finished product.” Response: Car-Max and vehicle storage lots are not regulated as industrial stormwater facilities. However, fleets of vehicles that serve any of the standard industrial classification codes related to transportation are regulated as industrial stormwater facilities. The no exposure exclusion from the industrial permit only applies to those operators that are regulated as industrial stormwater facilities. Oily water discharging from the Car-Max or contamination from other storage areas is considered an illicit discharge which is subject to enforcement under *inter alia* an applicable MS4 permit. The other part of the commenter’s concern relates to the no exposure exclusion of transportation facilities which is discussed in response to comment 55.

**Response to Comment 53:** The commenter provides several suggestions concerning the no exposure certification program. One suggestion is to require full retention of stormwater on-site prior to issuing a no exposure certification. Another relates to flooding and requiring a “certification that any material that has the potential to contaminate floodwaters or stormwater discharges is securely stored outside of flood hazard zones.” Additionally, the commenter suggests that granting a “no exposure” certification “amount[s] to ... an exclusion from regulation” and that the Department would create “a parallel regulatory process” that would regulate stormwater that is not exposed to pollutants associated with industrial activity. Finally, the commenter recommends denying a no exposure certification for “any new sources from newly established facilities.” Response: Federal regulations, 40 CFR §122.26, provide the Department with the authority to regulate discharges of stormwater associated with industrial activity. The regulation is specific in that “discharges composed entirely of storm water shall not be required to obtain a NPDES permit except: ... (ii) A discharge associated with industrial activity (see §122.26(a)(4)).” To this end, the Chesapeake Bay Restoration portion of this 20 SW permit, in order to increase on-site stormwater retention, requires the restoration of 20% of untreated portions of a facility as per Maryland’s Watershed Implementation Plans. However, the Department’s regulatory authority in the instant 20 SW permit does

not extend to regulating the discharge of stormwater from a facility (whether or not it is a new source from a newly established facility) where stormwater is not exposed to pollutants associated with industrial activity. That being said, Maryland law in other contexts, does regulate the on-site retention of stormwater that is not exposed to pollutants associated with industrial activity. For example, newly built facilities (*i.e.*, New Sources), whether or not stormwater is exposed to pollutants associated with industrial activity, are required to retain certain volumes of stormwater. As to the commenter's second point concerning securing certain items outside of flood hazard zones, the Department understands that this is already required by the Federal Emergency Management Agency. The commenter mischaracterizes the no exposure certification as a wholesale exclusion of a facility from regulation. This assertion is made in error. The "no exposure" certification is limited to facilities where sufficient factual support indicates that stormwater is not exposed to pollutants associated with industrial activity. As such, the facility is not subject to 20-SW requirements. However, "If circumstances change and industrial materials or activities become exposed to rain, snow, snow melt, and/or runoff, the conditions for this exclusion no longer apply. In such cases, the discharge becomes subject to enforcement for un-permitted discharge. Any conditionally exempt discharger who anticipates changes in circumstances should apply for and obtain permit authorization prior to the change of circumstances." The commenter's suggestion that the Department create yet another "regulatory process" assumes that there are no other mechanisms in Maryland that concern stormwater discharge. There are several other State, county, municipal programs that aim to increase on-site stormwater retention, including required NPDES permits for discharges from municipal separate storm sewer systems that serve certain size populations as well as discharges from small municipal separate storm sewer systems and construction activities disturbing from one to five acres. There are several "regulatory process[es]" outside of the 20 SW permit.

**Response to Comment 54:** The commenters refer to concerns expressed by both Dr. Horner and Dr. Roseen about the proposed "no exposure" certification provisions in the 20-SW. Dr. Roseen has observed a problematic trend whereby industrial facilities attempt to skirt regulation under the Clean Water Act by employing crude engineering measures to simply retain all stormwater on-site with no regard to impact on groundwater. The commenters then indicates they themselves are not aware of this practice being utilized by "no exposure" certification applicants in Maryland, but request that the Department improve the 20-SW by prohibiting such methods and appropriately requiring that any infiltration of runoff receives appropriate filtration and does not otherwise contaminate groundwater – a water of the State. Dr. Horner recommended that the Department review the "no exposure" certification requirements in Washington's industrial stormwater permit, which include 11 specific questions that must be satisfactorily answered to receive the certification. Response: The commenter acknowledges that they do not believe the proposed scenario of skirting regulation described by Dr. Horner or Dr. Rosen is a problem in Maryland, and the Department would agree. The State's design standards on any new development include specific requirements for treatment, such as Environmental Site Design (ESD), and include specific considerations for "Hot Spots," where there are potential pollutants. Dr. Horner also suggested reviewing Washington's



“no exposure” requirements, including its 11 required questions. These 11 questions are nearly identical to 11 the questions that Maryland asks in its No Exposure Certification for Exclusion from NPDES Stormwater Permitting form (found on the Department’s website at <http://www.mde.state.md.us/> or at <https://mdewwp.page.link/NEForm>). In addition, Maryland requires the permittee to have a professional certify that the facility meets the “no exposure” conditions, which is not a Washington State requirement. Further, Maryland provides a guidance manual for the operator and for the professional to use to understand these requirements.

**Response to Comment 55:** The commenter is concerned with the Department’s Guidance Manual for Conditional Exclusion from the Department’s Stormwater Permitting (12-SW) Based On “No Exposure” of Industrial Activities to Stormwater, not the 20-SW permit. The commenter compared the federal and the Department’s guidance manuals and objects to the exclusion by the Department’s guidance of certain transportation facilities where vehicle maintenance occurs. Response: The Department received a similar comment during the 12-SW notice and comment period and responded as follows: “Indoor maintenance services have not qualified for No Exposure Certification in the past, since it is likely that vehicles waiting to be repaired will be stored outside for some period of time and could leak oil or other fluids. The Stormwater Pollution Prevention Plan for such a facility will need to address this potential and prevent these leaks from impacting surface or ground water.” The Department’s response relied on the 1993 U.S. EPA NPDES Stormwater Program Question and Answer Document that discussed the following regarding indoor vehicle maintenance and equipment cleaning operations:

<b>Category (viii): Transportation facilities</b>	
<b>23.</b>	<b>If all vehicle maintenance and equipment cleaning operations occur indoors at a transportation facility, as defined at 40 CFR 122.26(b)(14)(viii), is a permit application required for discharges from the roofs of these buildings?</b>
<b>A.</b>	<b>Yes. Storm water discharges from all areas that are "associated with industrial activity," described at 40 CFR 122.26(b)(14), are subject to the storm water permit application requirements. This would include discharges from roofs of buildings that are within areas associated with industrial activity. In addition, storage areas of materials used in vehicle maintenance or equipment cleaning operations and holding yards or parking lots used to store vehicles awaiting maintenance are also considered areas associated with industrial activity.</b>

Figure 1-1993 EPA Question and Answer Document (Volume 2). The Department also relied on the 2009 EPA document, “Developing Your Stormwater Pollution Prevention Plan – A Guide for Industrial Operators,” provided SWPPP guidance on “Proper procedures for leaky vehicles and equipment, such as drip pans; parking in a contained area, or parking indoors.”

Further, EPA’s guidance states: “If the permitting authority determines that a facility’s storm water discharges have a reasonable potential to cause or contribute to a violation of

applicable water quality standards, the permitting authority can deny the no exposure exclusion.” And, although EPA’s guidance specifically states “non-leaking vehicles awaiting maintenance at vehicle maintenance facilities are not considered exposed,” the guidance also includes a statement that “any resulting unpermitted discharge would violate the CWA.”

While the Department’s guidance may have been modeled after EPA’s, it differs in several ways. To start with, Maryland law prohibits “[t]he addition, introduction, leaking, spilling, or emitting of a pollutant into the waters of this State; or [t]he placing of a pollutant in a location where the pollutant is likely to pollute.” *See* Environment Article § 9-101(b). The facts relevant to each individual facility are considered to make a “no exposure” certification determination. In order to remove any bias from the identification of relevant facts, the Department requests the submission of a third-party professional certification in support of a “no exposure” application.

Vehicle maintenance itself usually creates a risk of pollution exposure to stormwater (spilling, leaking various fluids), so do parked vehicles that have been worked on, or are waiting to be worked on (*e.g.*, faulty oil plug, a hose not fully clamped, etc.). However, the Department’s guidance provides “guidance” to the regulated community; it is not written in stone. The Department has and will continue to consider the specific factual circumstances of individual facilities. For instance, the Department may consider a “no exposure” certification for transportation facilities that conduct vehicle maintenance that does not involve the replacement of lubricants, fuels, etc.: minor maintenance such as windshield wiper replacement, windshield wiper fluid filling, tire filling, etc. or, potentially, electric vehicle maintenance. New facilities that provide parking inside for all vehicles would also likely be eligible. For example, the Department has recently become aware of an industrial transportation facility where vehicle maintenance is performed that appears to have effectively eliminated the exposure of stormwater to pollutants associated with vehicle maintenance (*i.e.*, the MTA Kirk Phase I Bus Division) and may now qualify for a “no exposure” certification. This new industrial facility is an environmental justice benefit for the community and will reduce industrial stormwater pollution. (Refer to COMMENT CATEGORY – Environmental Justice and Response to Comment 37).

Given the commenter’s valuable input and the Department’s review of new transportation facilities in the field, the Department will update its guidance to reflect this new information concerning transportation facilities that conduct vehicle maintenance that do not involve the replacement of lubricants, fuels, etc.: *e.g.*, minor maintenance such as windshield wiper replacement, windshield wiper fluid filling, tire filling, etc.; potentially, electric vehicle maintenance; and new transportation facilities that provide parking inside for all vehicles.

### **Grouping – Require an Individual Permit**

**Response to Comment 56:** The commenter requests that operators with a history of significant noncompliance be added to the list of facility types in Part I.G.2 that should require an individual permit, especially if discharging into waters with any impairment due to metals. Response: The commenter assumes that requiring an individual permit for an operator with a history of significant noncompliance would result in better compliance. Requiring an individual permit does not improve compliance, nor does it relieve an operator of relevant benchmarks or other pollution prevention measures. For waters with impairments for metals, the permit in another section does provide the Department with the opportunity to require additional controls or limits in Part III.B.2. The conditions in this permit are meant to protect state water resources and non-compliance would require dealing with compliance and enforcement. The fact that a facility has a significant noncompliance shouldn't itself make them eligible for a less restrictive individual permit automatically.

**Response to Comment 57:** The commenter urges the Department to include in a requirement for applicants to provide advance notice to the agency, to EPA, and to the public if the facility presents specified, clearly enumerated risks, in order to allow the Department to fully evaluate whether additional controls and/or an individual permit should be required instead. The conditions they request include: (1) ongoing noncompliance under the 12-SW permit, as identified by Department or EPA inspectors, especially for facilities that are not in compliance with the ISR requirement; (2) new facilities that would discharge the same pollutant for which the local receiving water is listed as impaired or new facilities that propose to discharge within a catchment that drains to a Tier II water body; (3) facilities located immediately upstream and within close proximity (e.g. a half mile) of a facility on the National Priority List or in the State's Voluntary Cleanup Program; (4) facilities that have applied a coal tar or high-PAH sealant within the previous year and ones that plan to apply such sealants (unless otherwise affirmed in the permit application); (5) locations within a community affected by environmental injustices, which could include either census tracts above a certain threshold (e.g. top quartile) in the CDC Social Vulnerability Index, MD EJ SCREEN, or an EPA EJSCREEN block group with more than one environmental or demographic indicator with an index score in the top quintile; and (6) facilities at greater risk of inundation, including those that have flooded within the previous decade and those within a FEMA 100-year flood zone. Response: The commenter has suggested a tiered approach to issuing permit authorizations, taking more time to consider certain situations. Here again, the commenter assumes that requiring an individual permit for an operator would improve compliance. Additionally, the Department reserves the right to delay an authorization in certain situation.

Both conditions (1) is referenced in Response to Comment 56. Condition (2) is now addressed by the water quality limits in the permit (Part III.B.2.b), which requires monitoring for the specific pollutant and allows the Department to use this information to add additional controls.

Condition (3) assumes, but does not articulate, a connection between upstream industrial facilities and downstream NPL sites or Voluntary Cleanup Program sites. The Department administers the NPL sites and Voluntary Cleanup Program sites individually.

Perhaps in cases where there is contaminated groundwater, but in those cases an individual permit would be required for any dewatering, as the permit only allows “uncontaminated ground water or spring water.”

Condition (4) was discussed in the fact sheet. EPA in its MSGP declined to require individual permits in these situations, and required monitoring of PAH in certain situations such as “Operators with stormwater discharges from paved surfaces that will be sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit.” Maryland is banning these products in more urban counties and will certainly evaluate any data that EPA identifies from their findings with regards to other facilities.

Condition (5) is related to EJ which is discussed further in comment 33.

Condition (6) is regulated both as industrial stormwater and by FEMA for any operation within a flood plain. This permit requires the evaluation of the flood plain and has specific requirements related to activities within those areas. It also puts the permittee on notice that other permits or approvals may be required. “Operations within the floodplain may require additional permit coverage and may justify flood insurance in those flood prone areas, especially due to climate change effects on increased frequency of flooding.”

Refer to the Grouping “Flooding Risks” for additional responses regarding this issue.

The Department does not consider any of these six conditions, by themselves, sufficient to require an individual permit. Each facility is required to create and utilize a site-specific Stormwater Pollution Prevention Plan which takes into account specific circumstances at each facility.

**Response to Comment 58:** The commenter requests a wait period similar to EPA’s MSGP process and the implementation of a separate administrative track for permittees with high rates of noncompliance. Response: The Department posts all received NOIs on its website (<https://mes-mde.mde.state.md.us/WastewaterPermitPortal/>) and the permit status is updated as it works through the approval process. The Department has the authority to require a facility with 20-SW coverage to establish additional controls or to take corrective action if it receives notice of a deficiency. Although there is no specific waiting period, the public may always provide comments to the Department. Maryland does not have a limit on when comments may be provided to the Department.

**Response to Comment 59:** The commenter is concerned that the Department is not staffed adequately to review incoming information with NOIs. The commenter is concerned that there is no prescribed process to provide individual permits as required. The commenter is concerned that the Department is not identifying facilities that are avoiding coverage. Lastly, the commenter suggests the Department must advocate for more resources. Response: The Department takes advantage of all available information to make decisions on discharges that require individual permit coverage, alternative general permit coverage, diverting certain process waters to sanitary sewer, or additional controls. The permit requires the permittee to identify non-stormwater discharges and include that information in their SWPPP (Part III.C.3.d). Standard Terms of the permit (Part VI.X) include “Penalties for Falsification and Tampering,” putting the applicant on notice that “any person who knowingly makes any false material statement,

representation, or certification in any application,” is subject not only to a fine, but also to imprisonment. The SWPPP and specifically these sections are reviewed upon receipt of an NOI. This is very clear and enforceable language. The Department strives to notify facilities requiring coverage who are not currently complying with the Federal Regulations and, if required, involve enforcement to persuade facilities to get coverage. The Department also works with MS4s and with citizen groups, to train them to identify facilities requiring coverage. The commenter complains that it is “unacceptable for the regulator to have to rely on referrals from the public.” The Department does not rely on referrals, but the Department welcomes referrals. The Department advocates to fill positions as quickly as possible.

**Response to Comment 60:** The commenter requests that the Department extend industrial classifications to “nonindustrial facilities with activities similar to those currently covered.” The EPA has previously determined that there is a large universe of facilities and activities that fall outside of the regular MSGP sectors, many of which could be subject to Sector AD. Commenters urge the Department to identify additional sectors for coverage for subsequent issuances of this permit, because there is no reasoned basis for continuing to ignore all nonindustrial facilities with activities similar to those currently covered. Response: The Department currently evaluates facilities that contribute to a violation of water quality standards or are a significant contributor of pollutants to waters of the State for coverage under sector AD. This is done on a site-by-site basis, based upon the observed discharges from a facility. A broad designation of new sectors to be covered would capture many facilities that pose no threat to water quality to capture a few facilities that are. The Department’s current approach of an individual facility review provides a much more targeted and effective means of preventing pollution. The Department has expanded the facilities required to obtain general permit coverage: Sectors AD.a, b, & e. Sector AD also allows the Department to require general permit coverage of additional facilities when appropriate.

**Response to Comment 61:** The commenter requests that all new facilities be required to obtain individual permits and require new loads preferable through on-site BMPs. At a minimum, prescribe specific additional or expanded control measures and restoration to incur no increase in discharges. Response: Maryland State Law requires stormwater management for any newly built facility. The “Stormwater Management Act of 2007” (Act) became effective on October 1, 2007. Prior to this Act, environmental site design (ESD) was encouraged through a series of credits found in Maryland’s Stormwater Design Manual. The Act requires that ESD, through the use of nonstructural best management practices and other better site design techniques, be implemented to the maximum extent practicable. Charged with implementation, the Maryland Department of the Environment (MDE) implemented the requirements of the Act including changes to regulations, the 2000 Maryland Stormwater Design Manual, and other guidance materials. Provisions of the Stormwater Management Act (Environment Article §§ 4-201.1 and 4-203) are available on the General Assembly of Maryland’s website. These provisions are implemented through approved stormwater management plans that are required for newly built facilities that are highly individualized to the property. For pre-

existing facilities built prior to the Act, the permit requires restoration of 20% of the untreated impervious surfaces. This is consistent with the TMDL. In addition, the 20 SW requires facilities in impaired watersheds to analyze their runoff for the pollutant. The Department issuing individual permits for these is not warranted.

**5. COMMENT CATEGORY – Part II (Authorization).**

**Response to Comment 62:** The commenter asks for clarification about Part II.F.1.c related to sludge and if it was meant to include waste disposal. Response: The reference here has to do with sludge from any water treatment system, not waste in general.

**Grouping – Deadlines**

**Response to Comments 63 - 64:** The commenters request an effective date that is six months after the issuance of the 20-SW. Response: The permit will be publicly noticed and available prior to the effective date. Given the concerns, and consistent with the previous 12-SW deadlines, the 20-SW permit will be effective 6 months, instead of 6 weeks, after it is issued. 6 months should provide adequate time for facilities to update their 12-SW SWPPPs to comply with the 20-SW permit.

**Grouping – Fees**

**Response to Comment 65:** The commenter suggests that the fees are not sufficient to address resource constraints and ensure compliance. Response: The fees are not established through permit issuance, but are set through regulation, as noted by the commenter. The commenter suggests that the Division has lost staff and that vacant positions must be filled. The concern is appreciated. The Division has actually added a permanent position and does strive to keep vacant positions minimized.

**Grouping – NOI**

**Response to Comment 66:** The commenter requests that the Department provide a table that identifies “all documents submitted to the Department,” (Part II.C.3), and the respective Division of the Department they are to be submitted to, for easy reference. Response: While Part II.C.3 concerns who is required or allowed to sign various reports, Part III.C.8, “Documentation Requirements,” is a logical area to provide such a table. This is a valuable exercise and will provide a useful resource for the permittee, the inspector, and third parties. The following has been added to Part III.C.8:

<b>Report / Document Name</b>	<b>Where to Send Report</b>	<b>When to Submit</b>
NOI/NOTransfer/NOTermination/NEC	WSA Permit Division	According to Deadlines (Part II.B)

Nutrient Reduction Progress Report (Appendix F)	WSA Permit Division	Within four (4) years from the date an NOI is filed. Only for facilities that require restoration.
SWPPP	WSA Permit Division	With the NOI, and with Appendix F, within four (4) years from the date an NOI is filed.
Discharge Monitoring Reports	WSA Compliance via NetDMR	Starting the first full monitoring period (found in Part V.C.7) that occurs, six (6) months after registering under this permit.
Routine Facility Inspection documentation (see Part V.A.1)	Kept on-site	Upon Request
Quarterly Visual Monitoring Form in Appendix B	Kept on-site	Upon Request
Comprehensive Site Inspection reports (see Part V.A.2)	Kept on-site, unless in one of the EJ regions now required to submit via NetDMR or unless exceeding any of the AIM triggering events. (Part IV.B.1.b.iii, Part IV.B.2.b.iii, Part IV.B.3.b.iii, and Part IV.B.4.b.iii)	Upon Request, unless one of the EJ facilities or exceeding any of the AIM triggering events when you submit via NetDMR.
Benchmark Completion Request	WSA Permit Program (Part V.B.2)	Upon annual average for any parameter that does not exceed the benchmark threshold.
Corrective Actions Report	WSA Compliance via NetDMR (Part IV.C.2), if you notify the Department regarding an allowed extension of the specified timeframe, you must document your rationale	Within 14 days from the time of discovery of any of those conditions/triggering events, and attached to your next discharge monitoring report through NetDMR.

	for an extension.	
Noncompliance which may Endanger Health or the Environment	WSA Compliance (Part V.D.1)	Call within 24 hours, and report within 5 days.
Hazardous Substances or Oil in Stormwater Discharge(s) Reporting	MDE Emergency Response Division and the National Response Center (Part V.D.2)	Call as soon as permittee has knowledge of the event, and send a written description to MDE Emergency Response Division within 10 days.

**Response to Comment 67:** The commenter asks if a Notice of Termination (NOT) under 12-SW is required after gaining authorization under 20-SW. Response: A NOT is not required because authorization under 20-SW will automatically terminate 12-SW authorization.

**Response to Comment 68:** The commenter requests greater transparency and accessibility. Response: The Department met with interested parties, inspectors, and permittees, and reviewed reports prepared by interested parties. The Department also followed EPA’s MSGP issuance and Department staff continue to visit facilities to gain additional information on what is happening in the field. The Department held training sessions for those interested in the permit. The Department takes calls from those interested in the permit, and performs outreach to those who require coverage. The Department is issuing this permit with full access to the public. A public notice concerning the draft permit was sent via mail to existing permittees, through all the papers in the state, via the Department’s industrial stormwater newsletter, via the Maryland Register, as well as being posted on the website. The Department automatically published along with this a notice of public hearing, which was held via web-based hearing. The Department took oral testimony and received written testimony in preparation of the final permit. In issuing authorization under the permit, the Department has provided copies of NOI and authorization letters, downloadable from the website for all approved authorizations, as well as documentation received on pending authorizations. The Department has trained MS4s, and interested parties on the use of the web-based tools, to clarify if a facility requires coverage. All benchmarks or monitoring results are reported via NetDMR and are available through EPA’s ECHO website. The Department considers these efforts to be a comprehensive effort to seek out and involve the interested public and affected parties.

**Response to Comment 69:** The commenter suggests various improvements to information required on the NOI, such as a 12 digit watershed identifier instead of an 8 digit watershed identifier, GISID, coordinates of each discharge point and storm drain collection points. In addition, the commenter suggests including DMR results and evaluating other state NOIs. Response: Some of the information is already planned and is included in the permit such as coordinates for individual outfalls, similar to the



Department's more recent permits. However, a 12 digit watershed identifier would provide no additional information. The other requests such as requiring the permittee to use the State's tools to identify impairments are included in the existing and any future directions provided with the NOI. No change.

**Response to Comment 70:** The commenter suggests requiring a public notice for permit applications, similar to the process used for the AFO permit. Response: AFO permits have entirely different requirements for coverage. As described in the Response to Comment 58, the Department posts all received NOIs on our website and the permit status is updated as it works through the approval process.

### **Grouping – Signage**

**Response to Comment 71:** The commenter suggests providing a QR Code to make it easier to get access to the website. Response: Required signage provides all the necessary information to access information concerning the facility on the Department's website.

**Response to Comment 72:** The commenter opposes the requirement to post a sign or other notice since the activity is permanent and thus it should be easy to search for permits using addresses from a search tool. The commenter refers to the MSGP as well. Response: It is not always obvious who the permittee is or what the address of a facility is and is difficult to determine if the facility has a permit. No Change.

**Response to Comment 73:** The commenter supports the requirement to post a sign or other notice, but suggests that the Department further strengthen the requirement. The suggestions include printing in Spanish, including a hotline phone number, posting signage at all potential access areas, various types of signs at discharge points and other requirements based on where a spill may have occurred, and providing a warning to the public who may have children nearby. Response: The complex set of requirements suggested by the commenter go beyond the intent of the signage. The signage informs the public that the facility has a permit. It is not meant to be a warning or provide notice that the discharge point is hazardous, or to be included at every potential entrance or outfall.

### **6. COMMENT CATEGORY – Part III.A (Chesapeake Bay Restoration).**

**Response to Comments 74-79:** The commenters request that the 20-SW maintain or expand efforts to restore impervious surfaces in order to protect water quality. The commenters suggest that the Chesapeake Bay Restoration (referred to as ISR) implementation in the 20-SW is backsliding and ignores the impacts of climate change. A commenter suggests that the permit does not contain adequate protections for either impaired or healthy waterways and appears to ignore the State's Water Quality Standards. Response: The commenter believes the 20% restoration requirement is rolled back, or eliminated, which is not the case. The 20% restoration requirement is maintained, and where the state has moved forward with new MS4s, the requirement will now impact industrial activities in those jurisdictions. The 20-SW continues to require the

20% restoration requirements. The permit also provides the opportunity to generate credits from any facility where restoration was not required, which is intended to increase restoration. Restoration is based on treatment of impervious surfaces over that provided when the model was first used, or the 2006 date referenced in the permit. There is no backsliding in this respect. The comment that industrial stormwater is increasing due to changes in climate does not appreciate the nature of emerging industrial activity. (Refer to similar response to this statement in *Response to Comment 37*.) In addition, the permit puts a renewed focus on local impairments that would benefit watersheds in congested areas such as Anacostia and Baltimore. Local impairments include pollutants not entirely addressed by restoration of impervious surfaces alone. Pollutants such as lead, mercury, zinc, PCB, or emerging pollutants such as PFAS, are of increasing importance in this permit.

**Response to Comment 80:** The commenter supports the Chesapeake Bay Restoration requirements in the permit in the 20-SW, acknowledging it is not backsliding. Response: The commenter notes that restoration requirements are not removed, but continued from the previous permit.

**Response to Comment 81:** The commenter suggests eliminating certain restoration (referred to as ISR) options, such as street sweeping, pollution trading, or off-site restoration. The commenter also suggests requiring restoration in certain outfalls with greater amounts of potential pollutants. Response: The options for restoration are consistent with urban stormwater requirements, as provided in the Design Manual and the practices in the Accounting Guidance. Requiring restoration at outfalls that have greater potential for spills would be counterproductive. Benchmarks and visual monitoring requires a reduction in the exposure of stormwater to contaminants, whereas implementing restoration at outfalls would remove these tools of measuring contaminant contact. Allowing restoration to consider street sweeping further incentivizes certain practices that are required for good housekeeping, and has greater benefits when you consider the elimination of sediment and attached pollutants. In many cases, it is preferable that the permittee implement certain structural BMPs for parking areas or roof drainage, as the infiltrated water meets the goals for urban stormwater runoff. However, this permit is for more than nitrogen, phosphorus, and sediment found in urban areas.

**Response to Comment 82:** The commenter objects to trading, calling the practice fundamentally flawed and cautions it will prevent Maryland from reaching TMDL goals. The commenter suggests that trading allows double-counting of pollutant reductions. The commenter suggests that trading will create hot-spots of pollutants since on-the-ground pollution reduction practices will not be used at the operations. The commenter also points to downstream effects and riverbank erosion. Response: The Chesapeake Bay Restoration requirements are considered structural controls appropriate for urban stormwater runoff that are consistent with an available wasteload allocation in an EPA established or approved TMDL. Trading is an available option provided for by Maryland regulations. In many cases, restoration is appropriate for industrial facilities. However, it is not necessarily the preferred way to treat every industrial facility. To date, trading has

only been used by a random small set of facilities, because trading partners cannot be found. To avoid hot-spots, the permit requires a whole set of other practices beyond those of restoration. In fact, the permit has five pages of controls and a few appendixes related to nutrient reduction reporting and trading. The permit also has over 100 pages of controls and corrective actions, monitoring, and reporting requirements meant to deal with the myriad of industrial operations that expose pollutants to stormwater, which cannot be traded. Trading is only allowed for restoration-related constituents (nitrogen, phosphorus, and sediment). The vast majority of the permit concerns non-restoration controls are not tradable.

**Response to Comment 83:** The commenter notes that reducing industrial stormwater pollution is essential to Chesapeake Bay Restoration. The commenter asserts that the permit is too vague to provide clear permit requirements for individual facilities. The commenter also asserts relying on a permittee to determine permit requirements applicable to their facility is in error. Instead, the commenter requested that the Department clarify standards and definitions. Response: The commenter does not clarify which standards or definitions need to be improved, however other commenters have provided various recommendations or clarifications which are being addressed. The Department agrees that reducing pollution from industrial stormwater is essential to the Chesapeake Bay and to local waters. Thus, the focus of this “general” permit is to clarify roles and responsibilities across a broad range of industrial facilities, including certain requirements that the permittee must both determine and implement.

**Response to Comment 84:** The commenter is concerned that terms and conditions in the Control Measures and Effluent Limitations section are vague and provides a specific example. The condition states that “[y]ou must divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff, to minimize pollutants in your discharges.” They ask: When is a permittee in compliance with this condition? How does a well-intentioned and conscientious permittee even measure their own compliance status? When would a facility be deemed in noncompliance with this critical provision? The commenter also posits that Dr. Richard Horner feels the 20-SW “gives no guidance or direction regarding where, when, or how these controls should be considered and implemented.” Response: The requirements for where and when to implement control measures and effluent limitations are inherently site specific. Several of these pollution mitigation measures are sector specific guidance from the Department and EPA, which often include the implementation of good housekeeping and best management practices. Additional pollution mitigation measures are also laid out in great detail in the Design Manual. While Dr. Horner may not be familiar with implementation in Maryland, those practicing stormwater design in the State are immersed in the best management practices used by MS4s and in the industry. The operator is responsible for the design (*i.e.*, “you must”) minimize pollutants through several practices including “divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff, to minimize pollutants in your discharges.”

When is a permittee in compliance or non-compliance with the “management of runoff” and how is this measured? Compliance with the “management of runoff” condition, like

other conditions is site-specific. The operator is required to implement sector-specific best management practices and other mitigation actions that effectively reduce the exposure of stormwater contaminants as well as any migration of contaminants. Exceeding benchmarks or evidence of pollutants in visual monitoring indicates that this “management of runoff” condition has not been met and the implementation of corrective actions (*i.e.*, additional or alternative best management practices) is required. And, if benchmarks and visual monitoring requirements are met, the permittee is in compliance.

**Response to Comment 85:** The commenter refers to comments from Dr. Horner concerning treatment controls, best management practices (minimum vs. advanced), and “advanced industrial stormwater treatment systems.” The commenters also asserts that polices like nutrient trading are adverse to a “restoration economy.” Response: It is hard to compare state permits between Washington, California and Maryland, since Maryland is unique in several ways. Maryland has the largest estuary in the world, is the terminus of several watersheds that extend through several states, and is downwind of numerous coal-powered generating facilities that emit copious amounts of nitrogen. Many Chesapeake Bay Restoration practices are discretely different from practices implemented in Washington or California. For example, Maryland requires the restoration of impervious surfaces which are substantial. Additionally, restoration is only one part of the 20-SW. And nutrient trading is limited to this unique Chesapeake Bay Restoration requirement. Trading is not allowed in other aspects of the 20-SW. A key driver for industrial facilities to implement treatment controls, best management practices (minimum vs. advanced), and “advanced industrial stormwater treatment systems” are benchmarks contained in the 20-SW. Benchmarks have been substantially expanded to include 18 additional industrial categories, largely consistent with the categories in the federal Multi-Sector General Permit (MSGP):

Subsector A1 (General Sawmills and Planing Mills for SIC 2421), Subsector A2 (Wood Preserving for SIC 2491), Subsector A3 (Log Storage and Handling for SIC 2411), Subsector A4 (Special Products Sawmills, not elsewhere classified and Wood Products Facilities not elsewhere classified for SIC 2426 and 2499), Subsector B1 (Paperboard Mills for SIC 2631), Subsector C3 (Soaps, Detergents, Cosmetics and Perfumes for SIC 2841 – 2844), Subsector C4 (Plastics, Synthetics and Resins for SIC 2821-2824), Subsector D1 (Asphalt Paving and Roofing Materials SIC 2951, 2952), Subsector E1 (Clay Product Manufacturers SIC 3251-3259, 3261-3269), Subsector E2 (Concrete and Gypsum Product Manufacturers SIC 3271-3275), Subsector F1 (Steel Works, Blast Furnaces, and Rolling and Finishing Mills for SIC 3312-3317), Subsector F2 (Iron and Steel Foundries for SIC 3321-3325), Subsector F3 (Rolling, Drawing, and Extruding of Nonferrous Metals for SIC 3351-3357), Subsector F4 (Nonferrous Foundries (SIC 3363-3369), Subsector I1 (Crude Petroleum and Natural Gas; Natural Gas Liquids; Oil and Gas Field Services (SIC 1311, 1321, and 1381-1389), Subsector K1 (ALL - Industrial Activity Code “HZ” dischargers not subject to effluent limitations in 40 CFR Part 445 Subpart A), Subsector Q1 (Water Transportation Facilities SIC 4412-4499), Subsector R1 (Ship and Boat Building or Repairing Yards for SIC

3731 and 3732), Subsector S1 (Airports using more than 100,000 gallons of deicing glycols based fluids or 100 tons of urea, on an annual basis for SIC 4512 - 4581).

Contrary to comments, the requirement to meet benchmarks has led to implementation of advanced stormwater control measures in Maryland. Performance standards often require the use of advanced stormwater controls. And, the improved 20-SW AIM measures will lead to the implementation of additional advanced measures.

**Response to Comment 86:** The commenter states that the permit does not fulfill its pollutant reduction responsibility under the Phase III WIP. The commenter provides a graphic illustration of the contribution of stormwater among the other sources of nitrogen, phosphorus and sediment. Response: The graph shows that the Phase III WIP goals for reductions will exceed the 2025 target. The commenter fails to acknowledge that industrial facilities are required to restore approximately 390 acres, while MS4 permits are required to restore in excess of 40,000 acres under the Phase III WIP. Presently, of the 300 permitted industrial facilities in the State, 220 facilities have completed required restoration, for a total of 170 restored acres. The required restoration area of industrial facilities pales in comparison to the significant acreage required by other permits in the State. For example:

- Phase 1 MS4 permits require the restoration of approximately 20,000 impervious acres by 2018 and 2019.
- Phase 1 MS4 permits require the restoration of an additional 17,500 acreage by 2023 and 2024. restoration requirement (completion dates: 2023 and 2024)
- Phase 2 MS4 permits require the restoration of approximately 3,000 impervious acres by 2025.
- Non-MS4 county permits require the restoration of approximately 400 impervious acres by 2025 (*e.g.*, trading, trust fund).

Setting aside the smaller amount of total acres required to be restored at industrial facilities, the facilities with additional restoration requirements have submitted restoration plans that must be completed by 2025 and will result in the additional restoration of 220 acre.

**Response to Comment 87:** The commenter is concerned about how much nitrogen is accounted for in the restoration of an acre of impervious surface: 5.4 lbs, 18.08 lbs or 7.69 lbs. Response: Part III.A.1.c.i requires restoration of impervious surfaces and has no calculation for lbs of nitrogen reduction. The model itself will be calibrated based on the latest assumptions for Bay pollutants.

Part III.A.1.c.ii refers to the Accounting Guidance that is applicable where an industrial facility chose a practice that equates reductions of sediment or nutrients as equivalent to an acre of restoration. These calculations vary based on the most current projections. The

permittee using this practice should use the most current version when developing their plans. However, once a plan is set, that should continue to be maintained going forward.

Part III.A.1.c.iii allows for the use of alternative control measures that achieve a reduction of 5.4 lbs (50% reduction of 10.8 lbs) per acre per year. For example, fertilizer reduction, benchmarks reductions, and reductions in the permittees own NPDES loads are allowed alternative control measures.

Additionally, calculations for nutrient credit trading are periodically updated based on the newest projection and other calculations such as edge of tide. If you have questions, please contact permitting when developing your restoration plan.

**Response to Comment 88:** The commenter asserts that a timely triennial review, a review of water quality standards, is required for the Department to adequately measure how the last permit and the present 20-SW permit meet water quality standards.

Response: While the State's issuance of permits is not tied to the triennial review, Part VI, Standard Permit Conditions Q reserves the right to reopen the permit based on various factors:

Reopener Clause for Permits. The Department may revoke this permit or modify this permit to include different limitations and requirements, in accordance with the procedures contained in COMAR 26.08.04.10 and 40 C.F.R. §§ 122.62, 122.63, 122.64 and 124.5, to comply with any applicable TMDL, or any effluent standard or limitation issued or approved under Sections 301, 304, and 307 of the Clean Water Act [33 USCS §§ 1311, 1314, 1317] if the effluent standard or limitation issued or approved:

1. contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
2. controls any pollutant not limited in this permit. This permit, as modified or reissued under this section, must also contain any other requirements of the Act then applicable.

Consequently, any water quality standard changes may be incorporated into the 20-SW as appropriate. Additionally, the triennial review cycle is 3 years and federal permit renewal requirement cycle is 5 years. Making the triennial review a condition precedent for the federal permit renewal is impractical.

**Response to Comment 89:** The commenter asks if the 20% of the untreated impervious area is due by the end of the 5-year permit. Response: The commenter appears to be both an MS4 permittee and a 20-SW permittee. MS4 permittees are not subject to restoration under 12-SW or 20-SW, but must account for restoration under their MS4 permit.

However, if this commenter were not an MS4 and upgraded a non-functional BMP with one that provided restoration, they could upgrade by the end of the permit term to comply

with the restoration requirement. If the site is smaller than 5 acres, that upgrade would be eligible to generate nutrient trading credits.

**7. COMMENT CATEGORY – Part III.B.1 (Technology Based Limits).**

**Response to Comment 90:** The commenter requests considerations for selecting and designing controls to include improving soils on-site by adding organic matter to create stormwater storage in the site soils, in Part III B.1.a “Control Measures Selection and Design.” Response: Organic matter is required for certain stormwater control measures such as selection of bioretention soils. It is beneficial for agricultural practices. However, it may be counterproductive for soils at an industrial facility which are subject to frequent compaction by machinery. It may be worth considering for non-industrial areas, but those areas are not regulated nor do they deal with reductions of pollutants from industrial facilities. Maybe landfill cover or swales. The recommended change is now incorporated as an option where appropriate, if nothing else, to reduce the volume of stormwater runoff, so it may fit in the next section related to climate change and potential increases in flow.

**Response to Comment 91:** The commenter asks what good housekeeping measures will be required (Part III B.1.b.ii) for roll off boxes at landfills as these are usually uncovered to allow trash to be placed in them. Response: The permit states “For dumpsters and roll off boxes that do not have lids and could leak, ensure that discharges have a control (e.g., secondary containment, treatment). Consistent with Part I.E.3 above, this permit does not authorize dry weather discharges from dumpsters or roll off boxes.” In addition to this permit condition, the “Industrial Stormwater Fact Sheet Series, Sector L: Landfills and Land Application Sites” provided by EPA. The fact sheet states

Good housekeeping is a practical, cost-effective way to maintain a clean and orderly facility to prevent potential pollution sources from coming into contact with stormwater. It includes establishing protocols to reduce the possibility of mishandling materials or equipment and training employees in good housekeeping techniques. Good housekeeping practices must include a schedule for regular pickup and disposal of waste materials such as oils and fluids and routine inspections of drums, tanks, and containers for leaks and structural conditions. Practices also include containing and covering garbage, waste materials, and debris. Involving employees in routine monitoring of housekeeping practices has proven to be an effective means of ensuring the continued implementation of these measures. Specific good housekeeping practices for landfills and land application sites include providing protected storage areas for pesticides, herbicides, fertilizers, and other significant materials, vehicle maintenance areas, and recycled materials areas if present. Additionally, a preventative maintenance program should be developed that addresses:

- \* The maintenance of containers used for outdoor chemical/significant materials/recyclables storage to prevent leaking
- \* All elements of leachate collection and treatment systems to prevent exposure of leachate to stormwater
- \* The integrity and effectiveness of any intermediate or final cover.

**Response to Comment 92:** The commenter suggests modifying Part III.B.1.b.iii: “Final repairs/replacement of stormwater controls ~~should~~ **must** be completed as soon as feasible but must be no later than the timeframe established in Part IV.A.2 for corrective actions, i.e., within 14 days or, if that is infeasible, within 45 days.” Response: This 20-SW language is identical to the EPA MSGP and is mandatory. It states that “completion” “must be no later than...” “Should” directs the facility to complete that repair/replacement sooner, if possible. The commenter’s focus is misplaced. While a facility “should” replace or repair stormwater controls as soon as possible, it “must” do so within a specific time. The requirement is not merely aspirational (“should”), it is required (“must”).

**Response to Comment 93:** The commenter suggests that adding the phrase “constitutes a permit violation” will “strengthen the permit” and “mak[e] it more enforceable.” The specific recommendations are the addition of these statements after these permit requirements:

- Failure to select, design, install, and implement control measures in accordance with good engineering practices and manufacturer’s specifications (unless deviation is justified and justification is documented) constitutes a permit violation. Permit Part III.B.1.
- Failure to minimize the exposure of manufacturing, processing, and material storage areas to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings constitutes a permit violation. Permit Part III.B.1.b.i.)
- Failure to regularly inspect, test, maintain, and repair all industrial equipment and systems constitutes a permit violation. Permit Part III.B.1.b.iii.)
- Failure to control your discharge as necessary to meet applicable water quality standards constitutes a permit violation. Permit Part III.B.2.a.

Response: The commenter’s suggestion lacks context. A violation results from an unpermitted discharge. Each facility is required to implement sufficient controls to foreclose unpermitted discharges. The proof is in the pudding. The 20-SW does not enforce permit violations that do not result in unpermitted discharges. This is consistent with Washington State’s approach:

The Permittee shall include each of the following mandatory BMPs in the SWPPP and implement the BMPs. The Permittee may omit individual BMPs **if site conditions render the BMP unnecessary or infeasible and the Permittee provides alternative and equally effective BMPs.”**



(emphasis added). The control measures and effluent limits referenced are the basic requirements, the tenets of the permit. The terms and requirements used by EPA and the State of Maryland are enforceable and violations may be assessed without the clarification requested.

**Response to Comment 94:** The commenter struggles with the permit terms of replacement versus repair of control measures, and desires that the permit clarify these in specific parts of the permit. Response: The commenter is concerned about the two phrases:

1. “you must **conduct the necessary maintenance** immediately in order to minimize pollutant discharge”
2. “you must immediately **take all reasonable steps** to prevent or minimize the discharge of pollutants until the final repair or replacement is implemented”

(emphasis added). The first phrase directs the facility to conduct maintenance to minimize pollutant discharge immediately. The second phrase requires the facility to take necessary actions (in addition to maintenance) to stop or minimize pollutant discharge until repair or replacement is completed. The first requirement is immediate (focused on correcting any insufficient maintenance), the other is ongoing (focused on limiting all discharges until replacement/repair is complete).

**Response to Comment 95:** The commenter suggests that the permit conditions applicable to control measures are not sufficient, since they lack increasingly restrictive requirements or BMPs. The commenter feels confident that the reason for impaired waters is traceable to benchmark exceedances. Response: Maryland first implemented benchmarks to evaluate effectiveness of controls in 2014. The benchmarks were the first numeric concentration basis for corrective actions. Prior to that, there were no numerical standards. Since 2014, benchmarks have provided essential data to permittees and inspectors in order to evaluate BMP effectiveness and identify appropriate corrective actions. The 20-SW is more restrictive than the 12-SW. It adds benchmark requirements to additional industrial sectors that previously were not required to meet benchmarks. This will provide numeric concentration data to evaluate BMPs and effective correction actions for these industrial sectors. The permit also requires restoration of impervious surfaces at new facilities and facilities located in additional Phase II MS4s, and it requires continued maintenance of such controls for sites that completed restoration under 12-SW. The permit provides additional opportunities to include numeric limits based on potential impacts to local waters. The permit provides incentives (which permittees commonly try to achieve) to obtain “no exposure” certifications by eliminating any exposure of industrial pollutants from stormwater. Additionally, the commenter errs by conflating the impacts of industrial facility discharges with the stormwater discharges from all sources in the entire state. In a way, the commenter is blaming the pollution in the Bay on a small slice of an apple of stormwater discharges.

### **Grouping – Chemical Additives**

**Response to Comment 96:** The commenter identifies missing definitions for chemical and cationic chemical additives, and requirements for landfills or for potential AIM measures. Response: The Department has implemented practices for chemical additives used in several permits (mineral mine, hydrostatic test, and construction), and the requirements for these are included in portions of the permit. However, as noted by the commenter, definitions for “Chemical Additives” and “Cationic Chemical Additives” need to be added to Appendix E, and the Department’s approval process needs to be incorporated into the permit, consistent with the Draft Permit Fact Sheet. These definitions and the approval process have been added to the 20-SW. In addition they are added as an option when trying to achieve benchmarks in the higher AIM measures.

### **8. COMMENT CATEGORY – Part III.B.2 (Water Quality Based Limits).**

#### **Grouping – Numeric Limits**

**Response to Comment 97:** The commenter enjoys Dr. Horner’s suggestions on the stimulation of treatment technologies through permits. First, identify a problem and then, propose a solution. The suggestion is that a numeric limit be established, and in conjunction with this, require a means of meeting them. Response: The Department acknowledges that there are Federally mandated end-of-pipe numeric limits (TBELs) based on established ELGs. The 20-SW itself requires an individual permit, or alternative General Permit, in cases where EPA has established these technology based numeric limits. Maryland Regulations require individual permits in these cases. As described extensively in both the EPA MSGP Fact Sheet and the 20-SW Fact Sheet, there are substantial challenges with establishing other numeric limits for stormwater. Most significant is that the concentrations vary so wildly during a rain event: initially high based on the first flush of pollutants, and then tapering off. However, the restoration requirements are an example of a limit in the permit that is based on the treatment technologies and their removal efficiencies, perhaps in line with Dr. Horner’s philosophy of setting a limit (20% restoration) and a method to achieve it (the design manual etc). The Maryland restoration approach is based on the TMDL and modeling. The concentration-based benchmarks and the required restoration requirements have driven investment in control technologies in Maryland.

**Response to Comment 98:** The commenter suggests that the first sentence of Part III.B.2.a (“Your discharge must be controlled as necessary to meet applicable water quality standards.”) is legally insufficient and that the Department should therefore “develop numeric, enforceable WQBELs.” Response: This individual sentence is taken out of context. The 20-SW requires the implementation of a variety of sector-specific control measures for individual industrial facilities. Further, the commenter does not identify a basis for the statements that “narrative TBELs and WQBELs have been insufficient to protect water quality.” See Response to Comment 86. The 20-SW requires sector-specific effluent benchmarks which have been expanded to include new industrial

sectors. See Response to Comment 85. Benchmarks differentiate between discharges to freshwater or saltwater. Benchmarks are also dependent on the hardness of the receiving water. And, some water quality based limits are not specified in numeric concentrations, but rather in percentage of impervious surface treated. While the allowances for potentially less restrictive limits based on mixing zones are not provided in the 20-SW, they could be allowed if the permittee requests an individual permit as required under AIM (Part IV.B.4.b.ii). Further, the EPA MSGP does not contain numeric concentration limits. Numeric effluent limits have extensively been discussed in EPA fact sheets (see Response to Comment 97). Benchmarks, although not limits, provide data regarding the effectiveness, or ineffectiveness, of an industrial facility's stormwater controls. Ultimately, benchmark exceedances may not continue indefinitely. AIM sets specific deadlines and requirements for a facility to bring discharges into compliance with applicable benchmarks.

### **Grouping – Impaired Water Monitoring**

**Response to Comment 99:** The commenter identifies two different standards for when monitoring for a pollutant may be discontinued when discharging to impaired waters without a TMDL:

- 1) “If the monitored pollutant is not detected in your discharge for three consecutive years, or it is detected but you have determined that its presence is caused solely by natural background sources, you may discontinue monitoring for that pollutant. To support a determination that the pollutant’s presence is caused solely by natural background sources, you must document and maintain with your SWPPP, as required by Part III.C.8 . . .” Permit, pg. 39, Part V.B.3.a.i.), lines 19-22.
- 2) “If the monitored pollutant is not detected in your discharge for three consecutive years, or it is detected but you have determined that its presence is caused solely by natural background sources, you may discontinue monitoring for that pollutant only after submitting a request to MDE’s Permitting Program with the appropriate justification and receiving verification that the request was granted.” Permit, pg. 39, Part V.B.3.a.i.), lines 37-42.

Commenters support the second approach, which requires the permittee to submit a request to the Department and receive verification that the request was granted.

Response: The first refers to documentation that must be kept on-site, and the second indicates the process to discontinue. Requirements regarding monitoring for impaired waters have been reformatted consistent with the EPA MSGP, and this Natural Background Determination inconsistency has been corrected in the final permit.

**Response to Comment 100:** The commenter provides an example of a facility and the impairments in the watershed, and asks confirmation of which impaired-waters-monitoring is required. Response: First, compare the list of industrial pollutants identified in Part III.C.3 (SWPPP requirements to identify potential pollutants from your facility) and any sector specific benchmark monitoring pollutants to the list of pollutants for which the waterbody is impaired. Impairments can be identified for your receiving water

segment by using the State’s interactive map:

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

The example appears to be a Department of Public Works within Sector P: the transportation sector. Part III.C.3 requires the identification of potential pollutants at site. For this example, there are no benchmarks. The EPA fact sheet for transportation can be used to determine if the pollutants are expected for this facility:

(<https://mde.maryland.gov/programs/Permits/WaterManagementPermits/Pages/EPAIndustrialStormwaterGuidance.aspx>).

**Table 1. Common Activities, Pollutant Sources, and Associated Pollutants at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Rail Transportation Facilities, and United States Postal Service Transportation Facilities**

Activity	Pollutant Source	Pollutant
Fueling	Spills and leaks during fuel delivery	Fuel, oil, heavy metals
	Spills caused by “topping off” fuel tanks	
	Rainfall falling on the fuel area or stormwater running onto the fuel area	
	Hosing or washing down fuel area	
	Leaking storage tanks	

**Table 1. Common Activities, Pollutant Sources, and Associated Pollutants at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Rail Transportation Facilities, and United States Postal Service Transportation Facilities (continued)**

Activity	Pollutant Source	Pollutant
Vehicle washing and maintenance	Parts cleaning	Chlorinated solvents, oil, heavy metals, acid/alkaline wastes
	Waste disposal of greasy rags, oil filters, air filters, batteries, hydraulic fluids, transmission fluid, radiator fluids, degreasers	Oil, heavy metals, chlorinated solvents, acid/alkaline wastes, ethylene glycol
	Spills of oil, degreasers, hydraulic fluids, transmission fluid, radiator fluids	Oil, arsenic, heavy metals, organics, chlorinated solvents, ethylene glycol
	Fluids replacement, including oil, hydraulic fluids, transmission fluid, radiator fluids	Oil, arsenic, heavy metals, organics, chlorinated solvents, ethylene glycol
	Washing or steam cleaning	Oil, detergents, heavy metals, chlorinated solvents, phosphorus, salts, suspended solids
Outdoor vehicle and equipment storage and parking	Leaking vehicle fluids including hydraulic lines and radiators, leaking or improperly maintained locomotive on-board drip collection systems, brake dust	Oil, hydraulic fluids, arsenic, heavy metals, organics, fuel
Painting areas	Paint and paint thinner spills	Paint, spent chlorinated solvents, heavy metals
	Spray painting	Paint solids, heavy metals
	Sanding or paint stripping	Dust, paint solids, heavy metals
	Paint clean up	Paint, spent chlorinated solvents, heavy metals
Railroad locomotive sanding	Loading traction sand on locomotives	Sediment
Liquid storage in above ground storage	External corrosion and structural failure	Oil, grease, heavy metals, materials being stored
	Installation problems	
	Spills and overfills due to operator error	
	Failure of piping systems (pipes, pumps, flanges, couplings, hoses, and valves)	

Compare the pollutants for the activities at the facility to (assuming these are correct for the facility) Chloride, total P, ammonia, TSS, and temperature. If there is a match, then impaired water monitoring is required. This is a simplified version of the path to follow. First, verify what the impairments there are for your receiving water segment that your facility discharges to. Second, identify if there are other pollutants present at your facility, including those on the Fact Sheet, or based on your own assessment. Finally, compare those pollutants that have been identified as present at your facility to those pollutants that are present in the impaired receiving water.

**Response to Comment 101:** The commenter asks about the two specific pollutants: PCB and PFAS. How would they identify PCB “potential pollutants” and PFAS “potential sources”? Specifically, if Gaithersburg knows that PCBs or PFAs were ever used on the site, should monitoring be required? Additionally is there a list of potential PCB pollutants for guidance?” Response: The permit as written requires the operators to determine if they are part of any impairment. Currently, there are impairments for PCBs, but none for PFAS. Therefore, PCB monitoring would only be required for watersheds

impaired by PCBs. If PCBs were part of past activities or if based on information received by the Department it is determined that the permittee is a potential major source that has the potential to cause an impairment. The permittee should identify both PCB or PFAS determinations in your SWPPP if there is a potential. The Department has no listing of specific sources of PFAS, however Part III.C.3.b.ii lists potential PCB source SIC codes. Therefore, it is incumbent on the operator to know what potential pollutants exist and to keep these in the SWPPP. The Department encourages permittees to ask the Department if there are specific questions.

**Response to Comment 102:** The commenter identifies weaknesses in the permit approach to identify PFAS contributions and points out there are currently no impairments related to PFAS. Response: The fact that this emerging pollutant does not have extensive documentation in either Safety Data Sheets, nor are there specific numeric criteria, supports the approach of determining potential sources of PFAS, and listing those in your SWPPP. The Department intends to gather information which will be used in the future if PFAS impairments are identified. It is incumbent on the operator to research this now and use this information to prevent releases of PFAS. The Department envisions this topic will be prevalent in regulation changes and in discussions related to impacts on uses of Waters of this State. The focus of this permit is PFAS used in industrial practices performed at a site. Cross-contamination of PFAS from sources like clothing worn by employees or food containers used by employees on site will not be considered at this time.

**Response to Comment 103:** The commenter suggests that there is little difference between a watershed with an established TMDL and one without one and that the Department should reconsider Part V.B.3.a.i or make it the same as Part V.B.3.a.ii. Response: In cases where a TMDL has yet to be established for a specific contaminant, (Part III.B.2.b.i and Part V.B.3.i “Existing Discharge to an Impaired Water with an EPA-Approved or Established TMDL”), the Department needs to identify potential sources of that contaminant. Once a TMDL is established (Part III.B.2.b.iii and Part V.B.3.ii “Existing Discharger to an Impaired Water without an EPA-Approved or Established TMDL”), the Department uses monitoring data and other sources of information to determine wasteload allocations, or to require monitoring, or require other measures intended to reduce the discharge of the contaminant to receiving waters. For example, a facility that is a minor source of a pollutant may be included in the TMDL as part of the aggregate load calculation, while a facility that is a major source may be assigned a wasteload allocation, required to monitor, or even required to reduce the loading to the receiving water.

**Response to Comment 104:** The commenter requests a tool that would allow a permittee to enter an address and identify what water quality tests are required. Response: The Department’s website that details the impairments for each receiving water of this state: [<https://mdewin64.mde.state.md.us/WSA/IR-TMDL/index.html>]. A permittee can enter an address into this website and identify impairments associated with that address. The permittee must then determine if they are a potential source of relevant pollutants. If the

permittee conducts industrial activity known to be associated with an impairing contaminant, water quality testing is required by the permit.

**Response to Comment 105 and 107 - 108:** The commenter suggests that inadequacies of the “Pollution Controls in this Permit” will cause and contribute to new and ongoing water quality impairments, and, therefore, the Permit Requires New or More Stringent WQBELs before it can be reissued. The commenter suggests that the record shows a lack of adequate progress because of a lack of clear, specific, and enforceable WQBELs and asserts that the Department must correct this deficiency. The commenter objects to the permit statement that “[t]he Department expects that compliance with the other conditions in this permit will control discharges as necessary to meet applicable water quality standards...” The commenter suggests that the “Permit will need to contain a new 20 percent ISR requirement”. (ISR is industrial stormwater restoration). The commenter also points out that the permit conditions are “glaringly inconsistent with local TMDLs issued by the Department”. The commenter claims the Permit proposes no WQBELs designed specifically to achieve these other TMDLs or address locally impaired waters. Instead, subsection III.C.2 merely provides a generic statement that permittees “must implement all measures necessary to be consistent with an available wasteload allocation in an EPA established or approved TMDL, including the restoration requirements (Part III.A).” The commenter complains about noncompliance with the existing permit. The commenter goes as far as “unless the Department can provide an adequate factual justification for the conclusory language that “compliance with the other conditions in this permit will control discharges as necessary to meet applicable water quality standards” it must be removed.” Response: The Fact Sheet (Page 57-60) provides background in the selection of WQBELs, which is nearly identical to EPA’s issued MSGP. The permit includes restoration requirements consistent with the TMDL and Phase III WIP. While an additional 20 percent restoration requirement is not required, permittees may avail themselves of incentives to do so. Additionally, there are circumstances where restoration of impervious surfaces may result in undesired effects, such as the migration of pollution from certain industrial sites. This was purposeful and consistent with the Phase III WIP and in support of the WQBEL TMDL. The permit now includes (for the first time) tools to require local limits where appropriate for local impairments. The commenter’s complaints about noncompliance suggest that additional requirements be put in place when they are not complying with the existing permit conditions. On the contrary, each successive permit iteration has set the bar higher, and is focused on addressing actual water quality issues. The commenter singles out one section of the 20-SW, Part III.B.2, to argue that the permit lacks enforceable WQBELs designed to achieve TMDLs or address locally impaired waters. To the contrary, WQBELs are directly tied to the quality of the receiving water which is fact specific and not amenable to broadly applicable numeric limitations. As such, the 20-SW has non-numeric WQBELs, based substantially on EPA’s MSGP, that, combined with required control measures and TBELs, are consistent with TMDLs and Phase III WIP. The permit requires that a permittee must control their discharge(s) as necessary to meet applicable water quality standards. Maryland’s Water Quality standards, COMAR 26.08.02, include both the designated uses and water quality criteria to protect those uses. The permit

contains non-numeric limits: “There shall be no discharge that causes visible oil sheen, and no discharge of floating solids or persistent foam in other than trace amounts. Persistent foam is foam that does not dissipate within one half-hour of point of discharge.” These non-numeric effluent limits are standard practice in the industry and COMAR. Additionally, Maryland’s Water Quality standards contain specific limitations that are tailored to specific locations where a certain industrial activity is conducted. The Department, through its regulations, requires appropriate effluent limitations for individual facilities. Contrary to the comment that there is no progress because there are no specific WQBELs, the permit includes the implementation of restoration of impervious surfaces at industrial facilities and progress is also being made as industries begin to measure the effectiveness of their controls and implement improvements. Industry has spent millions of dollars in technologies and practices that result in progress due to reductions at these facilities.

**Response to Comment 106:** The commenter is concerned that eligibility for the coverage in this permit is complex and confusing, requiring significant technical analysis on the part of the applicant, such as whether their discharge would meet water quality standards or comply with waste load allocations under a Bay or any other local TMDLs. Response: The commenter’s use of the word “eligibility” appears to be an error. No person in the State of Maryland is authorized to discharge pollution into the Waters of this State. The Department is, however, authorized to provide discharge permits to persons in the State of Maryland. Operators of facilities that engage in industrial activities identified in Appendix A of the 20-SW permit are not eligible for permit coverage; they are required to obtain permit coverage and abide by the permit. See response to Comment 105. The implementation of the 20-SW by an operator, however, may be complex and require significant technical knowledge. The Department attempts to provide training and online guidance to ensure the operators provide complete applications and understand the permit requirements. The commenter provides no advice on addressing the concern.

**Response to Comment 109:** The commenter suggests that the Chesapeake Bay TMDL not be included in III.B.2.b.i “Existing Discharge to an Impaired Water with an EPA-Approved or Established TMDL.” Response: The permittee makes this determination based on the State’s mapping tools which identifies all impairments with an established TMDL or not. In addition, the Department has informed operators of the Chesapeake Bay Restoration requirements.

**Response to Comment 110:** The commenter suggests that the Department must revise the Permit to be consistent with Tier II antidegradation procedures established in COMAR 26.08.02.04-1. Response: Tier II locations are predominantly undeveloped. If an operator intends to engage in an industrial activity in a Tier II watershed, that site likely needs to be zoned for industrial use. Doing so also likely requires a county sewer plan amendment, a construction permit, approved stormwater management, wetlands permitting, etc. The 20-SW permit applicants have likely already been approved under a previous permit and have stormwater management installed. In the rare case where an



industrial activity intends to newly operate in a Tier II watershed, the permittee is required to comply with 26.08.02.04-1.

**Response to Comment 111:** The commenter suggests that the Department should include or strengthen BMPs that focus on sediment removal and pollutants that adhere to sediments such as metals and organic pollutants and analyze the potential cumulative impact of multiple permitted discharges into the same water body. Response: The permit does strengthen BMPs (*i.e.*, stormwater controls) that treat metals, by requiring corrective actions on any benchmark for the industry. The Department evaluates all dischargers when establishing TMDLs. It is unclear what specific changes would be recommended. Additionally, permittees must take into account receiving water impairments in choosing and implementing appropriate controls.

**Response to Comment 112:** The commenter asserts that analysis from the Chesapeake Assessment Scenario Tool (CAST) indicates that polluted runoff from stormwater is increasing and will be Maryland's second largest source of nitrogen pollution by 2025 and suggests a substantial change is necessary for the permits to have the needed and required effect. Response: Models such as the Bay Program's CAST look at urban stormwater runoff and pollutant loads, but do not specifically model runoff from industrial sources (*i.e.*, this tool does not differentiate between industrial stormwater discharge pollution and other stormwater discharge sources). When compared to the MS4 contribution and other unregulated non-point sources, the industrial stormwater contribution is relatively small. See Response to Comment 86. See also "Progress by Source Sector":

<https://storymaps.arcgis.com/stories/174367c724004034add7d647581db684>. The commenter points to lagging efforts to reduce pollution in established neighborhoods. Maryland took a great step forward by requiring industrial facilities to mimic requirements by urban stormwater requirements and required the restoration of impervious surfaces. Overall, as a result of the industrial stormwater permits, the amount of industrial stormwater pollution is likely decreasing. See Response to Comment 37. As stated elsewhere in this document, there is an increased focus on local impairments with this permit.

**Response to Comment 113:** The commenter suggests that the Department could use previous the general permit to demonstrate that it is protective of water quality standards and trigger individual permits for new discharges that might impair water quality. Response: Part I.G of the 20-SW identifies several types of industrial activities that must obtain alternative permit coverage. Part I.G also states that operators that "will not meet an applicable water quality standard" must obtain alternative permit coverage. Also, through AIM measures, conditions may lead either to a compliance action or require an individual permit.

**9. COMMENT CATEGORY – Part III.C (SWPPP).**

**Response to Comment 114:** The commenter desires quick access to plans or other information from operators by the public. The commenter provides specific internal databases where data could be stored. The commenter focuses on SWPPPs and the use of ETS. Response: In practice, permittees submit SWPPPs with confidential information which the Department must evaluate before making publicly available. Information such as cell phone numbers and even maps need to be protected. Additionally, SWPPPs are required to be updated. Thus, providing public access to current SWPPPs would require the Department to receive all SWPPP updates, review them for confidential information, and then upload the most current version of the SWPPP. Maintaining such a system would be cumbersome and require additional personnel to handle this volume of documents. Internal systems such as the Environmental Tracking System (ETS) do manage permit information but the Department is not planning to use it to store SWPPPs or other required permitting documents, or to provide the public with access to these.

**Response to Comment 115:** The commenter suggests that paper copies are not essential as long as records are available quickly. Response: The 20-SW now allows the permittee to maintain a copy of its SWPPP in electronic or paper format onsite. Keep in mind that when an inspector is onsite, the SWPPP must be accessible. If it is not, this is a violation of the permit. Additionally, if the facility personnel cannot access the SWPPP for any reason (*e.g.*, the internet is down), this is a violation. Therefore, maintaining only electronic copies onsite must be done thoughtfully.

**Response to Comment 116:** The commenter asks if a narrative summary would be acceptable for Part III C.3.f “Sampling Data History.” Response: The answer is yes.

**Response to Comment 117:** The commenter believes members of the public should have access to SWPPPs (online if possible) and the results of the Department inspections. Response: With certain exceptions, all SWPPPs can be made available to the public through a Public Information Act request. See Response to Comment 114.

**Response to Comment 118:** The commenter insists that the Department must provide the public with greater access to information about the implementation and enforcement of this permit. Response: Similar to the response to comment 117, there is nothing in this permit that would prohibit such access. Currently, all NOIs are on-line, as are all monitoring results. It appears that the request is to increase access to SWPPPs, and as mentioned in Response 114, any confidential information must be removed prior to sharing with the public.

## 10. COMMENT CATEGORY – Part IV (Corrective Actions and AIM).

### Grouping – Deadlines and Timeframes

**Response to Comment 119:** The commenter suggests certain revisions concerning enforcement and violations. Response: Adding language that states that a deadline is “an enforceable deadline” or stating that failing to meet a 20-SW deadline is a “violation of

the permit” is redundant; failing to meet a 20-SW deadline is a violation of the 20-SW and can subject the permittee to enforcement actions by the Department. Commenter’s suggested revisions do not alter or augment the enforceability of these provisions. The provisions the commenter is concerned with are enforceable as violations of the 20-SW and are consistent with the EPA MSGP deadline language.

**Response to Comment 120:** The commenter suggests AIM Level 4 Responses require the permittee to take up to 30 days to select the professional, and an additional 30 days to prepare the action plan, and yet the AIM Level 4 Deadlines provide that the permittee must install the appropriate structural source and/or treatment control measures within 60 days of the occurrence of the triggering event. This means that the action plan for installing control measures is due to the Department the same day as the actual installation of the control measures. If the action plan is meant to have any functionality as a plan, as opposed to a summary of actions already taken, it must be due prior to the deadline for the corrective action itself. Response: In response to the commenter’s suggestion, the deadline to install the control has been extended 30 days. So, after a triggering event, the permittee has 30 days to select the provision, 30 days to prepare an action plan, and 30 days to implement the action plan. Certain actionation plans (*e.g.*, advanced controls) may take longer to investigate, design, and implement. In these circumstances, the 20-SW continues to allow the permittee to request an extension from the Department. See Response to Comment 119.

**Response to Comment 121:** The commenter recommends revising the definition of “Appropriate Demonstration“ in Appendix E to require that “a clear impediment” is “outside of the permittee’s control.” Response: This definition was added in order to provide permittees guidance regarding the necessary showing to obtain extensions of certain deadlines. The demonstration that there is a “clear impediment” requires a significant showing by the permittee and is a high bar. Additionally, the Department would benefit from receiving notification of “clear impediments” that are outside the permittee’s control as well as within the permittee’s control.” The addition of the commenter’s modifying clause would not likely alter the Department’s substantive analysis of a permittee’s offer of an “Appropriate Demonstration.”

**Response to Comment 122:** The commenter suggests that the Department’s AIM Level 4 Response 60 day period to review action plans creates confusion. The commenter asks that the Department add, revise, or clarify deadlines for submitting action plans and installing control measures. Response: With or without the Department’s approval of a permittee’s action plan, the permittee is responsible for mitigating any permit violations. If source or treatment controls are not installed within 90 days that sufficiently mitigate permit violations, the permittee may be subject to enforcement actions by the Department. The addition of yet another deadline for the submission of a revised action plan, in response to the Department’s disapproval of an action plan, does not limit the liability of the permittee nor would such an additional provision likely improve the enforcement of the AIM Level 4 Responses. See Response to Comment 119.

## Grouping – Clarifications

**Response to Comment 123:** The commenter suggests the Department provide additional clarity regarding certain AIM triggers. Response: The Department has added a flow chart similar to the one contained in EPA's MSGP.

**Response to Comments 124-125:** The commenter suggests the Department revise the Corrective Action Provisions to strengthen triggering events, improve enforceability, avoid impermissible self-regulation, and increase clarity. The commenter also requests that the Department accelerate the triggering events for corrective action to occur immediately upon the permittee reporting a benchmark exceedance. Response: The 20-SW approach is iterative and provides time to determine the most appropriate and effective controls to achieve the benchmarks. If a permittee has one exceedance above a quarterly benchmark (but not four times the benchmark), the permittee has not necessarily exceeded the average annual benchmark requirement. However, if a permittee exceeds four times one quarterly benchmark, then the permittee has exceeded the annual benchmark average requirement and must comply with AIM Level 1 responses and deadlines. Permittees are motivated to achieve benchmarks in order to discontinue benchmark monitoring and meet required compliance with AIM. Continued testing is a significant expense and benchmark exceedances invite Department investigation. There are many other reasons why permittees are motivated by benchmarks. It may also have been an anomaly, so no action is required. However, if the concentration is more than 4 times above the benchmark, that does trigger an AIM action. See response to Comment 126 for actions required regarding SWPPPs. See flow chart discussed in response to Comment 123.

**Response to Comment 126:** The commenter provides advice by Dr. Horner, that specific control measures be evaluated at each level, with control measures as the ultimate recourse and provide earlier qualified professionals involvement. The commenter also suggests that the first benchmark exceedance should trigger the first level of corrective action. The commenter then provides examples of how immediate actions related to benchmarks are addressed in the states of Virginia and Washington. Response: The 20-SW contains several requirements intended to prevent pollution from impacting local waters. Which requirements apply to a specific facility are determined by the operator who understands the source of pollution and the measures required to address them. Benchmarks are measures that evaluate the effectiveness of controls. They by themselves are not causing impairments. In addition to benchmark monitoring, the permit now requires water monitoring related to specific impairments, which can lead to other actions by the Department. Nothing in the permit limits a permittee from consulting with a professional. There are several conditions that could lead to enforcement actions, including an operator causing an exceedance of water quality standards. Results of benchmarks are not immediate, as they require collection and a lab to analyze the constituents. They are analyzed and results are provided back to the operator. However, visual monitoring is immediate and results of visual monitoring are a trigger for all permittees, not just those who have benchmarks, to take immediate action and update

their SWPPP. See response to comment 124-125. In the Virginia permit: “Exceedance of a benchmark concentration does not constitute a violation of this permit and does not indicate that violation of a water quality standard has occurred; however, it does signal that modifications to the SWPPP are necessary, unless justification is provided in a routine facility inspection.” Similarly, in the 20-SW, a benchmark exceedance does trigger scrutiny of a permittee’s controls. Additionally, when visual monitoring “shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam)” a permittee must review and revise their SWPPP to ensure compliance. Similar to Washington (Level One Corrective Action), the 20-SW requires revision and review of SWPPPs when oil sheen is detected in benchmark sampling. Washington allows for permittees to sample up to twelve (12) hours after a stormwater discharge event. Maryland, consistent with EPA, requires the permittee to make every effort to capture the first flush of pollutants, which is within the first half hour. Samples taken after the first half hour of a stormwater discharge event (the first flush of pollutants) are unlikely to capture the highest concentration of pollutants being discharged from industrial facilities. See Fact Sheet at page 9 “Effects of Rainfall Intensity and Duration on the First Flush from Parking Lots, 28 July 2016.” In addition to first flush sampling, Maryland requires a permittee to review and revise the SWPPP when an oil sheen is observed through required visual monitoring: “There shall be no discharge that causes visible oil sheen, and no discharge of floating solids or persistent foam in other than trace amounts.” Maryland’s 20-SW also contains additional triggers that require the review and revision of a SWPPP to ensure effluent limits are met. Visual monitoring is an immediate and important measure of the efficacy of a permittee’s controls and which requires immediate action. Other 20-SW SWPPP review and revision triggers include:

- a. an unauthorized release or discharge (e.g., spill, leak, or discharge of nonstormwater not authorized by this or another NPDES permit) occurs at your facility;*
- b. a discharge violates a numeric effluent limit;*
- c. your control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in this permit;*
- d. a required control measure was never installed, was installed incorrectly, or not in accordance with Parts III.A, III. B and/or in Appendix D, or is not being properly operated and maintained.*

Maryland, Virginia, and Washington permits do vary. The Department works with and considers the innovative ideas of other states and appreciates the commenter’s comparison.

**Response to Comment 127:** The commenter suggests that several aspects of the corrective action section must be strengthened to avoid impermissible self-regulation by the permittee. Response: The 20-SW’s corrective action and AIM sections are consistent with EPA’s federal strategy, and similar to the strategy used in all 50 states and other territories that are subject to the Clean Water Act. The commenter appears to conflate self-implementation with self-regulation. The permit is required by federal statutes and

regulations as well as Maryland statutes and regulations. As such, permittees are regulated by federal and Maryland governmental instrumentalities and required to comply (*e.g.*, implement) with corrective actions and AIM requirements. The permittee also has a contractual duty, through signing the NOI, to abide by the terms of the permit. Inspectors visit facilities and cite operators who are not in compliance. And, public complaints influence when sites are inspected. Ultimately, if a permittee fails to comply with corrective action or AIM requirements, that permittee may be subject to enforcement actions by the Department.

### **Grouping – Level 2 or Level 3**

**Response to Comments 128 & 129:** The commenter appreciates the differences in the Department's permit versus the MSGP but considers aspects of the MSGP problematic. The commenter is concerned with AIM level applicability to permittees that previously had 12-SW coverage, changes in the AIM Level 1 benchmarks, and the permit's reference to EPA's MSGP Appendix Q. Response: Consistent with the EPA's elimination of Appendix Q to the MSGP, the Department has removed references to Appendix Q. Thus, the 20-SW AIM Level 1 and AIM Level 2 are substantially similar. Starting new permittees and existing permittees at different AIM levels does have an effect of creating some confusion. In order to simplify the process and make it more equitable, AIM Level 2 has been removed, and Level 3 and Level 4 have been renumbered; AIM now has levels 1, 2, and 3, only. With this change every operator starts at Level 1 and progresses through the same steps. This advances the requirement for requesting an engineer to help sooner and requires added controls sooner, which is also beneficial given the concerns in other comments. Also refer to Response to Comment 96.

### **Grouping – Level 4**

**Response to Comment 130:** The commenter appreciates the consideration of permit coverage being revoked in certain parts of the 20-SW.

**Response to Comment 131:** The commenter suggests that AIM Level 4 is problematic because the values are based on water quality standards or criteria, rather than stormwater control measure performance, and thus achieving benchmarks is problematic. Response: Some of the benchmarks are obviously not selected based on standards or criteria, such as sediment (TSS), nitrogen, phosphorus, or COD. The other benchmarks were established based on EPA's General Permit, and are consistent with the previous permit (12-SW). The selected values of many benchmarks are consistent with standards or criteria for acute water quality values, expressed as end of pipe measurement. The Department expects that selected practices achieve the limits, including consideration of implementation of structural controls. Said another way, less stringent controls would not be selected based.

**Response to Comment 132:** The commenter suggests that the condition in Level 4 requiring an engineer and allowing demonstration that the discharge does not exceed

Water Quality Standards should be allowed earlier in the process. Response: The permit requires the use of benchmarks to ensure compliance with the permit requirements. By allowing this alternative only after time has been allowed for the permittee to meet the benchmark, it ensures the maximum effort is taken in preventing pollution before selecting this.

**Response to Comment 133:** The commenter objects to the provision allowing the permittee's authorization to be revoked for a single benchmark parameter. Response: The revocation of the General Permit coverage has been considered for a variety of operations. This is not a new concept. Part I.G of the 12-SW contained a similar requirement: "If the Department determines that a discharge may cause water quality standards to be exceeded in the receiving water, then the Department may require you to take additional actions. You may be required to obtain an individual NPDES discharge permit or coverage under another general permit." The 12-SW allowed the Department to revoke permit coverage if a "discharge may cause water quality standards to be exceeded." Now, the last of the AIM levels provides the Department with the authority to revoke permit coverage for facilities that have failed to meet benchmarks for over three years. This provides the Department with the appropriate authority to end perpetual benchmark exceedances. The commenter also is concerned about Appendix Q which was addressed in Comment 128 and 129.

**Response to Comment 134:** The commenter suggests that a permittee should be required to obtain an individual permit if the corrective actions do not result in water quality standards requirements. Response: The authority to "impose additional control measures" is an important tool for the Department, which allows the Department to require the immediate implementation of discrete corrective actions tailored to a specific facility. The process for a permittee to obtain an individual permit is lengthy. And, although there may be benefits for the permittee to have an individual permit, the Department believes that failing to meet applicable water quality standards by itself is not a reason to require an individual permit. See Response to Comment 56.

**Response to Comments 135 and 138:** The commenter suggests requiring an Individual Permit or denying permit coverage if corrective action or AIM Level 4 response is unsuccessful. Response: By the time that a permittee has reached the last AIM Level, the permittee would have implemented permanent controls and would have had an engineer involved in the improvements. The permittee would have worked with an inspector and a compliance organization, and potential impacts on water quality would have been evaluated. Denying permit coverage or requiring a permittee to obtain an individual permit are possibilities that the Department considers, after involvement by compliance and permitting. See Response to Comment 56.

**Response to Comment 136:** The commenter asks for clarification regarding what would happen if the benchmarks in the last AIM Level continue to be exceeded and suggests that it be based on quarter to quarter. Response: A permittee will be required to enter into an administrative consent order if it has failed to meet benchmarks in the last AIM level.

The permittee would also be required to (a) continue using professionals, (b) continue implementing of additional structural controls, (c) obtaining an individual permit, or (d) provide an “an adequate demonstration to the Department that [the permittee’s] discharge does not result in any exceedance of water quality standards.” The situation where the final level repeats is addressed in the final permit, requiring additional actions.

**Response to Comment 137:** The commenter points to an example facility with 12-SW corrective actions and how the Department continued working with the operator to reduce pollution. The commenter suggests the inclusion in the 20-SW of the following language: “If your control measures are insufficient to prevent reoccurrence of a triggering event listed in Part IV.A.1 after you have followed the Corrective Action requirements of Part IV.A.2, the Department will revoke coverage under this permit through the development of an individual permit to address site-specific water quality limits, or a final determination to deny permit coverage, unless you are under a consent order.” Response: The suggested language is similar to requirements in the last AIM level. A permittee with significant and unabated non-compliance will likely be subject to formal enforcement actions that may include stipulated penalties or certain injunctive relief. Requiring a permittee to obtain an individual permit would be a lengthy process that would delay the Department’s ability to issue such an administrative order and would not guarantee a reduction of pollutants being discharged from the facility. See Response to Comment 56.

### Grouping – AIM Exceptions

**Response to Comment 139:** The commenter suggests replacement of language regarding notification of neighboring properties related to run-on from “should” notify to “must” notify. Response: The operator is not an authority who can tell their neighbor what to do, nor can they be compelled to report the neighbor to the compliance program. A permittee is required to abate pollution that is exposed to stormwater, whether or not its source is another entity (e.g., run-on). However, if the permittee wants to be relieved of the benchmarks and required AIM actions, it is in their best interest to resolve it by one of these conditions.

**Response to Comment 140:** The commenter suggests including several AIM Exceptions in Part IV.B.5 as contained in the 2021 MSGP, including:

- demonstration of no actual in-stream WQS exceedance,
- an aberration exception,
- an abnormal events exception, and
- alternative benchmarks for copper and aluminum.

Response: The proposed permit AIM exceptions included natural background and run-on, which were both in the previous 12-SW and which were consistent with exceptions allowed in the EPA MSGP. A no actual in-stream water quality standards exceedance exception is contained in the last AIM level responses section of the final permit, which was incorporated from EPA’s MSGP. this exception, is included as a prerequisite to avoid an individual permit and is only offered after many years of effort attempting to meet benchmarks.



Also, the exception in the 12-SW that “no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice,” was removed in the 20-SW, because this exception is not contained in the 2021 MSGP. The EPA Fact Sheet states “The 2021 MSGP does not include an exception for feasibility, such as one found in the 2015 MSGP (i.e., no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice). This exception to AIM is inappropriate in the 2021 MSGP for several reasons. Feasibility considerations are not relevant at AIM Level 1 because the operator can self-determine that no additional measures are warranted, as well as AIM Level 2 where the operator can select pollution prevention/house-keeping measures they deem appropriate. At the second AIM level, repeated benchmark exceedances have occurred to a point at which implementation of permanent stormwater control measures is warranted. Industrial stormwater discharges are explicitly required to meet all provisions of CWA §301, including applicable water quality standards (CWA §402(p)(3)(A)).” However, the other exceptions in EPA’s MSGP do merit review and consideration based on the comment and the abnormal events exception and alternative benchmarks for copper and aluminum are appropriate considerations and are included in the final 20-SW. However, there is no aberration exception.

**Response to Comment 141:** The commenter suggests that AIM exceptions for natural background are inconsistent with the Final EPA MSGP and should be revised or eliminated. Response: The changes in the natural background exception in the EPA Final permit are noted and these are incorporated into the final version of the 20-SW.

**Response to Comment 142:** The commenter insists that the Department remove the AIM exception based on run-on from a neighboring source, or if not eliminated at least incorporate Dr. Horner’s recommendations related to the steps necessary to solve the problem from the run-on pollution. Response: The condition follows the same reasonable steps as required under EPA’s MSGP, and stipulates that they should notify the other facility, request that they should abate their pollutant contribution, and if they fail to take action contact the Department. The operators themselves do not necessarily have the authority to compel the neighbor to take action, which is why the Department is called into action.

**11. COMMENT CATEGORY – Part V (Inspections, Monitoring and Reporting).**

**Response to Comment 143:** The commenter asks if the Routine Facility Inspection Signature can be delegated to a duly authorized representative, as described in Part II.C.3. Response: Yes, that requirement for signature should have referred to Part II.C.1, instead of Part II.C.2, which then requires signature of either the Signatory or the Duly Authorized Representative. The permit has been corrected.

**Grouping –Benchmark Selection**

**Response to Comment 144:** The commenter suggests that “The Department should adopt universal monitoring for discharge flow-rate.” Response: The 20-SW does not request flow-rate data. Site-specific flow-rate data, by itself, has little value. For instance, sheet flow would be at best an estimate. Data would also vary based on several factors, including the saturation of the soils, the timeframe of the rain event, etc.

**Response to Comment 145:** The commenter urges the Department to require chemical oxygen demand, total suspended solids, and pH benchmark monitoring for “All Permit-Holders.” Response: The Department went to great lengths to describe the selection of benchmarks specific for each industry, and has included visual monitoring for all facilities. In the 20-SW, 18 additional industrial categories, largely consistent with the categories in the federal Multi-Sector General Permit (MSGP), now require benchmark monitoring. Those sectors and subsectors impacted include: Subsector A1 (General Sawmills and Planing Mills for SIC 2421), Subsector A2 (Wood Preserving for SIC 2491), Subsector A3 (Log Storage and Handling for SIC 2411), Subsector A4 (Special Products Sawmills, not elsewhere classified and Wood Products Facilities not elsewhere classified for SIC 2426 and 2499), Subsector B1 (Paperboard Mills for SIC 2631), Subsector C3 (Soaps, Detergents, Cosmetics and Perfumes for SIC 2841 – 2844), Subsector C4 (Plastics, Synthetics and Resins for SIC 2821-2824), Subsector D1 (Asphalt Paving and Roofing Materials SIC 2951, 2952), Subsector E1 (Clay Product Manufacturers SIC 3251-3259, 3261-3269), Subsector E2 (Concrete and Gypsum Product Manufacturers SIC 3271-3275), Subsector F1 (Steel Works, Blast Furnaces, and Rolling and Finishing Mills for SIC 3312-3317), Subsector F2 (Iron and Steel Foundries for SIC 3321-3325), Subsector F3 (Rolling, Drawing, and Extruding of Nonferrous Metals for SIC 3351-3357), Subsector F4 (Nonferrous Foundries (SIC 3363-3369), Subsector I1 (Crude Petroleum and Natural Gas; Natural Gas Liquids; Oil and Gas Field Services (SIC 1311, 1321, and 1381-1389), Subsector K1 (ALL - Industrial Activity Code “HZ” dischargers not subject to effluent limitations in 40 CFR Part 445 Subpart A), Subsector Q1 (Water Transportation Facilities SIC 4412-4499), Subsector R1 (Ship and Boat Building or Repairing Yards for SIC 3731 and 3732), Subsector S1 (Airports using more than 100,000 gallons of deicing glycols based fluids or 100 tons of urea, on an annual basis for SIC 4512 - 4581). Refer to the Fact Sheet for the discussion about a universal benchmark.

EPA did not include universal benchmarks in their final permit, however, it did include so called “indicator” monitoring for pH, TSS, COD for certain subsectors. EPA intends to use indicator monitoring collected data for future permit decisions. The subsectors selected were **B2 (pulp and paper mills)**, **C5 (various chemical products)**, D2 (miscellaneous asphalt products), E3 (miscellaneous glass, cement, stone products), **F5 (miscellaneous metal foundry products)**, I1 (oil and gas extraction), J3 (miscellaneous mineral mining), L2 (miscellaneous landfill sites), **N2 (source separated recycling)**, O1 (steam generating plants), **P1 (transportation sector)**, R1 (ship and boat building), **T1 (wastewater treatment plants)**, **U3 (miscellaneous food products)**, **V1 (textile and apparel)**, **W1 (furniture products)**, **X1 (printing and publishing)**, **Y2 (miscellaneous plastic and rubber products)**, **Z1 (leather and tanning products)**, **AB1**

**(transportation equipment manufacture), AC1 (electronic equipment manufacture), and AD1 (the Department discretion).**

There are two segments E3, C5 and J3, that are covered by the MM General Permit for mineral mines, asphalt and concrete plants. That permit includes specific limits for various process waters in addition to benchmarks. For sector O, this permit only covers facilities not already subject to an ELG. Sectors I1, L2, R1 already include industry specific benchmarks. The remainder of the sectors are the light industry categories that have not been subject to benchmarking in the past. EPA intends to gather information in consideration of future benchmarks. For these sectors, the Department will be paying attention to the analysis performed by EPA and any resulting benchmarks that may come about. See response to Comment 144.

**Response to Comment 146:** The commenter urges the Department to “adopt universal benchmark monitoring for nutrients and sediment.” Response: The selection of benchmarks relates to specific materials used by the operators which indicate the effectiveness of their controls. Some operators do have TSS, nitrogen, or phosphorus benchmarks. And, although every facility is required to sample for sediment (suspended and settleable solids), discharges to impaired waters without an EPA-approved or established TMDL and if the pollutant of concern for the impaired waterbody is suspended solids, turbidity, or sediment/sedimentation, you must monitor for Total Suspended Solids (TSS). In addition, every facility is required to implement certain controls when in the Chesapeake Bay watershed that have proven nutrient and sediment reductions efficiencies. Additional benchmarks for the other facilities are not deemed beneficial.

**Response to Comments 147 and 148:** One commenter recommends raising the aluminum benchmark consistent with the final EPA issued MSGP benchmark from from 0.75 mg/L to 1.1 mg/L, and another commenter suggests retaining the benchmark at 0.75 mg/L. Response: EPA modified the benchmark monitoring thresholds in the 2021 MSGP for aluminum based on revised CWA section 304(a) national recommended aquatic life water quality criteria. Since Maryland defers to national recommended aquatic life water quality criteria for aluminum (no criteria in COMAR) , this recommendation is acceptable. The final permit benchmark for aluminum has been updated.

**Response to Comments 149-151:** The commenter supports raising the iron benchmark from 1 to 3 mg/L, however, urges the Department to go further and eliminate iron benchmarks altogether. Response: In addition to other benchmarks that are entirely based on aquatic toxicity, the 20-SW retains the iron benchmark. For instance, sediment and nutrients do not, by themselves, cause aquatic toxicity, but are necessary to consider. Iron causes plumes of oxidized iron in receiving water, which is a pollutant in Maryland. Choosing the technology based limit of 3 mg/L is appropriate.

**Response to Comment 152:** The commenter asks why a benchmark for iron applies to landfills but not to construction activities. Response: The presence of iron at a landfill is one indicator of a seep. There may be other surrogates that could be used to test, and the

Department reserves the right to require additional monitoring. However, the industrial permit in addition to the Department's requirement through Land and Material Administration, continues to provide appropriate controls.

**Response to Comment 153:** The commenter suggests reverting the iron benchmark back to 1 mg/L. Response: The commenter points to potential impacts on turbidity which is precisely why the Department prefers to retain the benchmark, however, the basis is not in acute toxicity, but expressed as a technology based limit. The commenter's arguments, based on chronic toxicity "over periods of 4 and 10 days," ignores that the iron benchmarks are from storm events with maximum values occurring in the first half hour. Even if there were a storm event to occur over 4 days, the instream dilution would be substantially less than the concentrations noted.

**Response to Comment 154:** The commenter suggests adopting a revised selenium benchmark consistent with the MSGP, revised from 5 ug/L to 1.5 ug/L (for lentic waters) and 3.1 ug/L (for lotic waters). Response: The benchmark for Subsector K1 Benchmarks has been updated.

**Response to Comments 155-156:** The commenter notes that permits from Land and Material Administration (LMA), which monitor groundwater and landfill integrity indicate exceedances at least for one landfill. Response: This is an important point. Landfills are subject to the industrial stormwater permit in addition to the landfill permit issued by LMA. Typically, there are no duplicate permits for the same condition at the landfill, thus an exceedance for the landfill would not also have the same exceedance under industrial stormwater. And, although LMA's permit evaluates landfill integrity, the industrial stormwater permit is specific to stormwater. TSS and iron are the appropriate benchmarks. However, for any leachate or groundwater treatment, an individual groundwater discharge permit would be required. Thus, there are several individual permits for landfills. Refer to Response 131 related to flow monitoring. See Response to Comment 144.

**Response to Comment 157:** The commenter points out errors in references in Sector AD.e. The commenter also recommends that inactive landfills with no industrial activities should not be required to comply with the permit. Response: The references in Sector AD.e are corrected. In addition, Sector AD facilities are determined on a case-by-case basis, and the commenter may consult with the Department on facilities that may no longer be required to have coverage.

**Response to Comment 158:** The commenter appears to suggest that both landfills and scrapyards, specifically in Baltimore, be subject to additional benchmarks under the general 20-SW and simultaneously require individual stormwater discharge permits. The commenter states "The current permit does not distinguish these facilities in any way, yet they are sources of potentially toxic contaminant loads." The commenter also suggests impervious surface restoration be used increasingly to treat runoff from scrap yards. Response: Landfills are discussed in Response to the Comment 155 and 156.

Additionally, the 20-SW separately designates landfills as Sector L and scrapyards as Sector N and requires sector-specific benchmarks. Regarding benchmarks for scrapyards, Maryland has consistently used EPA's selected benchmarks which are used to evaluate the effectiveness of controls. Even with the National Academy of Sciences review, the same benchmarks were chosen. The source of the data for Table 4 in the comment is not clear. For example, the 12-SW did not require sampling for arsenic, cadmium, and hydrocarbons (total petroleum) but Table 4 contains concentrations for these constituents. Impervious surface restoration does not fix all stormwater pollution problems. It effectively reduces stormwater discharge pollution for certain constituents and in specific situation. Restoration is ideal for nutrients and sediments, but other pollutants such as hydrocarbons, mentioned by the commenter, are more problematic and considered "hot spots" in the design manual. Depending on the concentrations, permit conditions or treatment methods are better suited to mitigate stormwater pollution discharges. Also, the facilities may be either on brownfields and thus there are limitations of the amount of impervious restoration that can occur. However, benchmarks do exist and do drive operators to consider more advanced treatment which is the goal of the commenter.

### **Grouping –Benchmark Frequency and Clarifications**

**Response to Comment 159:** The commenter asks for clarification about the Sector AD.a benchmark monitoring. The question is whether benchmark monitoring is required for this sector if the material is under cover. Response: The commenter is correct. As stated in the permit, benchmarks are required only when "storage of street sweeping or storm drain inlet cleaning debris left uncovered.

**Response to Comment 160:** The commenter asks about oil dropoff sites for oil recycling and whether it would be subject to benchmark sampling. Response: The requirement for permit coverage is based on the primary industrial activity. It is doubtful that the area's primary activity is related to oil collection drop-off. More than likely, this oil collection area is within, for instance, a Department of Public works yard, which has coverage due to maintenance of vehicles. It may also be part of a transfer station where people are dropping off more than just oil. In either case, the activity would be discussed in your SWPPP and subject to visual monitoring.

**Response to Comment 161:** The commenter recommends "More Frequent Sampling for Benchmark Monitoring and Sampling Methodologies that Produce Data that are Representative of Industrial Stormwater Discharges." Response: Benchmarks are not intended to characterize a discharge, but rather to capture a peak concentration as a way to measure effectiveness of the operator's stormwater controls. Quarterly sampling is consistent with EPA's MSGP, with neighboring states, and with other categories of industrial individual permits. The use of low-cost methods such as first flush samplers or passive diffusion samplers, are the types of solutions that some operators may choose. The EPA Monitoring Guide found on the Department's website [https://mde.maryland.gov/programs/Permits/WaterManagementPermits/Documents/GDP%20Stormwater/EPA%20Industrial%20Stormwater%20Guidance/EPA\\_Monitoring\\_Gui](https://mde.maryland.gov/programs/Permits/WaterManagementPermits/Documents/GDP%20Stormwater/EPA%20Industrial%20Stormwater%20Guidance/EPA_Monitoring_Gui)

[de.pdf](#) is available for permittees which describes various options. Also, the 20-SW allows for the use of automated samplers in specific circumstances. However, small operators may find simple grab samples just as easy to use. The video of sampling techniques used in Minnesota are also provided on the Department's website for additional clarity.

**Response to Comment 162:** The commenter suggests that Part V.A.3 language related to visual monitoring needs to be modified from “should” to “must” so that the samples are representative of the stormwater discharge. Response: The change is made in the final.

**Response to Comments 163-164:** The commenters request clarification about whether operators that already met their benchmarks in the 12-SW must perform them again under the 20-SW. Response: The benchmark requirements do start anew for those that completed their benchmarks in the previous permit.

**Response to Comment 165:** The commenter suggests requiring “Benchmark Monitoring for all Permit-Holders and throughout the Entire Permit Term.” Response: The Department requires visual monitoring for all permit holders for the entire term of the permit. However, operators may discontinue benchmark monitoring after successfully meeting them. In this way, the permit continues to focus on those facilities with the greatest potential for polluting, consistent with the EPA and with other states. See response to Comments 145-146.

**Response to Comment 166:** The commenter questions the usefulness of the visual monitoring, since it takes resources to be on-site to do the inspection and often identifies no pollutants. Response: The benefits of visual monitoring are to provide validation that controls are working and to catch and correct problems. If your controls are producing good results, those visual monitoring forms help verify your compliance with the permit when an inspector is on-site. The 20-SW requires visual monitoring within 30 minutes of a rainfall event during normal business hours. Personnel on-site can be appropriately trained to conduct required visual monitoring. See: [Industrial Stormwater: How to Collect a Grab Sample](https://www.youtube.com/watch?v=oWKdonc9iDw) (<https://www.youtube.com/watch?v=oWKdonc9iDw>) and [Industrial Stormwater: How to Collect a Sheet Flow Sample](https://www.youtube.com/watch?v=AmEJUNp44aU) (<https://www.youtube.com/watch?v=AmEJUNp44aU>). If personnel on-site will not conduct the required visual monitoring, consider low-cost automated methods such as first flush samplers. Proof of visual monitoring is necessary to evaluate compliance at your facility.

**Response to Comment 167:** The commenter suggests for certain types of facilities such as maintenance yards which are homogeneous be allowed to pick the most impacted outfall to monitor rather than utilize the substantially identical clause in the permit. Response: The maintenance yard should only have a few outfalls. Make sure that you evaluate what outfalls are discharging stormwater associated with industrial activity. (Definition in Appendix E). Those outfalls should be the most impacted. However, use of

substantially identical may be of most use for the ones you mention are homogeneous and are not the most impactful ones.

**Response to Comment 168:** The commenter questions having arsenic listed as “recoverable” and copper listed as “total recoverable.” Response: Arsenic has been updated to be consistent as “total recoverable.”

**Response to Comment 169:** The commenter asks if a site collects a grab sample after the allotted time (first 30 minutes) for the first flush and provides documentation, is this sample still viable to submit to the NetDMR? Response: Yes. However, if this is repeatedly the case, you may want to investigate low-cost automated methods such as first flush samplers.

### **Grouping – Reporting**

**Response to Comment 170:** The commenter requests that annual reports be made available on the Department’s website. Response: At this time, there is no plan to provide these on-line, however, for the sites in EJ areas, the Department will require that annual compliance reports are submitted to the Department. Refer to comment 31. Those documents could be made available through the standard PIA process. Refer to Response to Comment 31 and 35 for related changes in EJ areas.

**Response to Comment 171:** The commenter asks for clarification on who signs the Comprehensive Site Compliance Evaluation. Response: The signature is either the Signatory or that person’s duly authorized representative. Part V A.2, Part II C.2 and Part IV C.1.d are updated to confirm the signature requirements.

**Response to Comments 172-174:** The commenters request that notifications that a permittee intends to exceed corrective action or AIM deadlines, along with the rationale and proposed completion date, should be made publicly available through NetDMR. Also they request other reports be made available in similar fashion. Response: Reports uploaded through NetDMR should be visible to the public, or may be accessed through PIA. However the Department has focused on specific reports deemed most critical to be submitted, and in response to comments has added comprehensive annual reports to the list of submitted reports, targeting the EJ areas. (Refer to Response to Comments 31 and 35)

### **12. COMMENT CATEGORY – Part VI (Standard Permit Conditions).**

**Response to Comment 175:** The commenter requests updating the Standard Terms of the permit Part V.I.B “Civil and Criminal Liability” be updated as in the current form it limits the ability for the County to take action. Response: A statement has been included to indicate “Nothing in the 20-SW precludes the institution of any legal action or relieves You from any responsibilities, liabilities, or penalties for which You are or may be

subject to under the CWA, Title 9 Environmental Article, or any applicable federal or State law.”

**13. COMMENT CATEGORY – Corrections.**

**Comment:** Page number in the permit needs to be fixed (44 of 34 pages example).

Response: Page numbering was addressed.