**MARYLAND DEPARTMENT OF THE ENVIRONMENT**

**WATER MANAGEMENT ADMINISTRATION**

**1800 Washington Boulevard, Suite 455**

**Baltimore, MD 21230-1708**

Response to Public Comments

(Final October 31, 2013)

Regarding

General Permit for Discharges from Stormwater Associated with Industrial Activities

State Discharge Permit Application No. 12SW

NPDES Permit No. MDR000000

## INTRODUCTION

The Maryland Department of the Environment (MDE), herein referred to as "Department", has made a final determination to reissue the State/National Pollution Discharge Elimination System (NPDES) General Permit for Discharges from Stormwater Associated with Industrial Activities, Permit **No. 12SW (NPDES No. MDR00)** to meet federal requirements and to protect water quality.

A public notice on the tentative determination to reissue the permit was published on October 5, 2012 in the Maryland Register and in twenty-two newspapers throughout the state of Maryland during the weeks of October 5th and October 17th, 2012. The Department held public hearings concerning the tentative determination on Monday, November 26, 2012 at 1pm and Friday, November 30, 2012 at 1pm in the Terra Conference Room, located at 1800 Washington Blvd, Baltimore, MD 21230, and received comments on the draft permit through January 4, 2013. Over 80 people attended the public hearing and made comment on the tentative determination during the public hearing, as well as written testimony provided by over 40 industry and government entities and over 150 individuals. An additional request for comments was sent April 19th to interested parties relating to specific changes contemplated to the tentative determination, with response due through May 20th, 2013. This Final Determination was published in the Maryland Register on November 1, 2013, and will be effective January 1, 2014.

A categorized summary of the significant comments and the Department's responses are listed below. The Department has made its best effort to review and consider each comment received and has created this written document to address the significant comments. The comments received on the draft permit and the associated responses have in some cases resulted in changes to the final permit. The changes to Tentative Determination (TD) are noted in this response.

Paraphrased public comments are identified with a bullet (•) adjacent to each comment and the Department's responses are provided in *italics* beneath.

## 1. COMMENT CATEGORY – Permit Justification.

### Regarding – Procedural Comments.

- Several comments have requested that the Department set up a workgroup with industry groups to discuss some of the more contentious provisions in the proposed permit.

*Specific requests were made by the scrap industry, by Blue Water Baltimore and the Environmental Integrity Project, by the Andrew's Airforce Base, and by the Baltimore Port Authority, Baltimore City and Baltimore County. The Department did meet with these groups specifically requesting meetings to understand their comments. In addition, the Department met with MAMWA, SWAMA, Montgomery and Carroll County to review the information provided at the public hearing. However, it is noted that there are no such requirements under the law or in COMAR 26.08.04 or specifically in COMAR 26.08.04.08 to have provided additional input as part of the procedure to issue the Final Permit. The numerous comments received during the comment period and the careful review of these helped to strengthen the permit and certainly will benefit water quality and the stakeholders involved.*

### Regarding – Restoration Requirement Exceeds the Department's Authority

- The Department received several comments stating that the Department had exceeded its authority to regulate the restoration of impervious surfaces.

*One comment incorrectly stated that the stormwater discharges controlled by general permits were not point sources, and thus, not part of WLA calculations. At least one comment attempted to liken the draft permit to EPA's sediment TMDL for the Accotink Creek. Another noted that the restoration requirement exceeded the Department's authority because it was not an effluent limitation, but rather an attempt to control the point sources, and not their discharge of pollutants. This comment further suggested that the only authority provided for the restoration requirement in the Fact Sheet was the WIP and suggested that the Department was confusing its authority to address MS4 discharges with its more limited ability to regulate industrial discharges.*

*Each of the comments incorrectly characterizes the permit's restoration requirement. The permit, through the restoration requirement, is addressing industrial stormwater discharges for which a permit is required. 33 USC § 1342(p). Indeed, the Clean Water Act provides that the Department has the authority to require a permit for discharges composed entirely of stormwater, and may fashion effluent limits in the form of BMPs. 33 USC § 1362(11). As noted in the Fact Sheet the restoration requirement is set forth as a means of "treatment" for stormwater flows from impervious surfaces with the goal (purpose) of consistency with the pollution reductions set forth in the WIP. Furthermore, the restoration requirement is consistent with nutrient control regulations under COMAR 26.08.03.01(C)(3.) Thus, the restoration requirement is implemented through BMPs designed to provide treatment pursuant to the Department's authority under the CWA and the Annotated Code of Maryland and implementing regulations in COMAR 26.08.*

*Despite comments, the WIP is not identified as the authority to require the restoration through the implementation of BMPs, but rather a water quality goal necessitated by the water quality impairments identified in the Bay. Under the CWA, industrial stormwater discharges must comply with WQSs, unlike the lesser restrictions set forth for MS4 discharges. Further background behind the restoration is included in a following section that provides further details on the science and legal background that serves as a basis for this requirement.*

- A comment notes that restoration measures do not meet the definition of effluent limitations.

*To the contrary, the restoration requirement is an effluent limit as constructed within the permit. As noted above, the Clean Water Act provides that the Department has the authority to require a permit for discharges composed entirely of stormwater. 33 USC § 1342(p)(1). The Clean Water Act defines the term "effluent limit" broadly to include BMPs that would restrict the quantities, rates, and concentrations of constituents within a discharge. 33 USC § 1362(11). As noted in the Fact Sheet the restoration requirement is set forth as a means of "treatment" for stormwater flows from impervious surfaces, with the goal (purpose) of complying with the pollution reductions set forth in the WIP. Thus, the restoration requirement is a BMP designed to provide treatment pursuant to the Department's authority under the CWA.*

## Regarding – Basis for 20% Restoration Goal Not Clear

- Several comments suggested that the 20% reduction is not based on any scientific study.

*The 20% restoration requirement is based upon a comprehensive scheme to address the water quality impairments for nitrogen, phosphorus, and sediment identified in the Chesapeake Bay by the*

*Environmental Protection Agency ("EPA") through the Bay TMDL. EPA, through the Bay TMDL, established state-wide allocations for Maryland as follows:*

*Nitrogen: 39.09 Million Pounds per Year (mpy)*
*Phosphorus: 2.72 Million Pounds per Year (mpy)*
*Sediment: 1218.10 Million Pounds per Year (mpy)*

*The WIP is a required plan to implement the Bay TMDL which applies to the State of Maryland (with the exception of the Coastal bays and Extreme western MD areas in Garrett County). The State was required to develop and finalize the Plan in October 2012 and now must implement it by sector. The Draft and Final WIPs used an allocation method to determine the amount of load each sector must reduce.*

*Maryland developed an allocation methodology, similar to the approach EPA used in allocating loads among the Bay watershed jurisdictions, to achieve an effective and equitable distribution of load reduction targets across source sectors for each of 58 segment-sheds within the State's portion of the Bay watershed. A summary of the methodology is as follows:*

*A portion of the load allocated to Maryland by EPA was assigned to significant wastewater treatment plants (WWTPs) as individual WLAs, based primarily on the State's point source Cap Policy that was adopted as part of the 2004 Tributary Strategy. This policy requires what is generally considered the "limit of technology," and achieves very significant reductions from major wastewater treatment facilities, enforced through NPDES permits. Tributary Strategy guidelines were used to set aggregate WLAs in each segment-shed for minor wastewater treatment facilities.*

*A portion of the maximum loads set forth in the Bay TMDL was also allocated to urban stormwater discharges as an aggregate statewide load. There is no WLA specifically for industrial stormwater. However, a planning target is included as corollary information to the Phase II WIP as follows (see "Phase 2 - Maryland (Non-Federal & Federal) Total Nitrogen Loads, Delivered" at http://mde.maryland.gov/programs/Water/TMDL/TMDLImplementation/Documents/WIP_Phase_II_Target_Load_Summaries/Phase_2_Loads_by_Sector_Maryland_Statewide_Only.pdf).*

*Nitrogen: 114,877 lbs/yr*
*Phosphorus: 9,308 lbs/yr*

*Forests were assigned their current loading, i.e., no reductions, as forests have the lowest per acre loading rate of any land use. (Although forest loading rates are low, there are still many acres of forest in Maryland, which generate a significant, but not reducible, load.)*

*The remaining load is then allocated to the nonpoint source sectors (urban, agriculture, and septic systems) using the following three equity principals:*

1. *Equal percent reductions of the reducible load by nonpoint source sectors. The reducible load is defined as the difference between the load assuming no BMPs (the No Action Scenario) and the load assuming all technically feasible reductions are made for each given sector (the E3 Scenario – Everyone doing Everything Everywhere);*
2. *Credit given for reduction practices reported to date;*
3. *Relative effectiveness.*

*Broadly speaking, the equitable principles ensured that sector specific loads would be reduced in a fair manner and regardless of cost considerations. This method transparently demonstrates that all contributors to aggregate loads would be responsible for a relative portion of the reduction required statewide.*

*The target for TN is 86,846 labs/yr, 2009 baseline is 114,877 lbs/yr, resulting in a reduction of 28,031 lbs/yr, or a 24% reduction. The target for TP is 5,713 lbs/yr, 2009 baseline is 9,308 lbs/yr, resulting in a reduction of 3,595 lbs/yr, or a 39%. There is no target for TSS. MD's Phase II WIP states that the sediment reductions per sector will be achieved by meeting the phosphorus reductions, because MD's overall Phase II WIP sediment target is way below what EPA set as the state target. To summarize, Maryland's industrial stormwater discharges require an aggregate reduction in nitrogen, and phosphorus to achieve discharges as follows:*

*Nitrogen: 86,846 lbs/yr (2025)*
*Phosphorus: 5,713 lbs/yr (2025)*

*The WIP further expressed these reductions through the permit percentage of area required to be restored.*

*Science was used in the determination of the nutrient removal efficiencies of the practices in the Design Manual and Accounting Guidance, which are the practices referenced in the WIP, and which we are using for this permit. The background for the efficiencies of the various methods we use is "UNIVERSITY OF MARYLAND/MID ATLANTIC WATER PROGRAM's DEVELOPING NITROGEN, PHOSPHORUS AND SEDIMENT REDUCTION EFFICIENCIES FOR TRIBUTARY STRATEGY PRACTICES, BMP Assessment: Final Report , Dr. Thomas Simpson and Sarah Weammert (3/31/2009)". This document (see http://archive.chesapeakebay.net/pubs/bmp/BMP_ASSESSMENT_FINAL_REPORT.pdf) is the basis for all BMPs found in the Design Manual or mentioned in our Accounting Guidance. It was with this background that the Department considered urban stormwater amongst the other nutrient loads in the creation of the Watershed Implementation Plan (WIP) to address the Chesapeake Bay's impaired status.*

*The loading rate estimates are documented in Section* 10.2.14 *of the Phase 5 model documentation. The rates are based on Phase I MS4 monitoring data. The median EMCs from the monitoring data were used. For Total Phosphorus (TP), this was 0.27 mg/l, and for Total Nitrogen (TN), it was 2.0 mg/l. There are multiple references to public literature which formed the basis for the model and the numbers we relied on for industrial / urban stormwater runoff. (ftp://ftp.chesapeakebay.net/modeling/P5Documentation/SECTION_10.pdf)*

*Based on an evaluation of all sources of nitrogen, the Maryland Phase II WIP laid out a strategy of a statewide 21% reduction of nitrogen from the Regulated Stormwater sector to meet the TMDL allocation that requires the reduction. To achieve this nitrogen reduction would require at least 28% of impervious surfaces area to be retrofitted each permit cycle. The industrial permit contains a 20% restoration requirement that is consistent with the approach to other urban sources under the WIP. While short of the amount assumed under the WIP, a 20% retrofit requirement represents a pace of progress towards meeting Bay WQSs that is reasonably achievable by industrial facilities. We can accept this knowing that other factors, especially redevelopment and incentives to restore impervious surfaces as a result of the stormwater utility fee, will lead to additional impervious surface restoration. We also believe that the baseline impervious surface treatment may be higher at these facilities than*

*had been anticipated in the initial TMDL. Last, but important, is the understanding that retrofits using the Design Manual should achieve more than the 25% efficiency in the WIP assumptions. For example, the Accounting Guidance for land use developed post 2010 requires a nitrogen reduction efficiency of 50%. In advance of the next permit renewal, MDE intends to provide data to the Chesapeake Bay Program in 2017 for the purpose of recalibrating the Chesapeake Bay Model based on progress on all sources of nitrogen, including industrial sources.*

***Change in Final Determination:*** *In recognition that the Chesapeake Bay impairments for nutrients are the basis for restoration, the Final Permit requirements are specifically for nutrient reduction control measures at operations that discharge within the Chesapeake Bay Watershed.*

- One comment received indicates that it isn't clear that industrial stormwater is included in the WIP.

*On March 30, 2012, revised Phase II WIP documents were submitted to EPA. Following the March 30 submission, local jurisdictions were encouraged to continue development or enhancement of their local strategies during a three-month extension of the Phase II schedule. A revised Final Phase II WIP was submitted in the October 2012. All of these versions of the Implementation Plans provided allocation to "Stormwater" which included all Urban developed lands. From the Phase II WIP: See Table 2, Table 3, and Table 7 for information regarding sector allocations and page 70 of the document notes that regulated industrial facilities are included as part of the overall Stormwater category.*

*The Final Phase II WIP describes how the stormwater from industrial facilities is viewed in relation to other urban sector sources. It states, "…[T]he State further divided the revised interim and final target loads among smaller, county-geographic areas by types of sources, like waste water treatment plants, urban stormwater, septic systems and various agricultural sources…" and indicating that regulated industrial facilities were considered as one sub-category within the overall urban, stormwater load. The State's further sub-allocation of the stormwater source sector was supported by the Maryland Assessment Scenario Tool. "The intent of this more detailed distribution of loads was to provide estimated goals at a local scale so that the shared responsibility for reducing pollutant levels in the Bay is clearer to everyone." See, Maryland's Phase II Watershed Implementation Plan (March 30, 2012) at pages 70-71 available online under "Main Report" at [http://www.mde.state.md.us/programs/Water/TMDL/TMDLImplementation/Pages/FINAL_PhaseII_WIPDocument_Main.aspx](http://www.mde.state.md.us/programs/Water/TMDL/TMDLImplementation/Pages/FINAL_PhaseII_WIPDocument_Main.aspx)*

*The Maryland Phase II WIP requires a statewide 21% reduction of nitrogen from the Regulated Stormwater sector, which includes stormwater from regulated industrial facilities. ((2010 Progress – Final Target) / 2010 Progress = (7.312-5.793)/7.312 = 21%). The time period for this reduction represents 3 permit cycles ((2025 – 2010) / 5 years = 3). The statewide reduction then equates to 7% nitrogen reduction per permit cycle (21% / 3 = 7%). To achieve a 7% nitrogen reduction per permit cycle would require 28% of area to be retrofitted (7% / 25%). While potentially short of this amount, a 20% retrofit requirement represents reasonable progress.*

*Specifically, the strategy called for requiring, in renewed federal NPDES stormwater permits, the retrofitting of 20% of previously developed impervious land with little or no controls within the next five year permit term. This strategy will apply to both Phase I and Phase II municipal separate storm sewer system (MS4) permits, in addition to this industrial stormwater permit. Previous Phase I MS4 permit terms set a goal of retrofitting 10% of impervious area not controlled to the maximum extent practical, bringing the total retrofit target to 30% by 2017. MDE had committed to and completed sending all draft Phase I and Phase II MS4 permits to EPA.*

*The assumption in the model was very conservative, looking to stormwater retrofits to reduce nitrogen by 25%, whereas restoration practices applicable in this permit are designed to reduce nitrogen by up to 50%. What this means is we will make better progress towards the required reduction than that three permit cycle plan.*

***Change in Final Determination:*** *The draft permit was revised to be consistent with the proposed Phase II MS4 permit, which regulates urban stormwater for properties greater than 5 Acres, within an urban area. There were 663 industrial sites included in the model that were 5 acres or greater. As of summer 2013, 38 are no longer in business and 154 are individual permits. That leaves 471 facilities included in the model input that would be part of the 12SW General Permit.*

- The final permit must include a clear and enforceable provision for implementing the wasteload allocations included in the Bay TMDL for nutrients and sediment in stormwater discharges to the Maryland's waterways.

  *The Bay TMDL based restoration requirements of the permit, the basis of which are addressed in other sections of this response document, are an appropriate method for implementing the allocations as the best provisions available to the Department for the types of facilities covered. The requirement for 20% restoration of impervious surfaces is both clear and enforceable. Appropriate information relevant to the requirement will first be submitted to the Department via the NOI submittal process. Extensive documentation is provided on our website to assist the permittee in completing the requirements. The permittee must obtain certification of completion of the requirement and provide notification to the Department of completion.*

- Is it an expectation that facilities will we be required to reduce by 20% every 5 years?

  *The reductions of nitrogen and phosphorus in the TMDL are targeted for year 2025. The required 20% restoration, with the associated reductions for nitrogen and phosphorus, is an incremental step forward. In 2017, MDE will have the opportunity to evaluate our progress towards the reductions required by the TMDL and will evaluate any further steps regarding the next revision of this permit. MDE believes there are a few components to that reset that will be critical to answer the question of whether further action is required. MDE will need to validate the model assumptions on impervious acres and whether they already had some treatment. MDE will need to understand the impacts of any redevelopment and how they provide additional treatment. MDE will need to evaluate the input regarding use of fertilizer and impacts of sediment and erosion controls put in place. With this combined data, a future run of the Chesapeake Bay Watershed model will provide input as to whether additional actions are needed.*

***Change in Final Determination:*** *The draft permit was revised to allow any restoration over the 20% required by this permit to count towards any future permit requirements.*

- Require attainment of the WLAs and any associated Implementation Plans for such TMDL WLAs.

  *Attainment and a reset of the baseline for the TMDL will be the result of both the information we gather from the NOIs, and the restoration achieved as a result of the implementation of the permit.*

**Regarding – Redundancy of Restoration vs. Control Measures**

- Comments opined that the individualized control measures set forth a facility's SWPPP should adequately control the pollutants discharged.

*The permit does set forth the control measures and monitoring requirements to address multiple potential sources that result from the industrial process. The SWPPP does document the measures chosen to address specific sources identified by the applicant. The specific restoration requirements deal with the permit requirement to address a nutrient TMDL. As noted, some of the control measures actually may meet the restoration requirements. The specific restoration requirements serve a specific water quality requirement.*

- Comments suggest that the restoration measures (Part III.A) are redundant with the control measures (Part III.B).

*We know that in many cases, control measures (Part III.B) may meet the Chesapeake Bay Restoration requirements for nutrient reduction (Part III.A). We also know that new facilities will be built to meet the treatment requirements of this permit, and therefore the restoration requirements may not apply. The restoration and control measures are both kept separate for a significant reason. The Bay TMDL and associated WIP compel the Department to require specific actions and to verify that those covered meet those requirements as progress towards the TMDL, thus we keep these separate.*

**Regarding - Comments regarding the EPA Multisector General Permit and previous 02-SW.**

- A comment contends that the Department cannot require a facility to consider control measures such as minimizing impervious surfaces, and increasing natural buffers because they deal with flow issues, not pollutant discharges. Accordingly, the comment suggests three of the measures should be eliminated.

*The comment fails to appreciate that 33 USC § 1342(p)(1) authorizes the Department to require controls for discharges composed entirely of stormwater. The subject control measures are BMPs designed to control/reduce the discharge of pollutants. Moreover, the control strategies set forth in the permit are consistent with measures included in EPA's national permit.*

*The basis for Maryland's stormwater permit's seven control measure selection criteria (Part III.B.1.a.) and best management practices (Part III.B.1.b.ii, iii, iv, and ix) are from EPA's issued permit, the Multisector General Permit. The Department has not received any specific objection involving some unique aspect within the state of Maryland regarding EPA's control measures. Accordingly, we defer to the national permit basis as developed and issued by EPA. Other sections of this response document further address the Maryland basis for restoration of impervious surfaces.*

- A comment notes that certain control measures do not meet the definition of effluent limitations.

*Control measures or stormwater best management practices (BMPs) used on site to meet the permit requirements can include operational, structural or treatment measures. Some specific operational control measures have been determined by EPA (see for example the EPA multi-sector permit for stormwater associated with industrial activity) to be technology-based effluent limitations appropriate for regulating stormwater associated with industrial activities. Examples of operational BMPs implemented as effluent limitations in both EPA's permit and Maryland's proposed permit are employee training, good housekeeping measures, maintenance, and spill prevention. Permittees are also given*

*the flexibility to select from other additional control measures which are not implemented in the permit as effluent limitations, but can be used to comply with the permit requirements and effluent limitations.*

## 2. COMMENT CATEGORY – Financial Concerns.

### Regarding - Benefits not Cost Effective

- There were many comments about whether the restoration requirements are cost effective.

*Restoration requirements are water quality based requirements and cost effectiveness is not an allowed consideration. Cost effectiveness applies to development of BAT standards. BAT requirements in this permit are consistent with the Federal EPA determination of BAT.*

### Regarding - Required expenditures represent significant investments.

- There were many comments regarding the investments that will be required to comply with the terms of this permit.

*Permit requirements do have costs associated with implementation. However, ignoring the impacts of stormwater also has costs, including local governments putting efforts to restoring impaired waters and lost income of those who use the water resources. The intent of this permit was to provide uniform requirements for treatment (not open ended as in the past) as well as alternatives. Having options allows the permittee to evaluate alternatives and select the methods that are both most effective for the watersheds and will achieve the most cost effective approach for the owner. The options provided include traditional Best Management Practices and Environmental Site Design practices which are provided as options in the Design Manual. These practices have been required for new developments, and have been cost effective ways to deal with stormwater runoff. One advantage of implementing the Environmental Site Design Methods is that they are smaller and can be implemented in stages. Nonstructural practices, provided for in the Accounting Guidance, provide additional options to achieve the same goals.*

*There is one alternative that hadn't been included in the draft permit, and that is to provide for alternative technologies as approved by the Department. There is a long standing approach that has been available to MS4s, which is referred to as Proprietary Stormwater Practice Guidance. By providing this in addition to the methods in the Design Manual or Accounting Guidance, we are providing another set of alternatives that may be more cost effective for the industrial site, yet meet the TMDL requirements for treatment.*

*In addition to these options for treatment in the permitted area, options had been provided to address either other impervious surfaces within the unpermitted portions of the facility, or offsite restoration in coordination with the local stormwater authority. Reviewing options available to meet the goals in the WIP, other equivalent methods were identified and as a result provided in the final permit. The Accounting Guidance provides a mechanism to calculate the equivalency to be used in this regard. The Chesapeake Bay Program considers the average loads from urban impervious areas to be 10.85 lbs/acre/year TN, 2.04 lbs/acre/year TP, and 0.46 ton/acre/year TSS. The removal rates for practices in the Design Manual that meet the requirement of this permit are 50% for TN, 60% for TP, and 90% for TSS. From these values we can calculate that for each acre of that must be treated at a facility, the load reduction achieved offsite must be at least 5.424 lbs TN, 1.02 lbs TP, and 0.23 tons TSS. For purposes of this permit, we have selected TN reductions as higher priority, since many of the treatment*

*technologies for industry already address removal of sediments, which have a high correlation to phosphorus removal. So for the sake of equivalent methods, we will require that equivalent methods be based on 5.425 (rounded to 5.4) lbs TN per acre of impervious surfaces being restored.*

*Comments from both those covered by this permit and by the MS4 community revealed the benefits of working with the MS4 and allowing them the resources to find reductions within the larger watershed, since many of the stormwater treatment facilities are shared amongst both commercial and industrial properties. The offsite option exists as a relief valve for industrial sites looking for cost effective alternatives where treatment options onsite have been exhausted.*

*The costs can be planned for and spread out over the permit term as part of the compliance or restoration plan. Since the requirement to infiltrate or re-use stormwater is not new to this permit, we do feel many facilities will already have practices in place that qualify, and to meet the additional treatment will be minimized. In recognition that some of the work may already have been done in coordination with the local permitting authority, we will be extending the window for evaluation, so that any work done since the January 1st, 2006, which was the date used for the 2010 TMDL baseline, can be taken into account and applied against this 20% requirement.*

***Change in Final Determination:***
*The process of requesting approval for innovative technologies, referred to as Proprietary Stormwater Practice Guidance, has been added to the permit in order to allow for potential cost-effective alternatives to be evaluated.*

*Equivalent methods were added when it isn't feasible to perform all or some of the treatment within the facility with the previously prescribed methods. This includes practices that achieve the equivalent and verifiable reductions of 5.4 lbs total nitrogen (TN) per year per acre of impervious surface by adding new controls to achieve benchmarks for nitrogen, new erosion and sediment controls, reduced use of fertilizer, or re-allocating a TN load.*

*The baseline for evaluation of impervious surfaces will coincide with the CBP model, January 1st, 2006, discussed in the restoration section of this response, below.*

## Regarding - Permitting Fees.

- There were several questions or concerns about the permitting fees.

*The permit fees are set in COMAR (26.08.04.09-1), and not by the permit itself. Therefore any fee adjustment must be accomplished through regulations and cannot be addressed in this permit. Our interpretation of COMAR is the one-time fee is for those renewing for the full term of the permit, thus a slight saving over the annual payment. However at the end of that term, in the case of an administrative extension of the permit, annual fees may apply.*

*What COMAR currently states that the fees for this permit are:*
*"(1) Stormwater Associated with Industrial Activity.*
*(a) The permit fee for stormwater discharges associated with industrial activity shall be either a one-time payment of $550 or an annual payment of $120. The $550 fee shall be submitted with the NOI. The alternative $120 annual payment shall be submitted with the NOI and annually by July 1 of each year.*
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*What COMAR also contains are certain exemptions which would apply to any of the fees. These are:*
*"(2) Exemptions. Discharges associated with the following dischargers are exempt from this regulation:*
*(a) Publicly owned treatment works;*
*(b) Other treatment works which treat only sewage; and*
*(c) Facilities or persons culturing or raising aquatic organisms in enclosed systems discharging less than 1,000,000 gallons per day."*

*To understand further the exemptions, the term Publicly owned treatment works is defined:*
*"(71) "Publicly owned treatment works (POTW)" means a facility that is:*
*(a) Owned by this State or a political subdivision, municipal corporation, or other public entity; and*
*(b) Used for the treatment of pollutants."*

*We do consider the stormwater controls of this permit as treatment of pollutants. It is in this context that any state or local government facility where treatment of pollutants is applied are exempt from fees.*

*In cases where there are multiple facilities under one owner, and these facilities contiguous, sharing a common border, the application may be grouped under one NOI and fee. Where there are facilities are not physically connected, separate NOIs and fees would apply.*

## 3. COMMENT CATEGORY – Numeric Limits.

- There were several comments that requested numeric limits for stormwater.

*The Department found that numeric limits would not be as effective as a good visual monitoring program by those covered under this permit. The water discharged by these facilities is characterized by a quick flush, followed by periods of no discharge. This variation in flow and the unknown of what source to regulate makes assigning specific limits difficult.*

*In cases where there are effluent limitation guidelines that should apply, the Department will require an individual permit to address those numeric limits. Additionally, where there is a reasonable potential to impact local water quality (PART III.B.2.b Discharges to Water Quality Impaired Waters or PART III.B.2.c Tier 2 Antidegradation Requirements for New or Increased Dischargers), the Department reserves the right to apply water quality criteria numeric standards or require additional stormwater controls. However a numeric limit for all pollutants in COMAR would be cost prohibitive, and we feel not as effective as the visual monitoring and benchmarks assigned to specific industries.*

*A specific example was provided where numeric limits do exist in the Oregon Department of Environmental Quality permit, which provides TBELs. TBELs are the Effluent Limitation Guidelines that Maryland requires to be addressed in an individual or separate general industrial permit (Part I.G.2). We feel the requirement for an individual permit where ELGs are required is more restrictive than the example provided. The facility for which the Oregon permit provides ELGs, the 12-SW would require an individual or industry specific general permit.*

*Another comment was about an illicit discharge detection investigation near Baltimore Recycling Center. The Center for Watershed Protection investigation found and other pollutants in a dry weather flows into a manhole downstream of the facility and black discolored discharge from under the railway*

*tracks adjacent to the facility. The Department followed up on these concerns and determined that these discharges did not come from this facility. Numeric limits would not have detected this problem both because it wasn't related to the industrial site, but to an adjacent groundwater seep, and some of the pollutants described (fluorides, detergents, etc.) are not associated with this activity, so those limits would not have been applied at this facility. However, if this discharge had been coming from the facility, it would have been detected by a visual inspection.*

*Regarding the comment on J.W. Treuth and Sons, this site had very visible discharges of animal wastes. Visual monitoring would have found this problem more efficiently than numeric monitoring, which requires waiting for sample analysis.*

## 4. COMMENT CATEGORY – Standard Permit Conditions.

- There Department of Defense has security concerns about taking photographs at their facilities.

*The Department understands that in some cases national security concerns may prohibit the Department from taking photographs.*

***Change in Final Determination:*** *A sentence recognizing national security concerns about photos has been added to the permit.*

## 5. COMMENT CATEGORY – Coverage.

### Regarding – Clarification

- What is a new discharge?

*The term "new discharges" in Part I.C.6, was used in error and should have been "new discharger," as defined in Appendix E.*

- If the applicant cannot get stormwater coverage under this permit, are they required to get another general or an individual permit?

*If you were covered under the 02-SW you can get stormwater coverage under the 12-SW. If you were not covered under the 02-SW you need to follow the procedure in this permit to determine if you are required to get coverage under this or another permit, include an individual or an MS4 permit. If you are uncertain, contact the Department.*

- Frederick County asked if Part I.E.4, about those covered under a different permit, could be interpreted as potential for an MS4 to be covered under this permit?

*Part I.E.4, which allows stormwater discharges that are covered by a separate permit (either individual or another General Permit) to seek "limited coverage" under Part III.A (restoration) instead of going through a permit modification or reissuance process to include those terms, does not apply to MS4s.*

***Change in Final Determination:*** *MS4s were specifically excluded from Part I.E.4. In addition MS4s will be working through their own permit for restoration requirements, which is now one of the exclusions for the restoration requirement.*

**Regarding – Leased/Shared Facility Requirements**

- The Maryland Port Administration (MPA) asks if they are required to apply for coverage and, if so, under which SIC?

*The MPA is required to evaluate the facility and operations for appropriate stormwater coverage. For portions of the facility that are leased to operators who require industrial stormwater coverage, either the operator(s) or the Port must apply for permit coverage. In either case, these facilities must coordinate with the port and notify MPA, the MS4, of their coverage. The MPA would most probably have to apply under SICs associated with one of the following sectors: SECTOR P: LAND TRANSPORTATION AND WAREHOUSING, SECTOR Q: WATER TRANSPORTATION, or SECTOR R: SHIP AND BOAT BUILDING AND REPAIRING YARDS. If the MPA operates portions of the facility that are eligible for industrial stormwater coverage, then they must apply for coverage for those portions of the facility that are required. (There were also several questions from the MPA and from their tenants about restoration requirements. which will be covered under the "Coordination with local Stormwater Authority" section.)*

- There were several comments about how to deal with shared areas.

*In the 12-SW "operator" is defined as "that person or those persons with responsibility for the management and performance of each Facility." Thus, it is possible that there may be more than one operator at a facility. Using port facilities as an example, a public agency, the MPA, owns the full facility. Port facilities and other fixed base operators (e.g. fueling companies and maintenance shops) that have contracts with the MPA to conduct business on their property are referred to as "tenants" of the port. Tenants may be of two types—those that are regulated as stormwater dischargers associated with industrial activities under 40 CFR 122.26(b)(14) and those that are not. The operator and the tenants of the port that conduct industrial activities as described above, or as described anywhere in 40 CFR 122.26(b)(14), and which have stormwater discharges, are required to apply for coverage under an NPDES stormwater permit for the discharges from their areas of operation. The port authority and tenants of the port <u>are encouraged to work in partnership in the development and implementation of a stormwater pollution prevention plan and restoration activities</u>. (Refer to similar example for airports in the Federal Register. Vol. 60, No. 189, 50998. Friday, September 29, 1995).*

*Where a facility has multiple operators (such as the Maryland Port Authority and tenants) that have stormwater discharges associated with industrial activity, as described above, each operator is required to apply for coverage under an NPDES stormwater permit. Each individual party must submit a Notice of Intent (NOI) to be covered under the Permit. Ultimately, the operator(s)/owner(s) of the stormwater outfalls from the facility is(are) responsible for compliance with all terms and conditions of the Permit.*

- MPA asked if requiring lessees to restore impervious surfaces is in conflict with 12-SW Part VI.H "Property Rights/Compliance with Other Requirements."

*The Department requires discharges authorized under this permit to have adequate controls to protect waters of the state. This would require a lessor to provide approval for the required controls, or the business would not be able to operate. As a lessee (store) in a mall may require certain modifications of the property to do business, including installation of electrical fixtures, etc., businesses that have exposed materials to stormwater are required to meet requirements of stormwater controls to do*

*business. What VI.H says is that holding this permit doesn't automatically allow a lessee to make modifications to the property, but says that they must work with the owner to do so.*

- There were several comments from port operators wondering how to define the area of their facility for this permit.

*For transportation facilities, classified by the SIC codes listed below, 40 CFR defines the industrial activity as the vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in these activities or which are otherwise identified under other SIC Codes eligible for coverage (such as a small manufacturing facility within a port facility for instance) need permit coverage.*

*SIC Code*
*40 railroad transportation*
*41 local and interurban passenger transit*
*42 trucking & warehousing (except storage areas 4221-25 described below)*
*43 US postal service*
*44 water transportation*
*45 transportation by air*
*5171 petroleum bulk stations and terminals*

*Storage facilities have additional requirements, which include stormwater discharges from all areas (except access roads and rail lines) where material handling, equipment, or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to stormwater. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate produce, finished product, by-product, or waste product. These are the SIC codes associated with this storage requirement:*
*4221 farm product storage*
*4222 refrigerated storage*
*4225 general warehouse and storage*

***Change in Final Determination:*** Areas requiring coverage for the transportation and warehousing sectors specific to repair, fueling storage, and material handling were clarified in Appendix A.

## Regarding – Transportation Category FLEET

- There were several comments regarding the Department's selection of FLEET as a category.

*The intent of the FLEET section was to cover those fleets operated to transport people or material (goods, waste, mail, etc) between facilities or throughout the local community, state, or country. Both water transportation and air transportation are covered in other sectors. To avoid confusion, we decided to remove the generic reference to FLEET, and use the MSGP definition by SIC, and add two categories which we currently cover in our 02-SW, those of Public School Bus Fleet Maintenance Facilities and Department of Public Works and Highway Maintenance Shops. Providing unique sectors allows the Department to keep these in their own category for future reference. In a similar fashion, the Department may evaluate other clusters of industries that could have their own sector in future permits.*

***Change in Final Determination:***

*The generic reference to FLEET was removed, which was replaced by the two Sector AD additions: Sector AD.a (Department of Public Works and Highway Maintenance Facilities) and Sector AD.b (School Bus Fleet Maintenance Facilities).*

- State Highway asked to clarify if guidance provided on the applicability of the 02-SW to their facilities will apply to the 12-SW.

*As described above, Sector AD.a (Department of Public Works and Highway Maintenance Facilities) has been added to this permit. The guidance from 02-SW is addressed in Appendix A of the final 12-SW and is intended to address the guidance as follows:*

***Facilities that conduct fueling and material storage only.*** *The Department does not normally consider these industrial, unless they are associated with vehicle maintenance at the facility. Considering how ubiquitous fueling operations are and that the Department's Oil Program already regulates these activities, the Department's policy has been to waive permitting on such facilities. As for material storage, it is not considered an industrial activity unless the materials stored are associated with industrial activity, i.e. in this case, vehicle parts, used motor oil, road salt, sand, or equipment. Though road salt is addressed in our permit, it is not associated with vehicle maintenance.*

***Facilities that store hazardous materials.*** *Storage or generation of hazardous materials from a laboratory are not activities defined as "industrial" under 40 CFR 122.26. The reference to RCRA facilities in the definition of industrial activities pertains to facilities that accept other person's hazardous waste.*

***Facilities that conduct light vehicle maintenance.*** *The Department considers all Department of Public Works maintenance activities potentially eligible for having either a permit or filing a No Exposure Certification. Guidance from EPA identifies parking of vehicles that are waiting for maintenance as being part of the maintenance activity, so most eligible maintenance operation need a permit. For maintenance so "light" that the vehicle operator just drives right into a garage and conducts, without the help of a professional, a simple task, such as replacing a wiper blade or topping off the oil, the Department would be unlikely to require coverage; notify the Department if you have any question.*

***Change in Final Determination:***
*In Appendix A, specific requirements for consideration in the Transportation Sector and Sector AD.a for Department of Public Works and Highway Maintenance Facilities were added.*

- Why do indoor vehicle maintenance facilities not qualify for No Exposure Certification?

*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.*

- If an industrial operator leases all its vehicles, and the vehicle owner comes on site to perform maintenance, is a 12-SW permit required and who should apply for the permit?
- If an industrial operator owns its vehicles, and the maintenance of the vehicles is performed at the site by a contractor, is a 12-SW permit required and who should apply for the permit?

*The industrial operator has the ultimate responsibility to make sure appropriate permits are in place. The party who signs the permit would need to make sure the industrial activity meets the requirements of the permit.*

*If an industrial operator leases all its vehicles, and the vehicle owner comes on site to perform maintenance, coverage with the 12-SW is required. Most likely the operator would apply for the permit coverage, however they can in their contract with the service provider, require that they apply on the operator's behalf.*

*If an industrial operator owns its vehicles, and the maintenance of the vehicles is performed at the site by a contractor, coverage with the 12-SW is required. Most likely the operator would apply for the permit coverage, however they can in their contract with the service provider, require that they apply on the operator's behalf.*

- An example of a site was provided where there was a concern that the operator didn't have a permit.

*The example of citizen concerns about LAI Construction Services speaks to the distinction between what is covered and what isn't, which is clarified in the 12-SW. The site wouldn't meet the initial SIC category requiring coverage under the permit, and therefore would not have applied for a permit, however must still comply with the jurisdiction's sediment and erosion controls for the unstable piles of materials onsite.*

## Regarding – Bulk Petroleum Facility

- There was confusion about what portion of the bulk petroleum facility is covered under this permit.

*Bulk Petroleum Facilities (SIC Code 5171) fall into SECTOR P: LAND TRANSPORTATION AND WAREHOUSING. Stormwater coverage only includes facilities which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under another sector are associated with industrial activity, need permit coverage. Additional permit coverage may be required for other portions of the facility, such as "GENERAL NPDES PERMIT NO. MDG34 Discharge of Stormwater and Hydrostatic Test Water From Oil Terminals to Surface or Ground Waters of the State".*

## Regarding – Landfill and Land Application Sites

- Open dumps are forbidden, so how can they be covered by this permit?

*Correct, open dumps are forbidden (RCRA Sect. 4004).*

***Change in Final Determination:*** *References to Open Dumps are removed from the permit.*

- Why are municipal landfills required to apply for this permit?

*Municipal landfills by their nature take in many potential sources of waste. We believe that all landfills ultimately take in some waste associated with industrial activities (as defined in 40 CFR122.26) and*

*therefore suggest that all need to apply for coverage, unless they can prove they have no mixing of wastes.*

- Why is 40 CFR Part 445 listed?

*The effluent limitation guidelines in 40 CFR Part 445 have to do with discharges from open cells of the landfill, which include stormwater that has come into contact with the open cell. Discharges from the open cell are subject to effluent limitation guidelines. Our stormwater permit is for the rest of the landfill, or for facilities that have no discharges to surface waters from the open cell.*

- Are closed and capped landfills required to get coverage under 12-SW?

*Sometimes. Inactive, closed, or capped landfills are no longer subject to stormwater permitting requirements when MDE determines the land use has been altered such that there is no exposure of significant materials to stormwater. Since there was a fair amount of confusion on this subject, we did consult with our Land Management Administration. Based on their feedback, we will require coverage for any landfill with a refuse disposal permit issued by Land Management Administration as our validation that the site has potential for exposure. Land Management Administration may require this refuse disposal permit for 5 or more years post closure of the landfill. These sites would be required to perform some benchmark monitoring. Once the land management permit is terminated, the site may continue with coverage under this and subsequent permits or request that the permit coverage be terminated. In addition, the Department may notify the landfill that coverage of the closed facility is required based on impacts on local water quality.*

***Change in Final Determination:*** *Reference to the refuse disposal permit was added for clarity. Subsector L3 was added, for post closure landfills that may be covered under the permit, if notified by the Department, and subsector L1 and L2 indicate required coverage when the facility is covered with a refuse disposal permit.*

## Regarding – Processing Facility, Transfer Station or Material Recovery Facility

- Are "Source-Separated Recycling" or "Materials Recycling Facility" required to perform get coverage and perform benchmark monitoring?

*These facilities would apply for coverage under Sector N. However, upon review the Department determined that the MSGP designated a portion of Sector N - Scrap Recycling and Waste Recycling Facilities (source-separated recycling) to be exempt from benchmark monitoring. With this in mind we decided to restructure the recycling sector to match the MSGP requirement in this case.*

*Sector N, has been broken up into two sub-sectors. The first is for N1 -Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling. The second is for N2 - Source-Separated Recycling. "Source-Separated Recycling" are facilities that only receive recyclable materials separated at the source from solid waste, primarily from non-industrial and residential sources (i.e., common consumer products including paper, newspaper, glass, cardboard, plastic containers, aluminum, and tin cans); including recycling facilities commonly referred to as material recovery facilities (MRF). "Source-Separated Recycling" have no benchmark requirements in the MSGP, an item that was overlooked when assigning the benchmarks for Sector N, SIC 5093. This benchmark assignment was not done on purpose, and by removing the requirement, we are correcting an error and are addressing the types of recycling facilities that we feel will be protective of water quality.*

*By way of example, if a federal agency collects different non-industrial and residential materials (consumer products including paper, newspaper, glass, cardboard, plastic containers, and aluminum and tin cans) together in single containers at various locations throughout the facility and the collected materials leave the facility without further separation source-separated recycling has occurred.*

*If some separation of materials occurs at the source, then additional separation of the collected recyclables can occur at the facility and still be considered source-separated recycling. This type of recycling is commonly called single stream recycling in the state.*

*Typically source separated recycling has not required a hazardous or solid waste management permit.*

*This does not include: mixed waste stream of non-recyclable & recyclable wastes, dismantling ships, marine salvaging, and marine wrecking, scrap and waste recycling (non-liquid wastes), facilities with a shredder, reclaiming & recycling of liquid wastes.*

***Change in Final Determination:*** *Sector N, has been broken up into two sub-sectors. The first is for N1 - Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling. The second is for N2 - Source-Separated Recycling.*

- Does a Processing Facility and Transfer Station require benchmark monitoring? This type of facility could be classified under several sectors which differ in their benchmark monitoring requirements.

*There are multiple industrial sectors possible for a* Processing Facility and Transfer Station*. These include Sector N, which has potential of specific benchmark monitoring requirements described above. If vehicle maintenance is performed onsite, that activity is eligible as Sector P-LAND TRANSPORTATION AND WAREHOUSING, which has no additional benchmark monitoring. If any of the material is land disposed of onsite it is eligible as Sector L - LANDFILLS, LAND APPLICATION SITES, which now require additional benchmark monitoring. This change is detailed under comment category benchmark monitoring, regarding including selected benchmark monitoring requirement. If your facility has two sectors with benchmarking, then multiple sets apply to the facility. Any questions on this can be clarified by the Department.*

- Are "Processing Facility and Transfer Station" eligible to be covered?

*"Processing Facility and Transfer Station" where the material is shredded and processed can be handled as SIC 5093 SCRAP RECYCLING FACILITIES classified as part of Sector N1 Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling. This sector is subject to Benchmark monitoring.*

*"Processing Facility and Transfer Station" where the material is merely sorted and sent back out can be handled as SIC 5093 SCRAP RECYCLING FACILITIES classified as part of Sector N2 Source-Separated Recycling. This sector is not subject to Benchmark monitoring.*

## Regarding – Military Facilities

- There were several questions asking how military facilities are covered.

*The appropriate branch with operational authority for the base or facility is required to evaluate the operation for appropriate stormwater coverage. A permit authorizing stormwater discharges is required where facilities are operated that meet the eligibility requirements.*

a. *Many operations will qualify as an MS4, in which case they must abide by that permit.*
b. *Portions of the operation, even if covered by an MS4, may be eligible for industrial stormwater coverage, such as SECTOR T: TREATMENT WORKS, SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES or SECTOR L: LANDFILLS, LAND APPLICATION SITES. Additionally portions of the operation may be eligible for other sectors such as SECTOR S: AIR TRANSPORTATION FACILITIES, SECTOR R: SHIP AND BOAT BUILDING AND REPAIRING YARDS, etc.*

*The confusion exists when a facility is currently covered under the 02-SW, but the primary SIC is 9711, which isn't listed in Appendix A of the 12SW. These facilities can be accommodated if they have a high likelihood to be a significant contributor of pollutants. The draft permit was revised to allow these facilities to get coverage.*

***Change in Final Determination:*** *Under Eligibility, an option has been added to provide coverage to those who had coverage under the 02-SW where the individual or Department made a determination that coverage was appropriate for the facility.*

### Regarding – Sector AD

- How would a new Sector AD be added?

*Individual facilities could be notified by the Department that they are required to obtain coverage under Sector AD as a result of a citizen complaint or noted violation that would be cause for concern under this sector, where existing controls in the permit would provide for protection of waters of the state. Any new industrial sector with unique requirements for new benchmarks or controls, under Sector AD, would be treated as a modification to the permit, with public notice and participation. The eligible applicants would then be treated either as a new discharger, if they were not covered for stormwater previously, or as an existing permittee being notified by the department to apply for coverage.*

## 6. COMMENT CATEGORY – Application.

### Regarding – Notice of Intent (NOI)

- There was a concern that the NOI was not included for comment.

*We did provide the NOI form elements in the permit. We would welcome comments on the NOI, but that form isn't considered part of the permit. We have let EPA know that we do not include the actual form in the permit because that allows us to amend and improve the form as needed without going through a major modification.*

- There were many comments about the requirement and timeframes provided to complete them.

*"Significant structural work to design and implement control measures can take months to complete (notwithstanding any additional requirements stemming from onsite construction, such as obtaining coverage under a general permit for construction activity)." Considering the requests and their*

*thoughtful recognition that the 12-SW provides additional guidance that facilities want to take into account, the Department has revised the draft permit to allow additional time for those applying for coverage to seriously consider changes and document them in the NOI. We understand that time should be provided to incorporate changes into the SWPPP before filling out the NOI, so that the signatory understands the full scope of work being committed to. We expect that those covered will take this additional time to review and ensure they are implementing the permit fully.*

***Change in Final Determination:*** *For those covered under the existing 02-SW, the Department has set effective date of the permit to January 1, 2014, a full two months after issuing this permit. A table has been added to the permit to clarify the deadlines, which have been extended to accommodate and address the concerns raised.*

- There was a concern about the difficulty to determine where their facilities are and where their boundaries are.

*The applicant must take the time to determine the where their facility boundaries are. The previous permit did have a requirement for a site map, which would be a good starting point. Depending on the number of facilities, identifying boundaries and accounting for impervious surfaces may take time, and it is recommended that you document where the boundaries are, where flows go to, and how you make your calculations so that you could justify them in the future if questioned.*

- The NOI should require Lat/Long for every outfall.

*We considered the site map sufficient for locating outfalls.*

- There was an inconsistency with when Signatories are required.

*Appropriate Certification is required for the NOI, the SWPPP, the DMRs and the Restoration Plan, which are submitted to the Department per the requirements in the permit. Certification indicates that all documents must be signed with the required Signatures. In a review of the MSGP and the 12-SW, we did find that the 12-SW was not consistent and adopted the signatory language from the MSGP which was an improvement.*

***Change in Final Determination:*** *We have amended the permit to indicate that NOI submitted to the department must be signed by Signatory, however the SWPPP, DMRs, or other documents may be signed the signatory or by a delegated authority.*

- MDE Should Implement a State/Local Partnership to Increase Chance of Submittals of NOIs.

*We agree. The MS4 jurisdictions do work closely with MDE on permitting issues. When we issued the Tentative Determination, we did send out information to all of the MS4s notifying them of the proposed draft and invited them to comment. As a result we did meet with several, and received comments from most of the large MS4s. Going forward, we are open to meeting with local government partners and ensuring they understand the permit requirements. We will make sure they have access to the permit and are aware of the deadlines to apply. We will also provide them with an overview and with a listing of the permitted facilities within their jurisdiction upon request.*

**Regarding – Stormwater Pollution Prevention Plan (SWPPP)**

- There were many comments about the requirement and timeframes provided to complete them.

*As stated regarding the NOI above, there will be additional time between issuing and effective date of the permit to select control measures and other best management practices as required by this permit. The Department also provided additional time to make changes before submitting the actual plan.*

***Change in Final Determination:*** *Changes were made in the timeframe allowed to submit your SWPPP to the Department, now required at the same time you submit with your NOI.*

- How often must the Stormwater Pollution Prevention Plan (SWPPP) be submitted to the Department?

*The updated SWPPP is only presented to the Department once, unless requested by an inspector or other MDE representative. We will not be requesting yearly updates. The permit does however have requirements for when the onsite document must be updated.*

- Where does information required by Part V(C)(1), such as runoff coefficients, go in the SWPPP?

*For clarification and for general guidance, applicants can refer to guidance for the MSGP, which is very valuable for developing the SWPPP, found on the MDE website or at EPA's website at this link http://cfpub.epa.gov/npdes/stormwater/msgp.cfm. We have also provided a SWPPP Template, similar to that of the MSGP, and in this template is a Section 4 where the type of information such as runoff coefficients may be recorded. The guidance suggests including this specific information only when contemplating substantially identical outfalls in a section called "SCHEDULES AND PROCEDURES FOR MONITORING."*

- Comment that subsection V.C.1 Monitored Outfalls, refers to 'Part III.D.2,' for a description of SWPPP requirements for indentifying outfalls and subsection V.C.5 Adverse Weather Conditions refers to 'Part III.E.3,' but these sections don't exist.

*As noted, Part III.D.2 reference didn't exist, and should have been Part III.C.2. The cross reference to Part III.E.3 should have pointed to V.A.3.*

***Change in Final Determination:*** *We corrected the cross reference for Part III.D.2, to Part III.C.2. A description of adverse weather conditions has been added to V.A.3.b. and the references in the document have been corrected.*

- What is meant by "immediate vicinity" and "significant quantities of pollutants"?

*The term "immediate vicinity" refers to the streams that your facility effects. We are looking for the permittee to identify the local streams that they discharge to and verify if they are impaired. If the discharge is to the MS4, a best guess is adequate to indicate where the MS4 pipe leads and discharges to.*

*"Significant quantities of pollutants" in run-on at a facility will be determined by the monitoring method required for your coverage. For example, if there was a benchmark for copper of 0.0090 mg/l, and the run-on has concentration of 0.0090 mg/l or greater, that would be categorized as significant quantity of pollutants. However, the phrase refers to SHA facilities, which for the most part are not subject to benchmark monitoring. Since SHA is using the visual monitoring method, it would be appropriate to use the same process for evaluating run-on as the run-off. If the run-on has color or*

*odors, sediments, an oily sheen, any of the visual monitoring elements, then the facility will most likely not meet the tests for visual monitoring of the run-off. You would be required to measure the run-on only if you believe it is contributing to your own visual or benchmark monitoring issues.*

- How does the applicant identify that past activities or materials are no longer handled, treated, stored, or disposed and that they no longer pose a risk as required in Part III(C)(3)(b) portion of the SWPPP?

*That portion relates to identifying potential sources of pollution in various areas of your facility that have been exposed to stormwater. The section provides examples (e.g., crankcase oil, zinc, sulfuric acid, and cleaning solvents). We expect a reasonable analysis of what was there in the last few years. If vehicles have been parked there, then crankcase oil is a potential. If these vehicles were used for deicing, then perhaps salts. This may be useful when evaluating stormwater samples, and may be interesting for you to take into account for determining where to sample.*

- Part III(C)(3)(f), "Sampling Data. You must summarize all stormwater discharge sampling data collected at your facility during the previous permit term." should be revised to make clear that a SWPPP need only include a summary of stormwater discharge sampling data collected by the permittee.

*This was carried over from the MSGP, which required sampling in the previous permit term. In Maryland, only visual monitoring had been required in the previous term.*

***Change in Final Determination:*** *The section will be changed from "Sampling Data" to "Visual Monitoring History", and the requirement will be "You must summarize what you have observed as potential problems from stormwater during the previous permit term."*

- Is EPA's Industrial SWPPP Template, which is in Microsoft Word format, acceptable?

*The EPA's MSGP Microsoft Word document format is acceptable, and we have now edited that to create a 12-SW SWPPP Template which is available on our website. However, as long as all the SWPPP requirements are met, other formats can be considered as well. The key is that you address the permit requirements for the SWPPP and that it is easy for you to maintain and understand.*

- If posting online or sending to MDE, can the applicant exclude confidential information such as cell or home phone numbers or locations of items considered national security risks?

*We are encouraging permittees to post their SWPPPs online, but that is voluntary. The MSGP takes a similar approach. Posted versions would need to be edited to exclude information the facility feels is sensitive, such as cell phone or home phone numbers or maps indicating sensitive areas. Assume that documents provided to MDE are public documents as well, and exclude this information.*

- The final permit should explicitly require SWPPPs to describe best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT) and it should require facilities to implement their SWPPPs.

*The permit does require selection of BPT/BAT/BTC, which are the Non-Numeric Technology-Based Effluent Limits (Part III.B.1.b). The permit requires that these be implemented. Part III.B.1 specifies that "you must select, design, install, and implement control measures (including best management practices) to meet the nonnumeric effluent limits." Furthermore, the permit goes on to say that "If you*

*find that your control measures are not achieving their intended effect of minimizing pollutant discharges, you must modify these control measures."*

- Why does the MSGP have more robust descriptions in the Inspection and Monitoring section?

*The MSGP 5.1.5.2 differs from the 12SW Part III.C.5.b because several of the options listed are not applicable. Specifically not included are effluent limitations guidelines (ELG) monitoring and State or Tribal-specific monitoring. In cases when the Department tells the permittee to monitor, it will be for a specific location and we will require that be marked on the SWPPP. We felt that since we had reduced the number of options, there was no requirement for the robust descriptions in that section of the SWPPP.*

- SWPPPs should be available on-line, so that the public can have access.

*Since the SWPPP is not an effluent limitation, permittees are not required to post them for public comment. We will encourage companies to post their SWPPP online, but this is not required. The Department is not prepared to post all SWPPPs on the MDE website at this time. It may be possible in the future, and we do reserve the right to do so. As with EPA's MSGP, by requiring members of the public to request a copy of the SWPPP through the Department, we are able to provide the permittees with assurance that any Confidential Business Information contained within its SWPPP is not released to the public. We do reserve the right to request current SWPPPs from permittees upon request. "You must retain a copy of the current SWPPP required by this permit at your facility, and it must be immediately available to the Department." (Part III.C.8) If this request is to be provided to a neighbor or key stakeholder, we will need to let the permittee remove sensitive information. We will not entertain requests to get mass copies of SWPPPs, because of the time and expense required to do so.*

## 7. COMMENT CATEGORY – Changes in Ownership.

- MDE should include very clear transfer provisions that lay out time frames and processes for ownership changes.

*The existing transfer form has been evaluated and is acceptable. Rather than follow suit with the MSGP, we will continue with the process used for our other permits and make use of this form. However, transfer of ownership doesn't reset the deadlines for the nutrient reduction control measures.*

***Change in Final Determination:***
*The existing transfer of ownership process developed and used for the 02-SW, will continue to be used. The 12-SW permit provides a process in Part II.F.2, and does now specify deadlines for transfer of ownership (Part II.B).*

## 8. COMMENT CATEGORY – No Exposure.

- Several requests were made to delete the restrictions on No Exposure presented in the Tentative Draft.

*We verified that the facilities identified in the TMDL as "industrial stormwater" did not include the No Exposure exempted facilities. It was with this in mind that the Department agreed to delete the impaired water restrictions for the No Exposure certification. We still believe that these sites still may*

*take steps required for restoration, if they are motivated by the jurisdiction through a discount in their stormwater utility fee, or will be handled by an MS4.*

*When contemplating this change, we did change how the No Exposure is applied for. We will require that a certification is provided as part of the exemption application. This will ensure that site qualifies, and will speed up the approval process by the Department.*

***Change in Final Determination:***
*The No Exposure Certification restrictions in impaired watersheds were removed. Certification from a Professional Engineer, a Certified Professional in Storm Water Quality (CPSWQ), or a Registered Architect or Landscape Architect that you meet the requirements of no exposure has been included.*

- Please specify if the No Exposure Certification refers only to impairment of the receiving stream reach (i.e., a local impairment), or to the broader watershed impairments such as the Chesapeake Bay-wide watershed impairments and TMDLs.

  *The restrictions were removed, making this question irrelevant.*

- Can a no exposure be issued for portions of a facility?

  *No exposure is for the entire facility, not just for certain portions.*

## 9. COMMENT CATEGORY – Eligible Discharges.

- MDE should revise the list of eligible non-stormwater discharges so that it is consistent with EPA's Multi-Sector General Permit (MSGP).

*Most categories eligible for discharge from the MSGP has been reconsidered and added to the permit. However, fire hydrant flushing is covered by the Department's "General Permit for Discharges from Tanks, Pipes, and Other Containment Structures at Facilities other than Oil Terminals." The Department did have a concern about wash waters from buildings where paint chips may wash into storm drains or streams, so we wanted to make sure that the permittee would address paint chips. We are also concerned about chlorinated water being discharged, but agree with the Federal MSGP, that for these activities the quantity of water will be minimal, and dechlorination through natural processes would be adequate. The permittee however should take precautions to minimize water drainage during these activities.*

***Change in Final Determination:***
*The eligible categories from the MSGP excluding fire hydrant flushing have been added from the MSGP. We have included a requirement to filter paint chips so that they do not end up discharging into storm drains or surface waters.*

- Consider addressing Non-Contact Cooling Water (NCCW).

*Non-contact cooling water must be addressed by a separate permit because this is not a type of stormwater and has a high potential for pollutants.*

- How is equipment cleaning defined?

*Equipment cleaning is mentioned in three different industry sectors. The one of interest for the commenter is Land Transportation and Warehousing. For Land Transportation and Warehousing, the industrial activity is the maintenance of the fleet of vehicles used to transport. In this context the term 'equipment cleaning' is referring to the activity of maintaining the fleet, and doesn't mean for instance the equipment stored in a warehouse for sale. The term is applicable to items like a vehicle lift, spray painting equipment, or water recycling equipment. Equipment cleaning operations include areas where the following types of activities take place: vehicle exterior wash down, interior trailer washouts, tank washouts, and rinsing of transfer equipment.*

- Is washing the interior of food-grade containers and collecting discharge water considered equipment cleaning?

*Yes.*

- Is rinsing of "roll-on/roll-off cargo" such as the new equipment part of the permit?

*Rinsing is allowed; however the discharge from the rinsing water is not allowed under this permit. If this activity is performed, the water would have to be collected and hauled, discharged to sanitary sewer or discharged under an individual ground or surface water NPDES permit. In the case where water rinse water can be collected, harvested rainwater may be a good source for the water as part of the Chesapeake Bay Restoration requirements.*

- Please provide MDE's interpretation of the last sentence of the first paragraph of Appendix E, page 7: "The term [industrial activities] also includes those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v). See 40 CFR 122.26(b)(14).

*These are from the Code of Federal Regulations (CFR), which provides the authority and direction for creation of permits such as this one. The 40 CFR 122.26(a)(1)(v) says that the Department may designate other industrial sources. The 40 CFR 122.26(b)(14) lists the SIC codes that are applicable, which is laid out in the permit as Appendix A, the specific SIC codes that the permit applies to.*

## 10. COMMENT CATEGORY – Impaired Water Discharge.

- Several suggestions requested that if the Department does not respond to an NOI within 30 days, they would have coverage, as this was provided in EPA's MSGP.

*As required by Section 1-607(A)(2) of the Environment Article, the Maryland Department of the Environment (MDE) has established, in consultation with interested parties, the standard turnaround times for all types of permit applications. For general permits the current turnaround time is 120 days. To ensure appropriate review the Department is not considering allowing automatic coverage at this time.*

- When filing the NOI, do we list the local TMDL or impairment, or do we go all the way downstream and evaluate the downstream impairment?

*Your project will be considered to discharge to an impaired water if the first water of the U.S. to which you discharge is identified by the state or EPA pursuant to Section 303(d) of the CWA as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first water*

*of the U.S. to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system. We have provided tools on the Departments website, referenced in the NOI instructions, so that you can search through all potential impairments and evaluate your discharge.*

- One comment suggested listing a number of WQBELS similar to the State of Washington.

*We did evaluate this and have determined not to issue all WQBELs in this or other permits, as these are specified in COMAR and are subject to modification over time. It is not clear how this permit provides additional protections that are not possible in 12-SW. We have industry-specific controls consistent with Washington's permit. The other requirements for pH, Pentachlorophenol, and Mercury would be found in the State's criteria.*

- How would a numeric limit or additional control be set if it were required for my facility?

*Either numeric criteria, with specific monitoring requirements, or reference to selection of BMPs, would be specified in the registration letter and would need to be reflected in the SWPPP. Any additional numerical water quality based limits for any specific discharger under Part III.B.2 of the permit shall be based solely on Maryland's Numeric Water Criteria for Designated Uses in COMAR 26.08.02.03-3 and Maryland's Criteria for Toxic Substances in Surface Waters in COMAR 26.08.02.03-2, applied at end of pipe, or the applicable wasteload allocation in a final approved TMDL. Since a majority of facilities are impacted by the Bay TMDL and therefore to the restoration requirements in the permit, it is fair to say that there would be no additional requirements for nutrient or sediments. However, if there is a local impairment for mercury for example, and you facility has high potential for mercury exposed to stormwater, a numeric limit can be found in COMAR of 1.4 micrograms/liter. For any additional control requested by the Department you must include a plan to implement BMPs to address the pollutant of concern in your SWPPP.*

***Change in Final Determination:***
*An explanation of how numeric limits and additional controls would be set was added to the permit.*

- MDE should revise the Draft Permit to prohibit facilities discharging into any impaired waters, not just those impaired for nutrients or sediments, from acquiring a no-exposure certification.

*This comment was related to the restrictions contemplated for No Exposure Certification and is no longer relevant.*

- The final permit should clarify that the corrective actions required under the WQBELs section are those required under Part IV of the Permit. MDE should revise Part III(B)(2)(a) of the Draft Permit to specify "Corrective Action as identified in Part IV of this Permit" so that the requirements of Part IV are clearly triggered.

*The Department agrees and has inserted a similar clarification in the permit.*

***Change in Final Determination:***
*A reference to Part IV was added to Part III(B)(2)(a) of the permit.*

- MDE should require facilities to conduct sampling consistent with 40 CFR § 36, or at least require those facilities discharging stormwater into impaired waters to conduct this sampling consistent with 40 CFR § 36 for the pollutant(s) causing the impairment(s).

*The draft and final permit require that sampling be consistent with 40 CFR 136 (Page 25 of draft). The MSGP references 40 CFR 136 to state that it is not applicable to visual monitoring; however it is applicable to the benchmark monitoring. That is also the intent of the 12-SW.*

- MAMWA and Fredrick County recognized a degree of uncertainty due to some of the wording in the Fact Sheet.

*"If more stringent controls are necessary, EPA will notify the effected facility of the need to comply with stricter limits. EPA anticipates that similar assessments will occur if facilities indicate that they are discharging to a waterbody designated as Tier 2 for antidegradation purposes." This should have been correctly written as "If more stringent controls are necessary, the Department will notify the effected facility of the need to comply with stricter limits. The Department anticipates that similar assessments will occur if facilities indicate that they are discharging to a waterbody designated as Tier 2 for antidegradation purposes." Hopefully that addresses the concerns about uncertainty. By keeping the control of this determination in the Department (vs. the EPA), applicants can discuss any uncertainties with staff and understand what may be required of them.*

## 11. COMMENT CATEGORY – Restoration.

### Regarding – Define Impervious Surfaces more precisely

- Several questions asked for this clarification, since the definition was left open ended.

*The definition of impervious surface with regards to industrial facilities is ambiguous in the source material for this permit, including COMAR and the Design Manual. According to the Environment Article §4-201.1(d)(1)" Impervious surface means a surface that does not allow stormwater to infiltrate into the ground", and 92) "Impervious surface" includes rooftops, driveways, sidewalks, or pavement. The definition of this term for the purposes of this industrial permit will thus be further clarified.*

***Change in Final Determination:***
*Additional clarification has been added to the definition of impervious surfaces in the permit in the restoration portion of the permit.*

- Are open tanks at a Water Reclamation Facility (WRF) considered as impervious surface?

*Tanks are designed to capture water and by their very nature are impervious, not allowing water to infiltrate. The question to ask is whether the water is being treated. If contained stormwater is to be discharged, review the Design Manual for Rainwater Harvesting for accepted practices. If the WRF has the capacity to incorporate the water quality volume from a 1" storm into the treatment process, then this, for purposes of this permit, is considered a treated impervious surface.*

- Why are rooftops to be considered part of the impervious surface to be treated?

*Rooftops are part of the facility and therefore first must be addressed for specific industrial sources of pollutants produced by smoke stacks or vents, and then must be considered for their contribution to nutrients and sediments as part of a TMDL.*

- How are solar panels viewed with regard to impervious surfaces?

*Solar panels are considered a pervious surface and the suggestions for treatment are provided in an MDE document. The Department's Environmental Site Design (ESD) Guidance is provided on our website (search solar panel design guidance on the MDE website).*

- Will MDE's long standing interpretation of imperviousness when reviewing railway plans pursuant to § 4-205 of the Maryland Environment Article apply?

*MDE has allowed WMATA, MTA, and Amtrak projects, to consider rail sections constructed of ballasted track on compacted sub-ballast as pervious surface. Accordingly, there are no water quality requirements associated with ballasted track sections; however, quantity management will be required where ballast is placed on existing pervious surface based on an RCN that is greater than existing conditions, but less than typically applied to paved surfaces. In instances where existing pavement is to be removed for construction of ballasted track section, 50% credit for pavement removal has been allowed.*

## Regarding – Design Manual Concerns

- The Design Manual was written for developers, and does not speak to restoring an existing industrial site.

*The Design Manual provides guidance that is useful when considering an industrial property when the additional requirements for stormwater controls from this industrial permit are properly implemented. Review the cautions regarding Hot Spots in the document to fully evaluate where safeguards must be put in place. The comments about the Design Manual suggest a need for additional options and flexibility. The Department's "Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated" guidance provides additional methods for meeting restoration requirements under this permit. These both provide methodologies that are vetted by the Chesapeake Bay Program and have proven removal efficiencies. The Department has added the proprietary practices as another option, and provided other equivalency opportunities to be as flexible as possible.*

*The selection of the appropriate controls is very important, especially at industrial facilities. In areas where hydrocarbons are expected, appropriate control measures for these pollutants are required. This may mean that compost blankets or other controls known to capture hydrocarbons need to be placed prior to a control found in the Design Manual, such as bioretention. Also an appropriate maintenance plan in a parking lot may be very different than in an area where there are large potentials for sediments, such as an active yard. The Design Manual, combined with the controls required by the permit, represent the best controls readily available to applicants.*

- There is a lot of uncertainty by cross-referencing the Design Manual.

*The 12-SW coupled with the Design Manual, provides a lot more clarity for required control measures than the previous permit. However, as a general permit, it must provide some degree of flexibility to adapt to the number of applicants. Where there is any uncertainty from the applicant's standpoint, the Department should be contacted for clarification.*

- The Design Manual should provide an option for pervious pavement.

*The Design Manual provides for pervious pavement in the section starting on page 5.41 (Chapter 5, page 41). This section provided for alternative surfaces such as Green Roofs, Permeable Pavements and Reinforced Turf. There are potential concerns that need to be taken into account when using these practices, such as the caution about where it may not be appropriate that includes industrial sites. However, pervious pavement can be used and be considered treated area, if the applicant can verify that the appropriate design and maintenance will be taken to allow the surfaces to work.*

*Most permeable alternatives have a lower load bearing capacity than conventional pavements. Therefore, applications should be limited to locations that do not receive heavy vehicle traffic and where sub soils are not compacted. Note that there are several requirements including that pavement surfaces shall have a permeability of eight inches per hour or greater to convey water into the subbase rapidly and the slope of the permeable pavement shall be no greater than 5%. The pavement also requires maintenance so that it doesn't clog, which should not be an encumbrance as additional housekeeping requirements are not uncommon for industrial activities.*

- The restoration requirement for use of the Design Manual in III.A.1.c. contradicts the reporting requirement in II.A.3.b.

*Agreed.*

***Change in Final Determination:***
*III.A.1 was changed to reflect that restoration must be done in accordance with structural practices in the Design Manual and nonstructural practices as provided in the Department's Guidance.*

- The Department should include additional Guidance Documents for treatment, which should include BMPs for treatment of industrial pollutants.

*The control measures provided by the 12-SW are those recommended by EPA or by the Department. The operator must consider their specific site characteristics. Engineering firms currently provide assistance in treatment of specific pollutants where industrial sites may need assistance. If amenable, we would encourage applicants to share their specific BMPs with their respective industry.*

- The Design Manual notes that certain BMPs (e.g., recharge and infiltration BMPs) are inappropriate for use at industrial sites.

*The Design Manual cautions are based on the stormwater controls defined in the 02-SW. The 12-SW has adopted more substantial controls for potential pollutant sources to ground or surface water. The 12-SW controls can allow the Design Manual BMPs to be used with proper, site-specific engineering judgment and practices.*

*As the Design Manual options for infiltration are based on their efficiency in removing sediment and nutrients, you may require pre-treatment of the water for other pollutants (i.e. salts, metals, or hydrocarbons) prior to entering that control measure. Realistically, you would require these same pre-treatment prior to stormwater running off your property and into surface waters.*

*EPA issued a memo reaffirming its support of the use of infiltration practices for managing stormwater, and providing an overview of "Class V" Wells by the Underground Injection Control (UIC) program requirements for stormwater infiltration practices that are classified as Class V wells. For additional information on the EPA position on infiltration practices, please review*

*http://water.epa.gov/infrastructure/greeninfrastructure/upload/memo_gi_classvwells.pdf. For additional background on selecting appropriate infiltration practices, the applicant may want to review EPA guidance.*

## Regarding – Stormwater Accounting Guidance

- Does compliance with the "Maryland Stormwater Design Manual", Volumes I & II (Effective October 2000, Revised May 2009) meet the requirements for exemption of restoration?

*This permit incorporates the Design Manual to provide guidance for how to design and implement specific practices approved in the state. Stormwater management for the impervious surfaces must meet the design standards specified in the Design Manual for the volume from one inch of rainfall, or the permit requires additional nutrient reduction control measures.*

- Why are facilities developed or redeveloped after 2002 exempt from restoration requirements?

*The Department has determined that upgrades of facilities built during the period from 2002 and forward would not produce significant benefits that the older facilities would.*

- Confirm that retrofits of existing stormwater best management practices, constructed prior to 2002, will count toward the 20% impervious surface restoration requirement.

*Yes, such retrofits would count towards the restoration requirement. Page 8 of the Accounting Guidance provides background and a method on how to account for the retrofit.*

- Provide guidance on how to determine the exact extent of the impervious area that must be restored.

*The Tentative Determination permit lacked guidance on how to account for partial treatment. To address this, the Department has taken portions of the Accounting Guidance and created a detailed process in the permit to allow permittees to determine the exact extent of the impervious area that must be restored.*

***Change in Final Determination:***

*The Department has added specific steps that must be used to calculate the amount of impervious area that must be restored.*

- What constitutes "untreated" impervious area when some level of "treatment" exists for all of the stormwater onsite?

*An impervious area is considered "untreated" if, despite any existing stormwater control, it does not meet the full requirement for treatment as defined in Appendix E of the permit. In sizing the restoration requirement, you are allowed to consider where some treatment exists, per MDE's "Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated."*

- We need the definitive criteria from MDE on what constitutes 'restoration' to meet the purposes of the General Permit, for example, the permit refers to draft guidance.

*The permit provides a definition of restoration that now refers to both the structural practices in the Design Manual and the nonstructural practices in the Accounting Guidance, defined in Appendix E.*

*For the purpose of this permit, the Accounting Guidance document will be considered definitive. If you meet the definition of restoration as of the date of this permit you will be considered as meeting the restoration requirement. In the future the Department will also consider new practices accepted by the Chesapeake Bay Program, and incorporate them into the Accounting Guidance. Any changes made to the Accounting Guidance during this permit term, will not trigger you to go back and redesign a practice.*

***Change in Final Determination:***

*The control options have been revised to make it clear that the Accounting Guidance can be used to meet the requirements in the permit.*

- If an area was treated with detention under earlier regulations, are there any methods by which this treatment can receive partial credit, similar to the "Equivalent Impervious Area" section of the 2011 guidance?

*To evaluate partial credit for existing treatment, the Accounting Guidance should be consulted.*

*a) Where surfaces drain to a stormwater control defined in the Design Manual, which were designed to less than 1" standard, you can take partial credit. By way of example if the facility was designed to capture ½", which is 50% of 1", you can reduce the Area of Impervious Surfaces not fully Treated by 50%.*

*b) Where surfaces have structural BMPs defined in the Chesapeake Bay Program, you can derive partial treatment of existing control structures from the Structural BMP Matrix. Comparing the listed partial treatment, to the efficiencies of ESD, which are 50% nitrogen, 60% phosphorus and 90% sediment, you calculate the relative nitrogen, phosphorus and sediment reduction efficiencies. If you then take the average, you can determine the overall efficiency to derive your credit for those structures. By way of example, dry detention ponds provide some treatment listed as 5% nitrogen, 10% phosphorus, and 10% sediment. Comparing this to ESD, you can calculate (5%/50%) or 10%. This indicates that dry ponds are only 10% as effective as a fully implemented ESD practice for nitrogen. Next compare phosphorus at (10%/60%) and you calculate 16.7% as effective as fully implemented ESD practice. For sediment you take( 10%/90%) to calculate 11.1% as effective as fully implemented ESD practice. The overall efficiency of this practice is then the average of these three values, or (10% + 16.7% + 11.1%)/3 or 12.6% as effective as the ESD practice. This averaging method was used to calculate the following credits for the treatment types listed in the accounting guidance.*

   *a. Where surfaces drain to a dry detention pond or hydrodynamic structure, you can reduce the Area of Impervious Surfaces not fully Treated by 12.6%.*

   *b. Where surfaces drain to a dry extended detention pond, wet ponds and wetlands, you can reduce the Area of Impervious Surfaces not fully Treated by 46.7%.*

   *c. Where surfaces are treated with required Erosion and Sediment Control, you can reduce the Area of Impervious Surfaces not fully Treated by 53.7%.*

*In summary, you can take the untreated acreage, and reduce by the partial credit provided in the guidance. As an example, if the entire area drains to a Dry Pond, you can reduce the restoration required by 12.6% by taking 0.874 times that total.*

***Change in Final Determination:***

*The required steps to calculate the amount of impervious area that must be restored also provide guidance on calculating partial credit.*

- Allow a mechanism to compare effectiveness of pre-2002 stormwater controls to current design manual requirements, and allow stormwater control equivalent to current requirements to be considered treated.

*Structural BMPs implemented prior to 2002 can be credited for treatment of impervious area per the Accounting Guidance (currently on page 4 under Water Quality Facilities).*

- What happens if an applicant demolished a building and restored that impervious space to pervious space? Can they count that as restored surface?

*Taking an impervious space and making it pervious is considered restoration, as long as this was done after the TMDL model baseline was set, which for purposes of this permit would be Jan 1, 2006.*

***Change in Final Determination:***

*The impervious surface evaluation for a facility will take into account a baseline year of January 1, 2006. Any treatment added since that time would be credited as progress towards the TMDL requirements.*

- The Accounting Guidance is specific to an MS4 and not applicable to an industrial facility.

*This comment refers to the Accounting Guidance, which, as stated above, will be considered definitive for the purposes of this permit. This document is used because it has been part of our SW permit promulgation process, which has been an open, public and transparent process. Referring to it in our Tentative Determination provided additional input to be considered for industrial discharges. A lot of the practices in the Design Manual and the Accounting Guidance can be directly applied to industrial facilities. In addition, when evaluating options, the Accounting Guidance provides practices by their nutrient loading which is useful.*

- If a facility was built in the pre-2002 with the approval of the city or county, and since then additional buildings have been added, will additional work be required as a result of this permit.

*Additional building since that time would have been required to provide stormwater management, and would likely have newer stormwater management that can be claimed as treated. The applicant will need to determine to what standard ponds or other stormwater controls were built to, and then determine if they will meet the requirements of this permit.*

- Street sweeping and the other nonstructural options are not valid for industrial sites.

*Many industrial facilities routinely use street sweeping and use other nonstructural practices as part of their housekeeping. Nonstructural options can be valid for onsite or offsite restoration of industrial sites. If there are other creative ideas for industrial sites to consider, they may be proposed through the innovative technology process, which is now defined in Appendix E.*

- Will we be required to establish a baseline pollutant load, and use model(s) to estimate the reductions achieved after various BMPs have been installed or implemented?

*No. The Accounting Guidance provided information for those covered under the general permit to estimate an individual nutrient load for the site based on impervious surfaces. You can use the 5.4 lbs of TN to calculate your required nutrient reduction when evaluating certain equivalent control*

*measures. However, the load assigned to industrials is done in aggregate based on a complex model. Through the NOI and restoration reporting, we will gain the input to confirm if the desired reductions are achieved.*

**Regarding – What if time schedule cannot be met?**

- There are a number of concerns that deal with federal, state, county or city government budget concerns. These have to do with the time it takes to secure capital for an unfunded project or appropriation funding cycles that go beyond 4 years. In addition the process to put out for bid and implement projects takes set periods of time that cannot be expedited.

*For federal, state, county or local government juggling multiple Clean Water Act responsibilities, the EPA provides for the Integrated Planning Approach Framework, suggested by EPA October 27, 2011 (http://cfpub.epa.gov/npdes/integratedplans.cfm). On January 18, 2013, EPA issued a memorandum to EPA Regions that described the status of the dialogue, which specified prioritization of investments. In the case of these facilities, the Department encourages applicants and registrants to indicate on the restoration plan summaries of the various permit or consent decree priorities and where this permit will be allocated funds. The goals of each action are competing for public funds, and as such, priorities for projects that provide the best benefit for clean water should be prioritized appropriately. While this prioritization allows for delays in meeting the restoration requirement, it does not negate the obligation for providing for the restoration portion of this permit.*

***Change in Final Determination:***
*We have allowed for the full permit term, the full five (5) years, to implement restoration activities.*

- The Department should include a provision to allow on a case by case basis an extension of the requirement to complete restoration within four (4) years.

*We cannot accommodate extensions. However, we were able to accommodate restoration over five (5) years, an extension for all those impacted by this requirement as per the previous comment.*

**Regarding – Can there be credit if more than 20% is treated?**

- Allow for expanded trading and eliminate the limitation on creating marketable credits if the permittee reduces by more than 20%.

*There is the potential of a marketable credit if more the 20% restoration is completed onsite. Implementing more than the 20% required would also reduce any potential future permit requirements.*

***Change in Final Determination:***
*The limitation about marketable credits was revised to specifically allow for the credits when you exceed the permit requirements.*

**Regarding – Subsurface Contamination, Environmentally Sensitive Areas**

- Several concerns were raised about limitations of onsite treatment due to either subsurface contamination or environmentally sensitive areas.

*Part III.A.1.g addresses areas where subsurface contamination is present. "This restoration requirement must be implemented in a manner that is consistent with any other permits, schedules or requirements by the Department for the control or mitigation of pollutants at the site." In areas where your industrial activity is located on property where subsurface contamination exists, which has been paved over, this surface must be part of the calculation for surfaces requiring treatment. If structures are built on the property, options exist in the design manual such as rain catchment or incorporating a green roof. Similar technology as green roof could be applied to cover portions of a paved area, and could be considered by the Department. The other options are to treat other areas of the property, implement nonstructural restoration activities, or perform the activity offsite. The same could be said of environmentally sensitive areas.*

*If you have further questions, EPA recently provided additional guidance http://water.epa.gov/infrastructure/greeninfrastructure/upload/brownfield_infiltration_decision_tool.pdf. You are also encouraged to consult with the Department.*

**Regarding – Clarification.**

- What does the phrase "unless your facility was developed or redeveloped in accordance with applicable law after 2002" mean? What applicable law does this refer to?

*The date of 2002 was chosen as a date when the concepts of the Design Manual were to be used in developing facilities around the state. Upgrades of areas developed or redeveloped after 2002 are not deemed to produce additional removal to justify upgrades or retrofits. The quotation makes reference to the Authority provided through the Annotated Code of Maryland Environment Article, §§4-201 and 4-203, to establish certain requirements for development or redevelopment. The stormwater management policy is established in the Code of Maryland Regulations (COMAR 26.17.02). Additionally, the concepts are reinforced in the Design Manual and Accounting Guidance.*

- What constitutes "redevelopment"?

*"Redevelopment" means any construction, alteration, or improvement exceeding 5000 square feet of land disturbance performed on sites where existing land use is commercial, industrial, institutional or multifamily residential. The policy required in COMAR for redevelopment specifies an additional 50% restoration in impervious surface area, which meets and exceeds the 20% restoration requirement of this permit.*

- How are waived, exempted, or variance projects viewed in relation to this new requirement?

*COMAR gives the local planning department to waive or provide variance to the new 2002 stormwater requirements. If portions of a facility met the redevelopment requirements when developed from 2002 or later, for reasons of this permit, those portions may be excluded from the area requiring restoration under this permit. However, areas of the facility not affected by this project must still be considered for restoration.*

- There is confusion, or a discrepancy, in references to the 20% impervious treatment requirement between Part II.A.1.d. and Part III.A.1.b.

*Part II.A.1.d "How to Obtain Authorization" does conflict with the restoration requirements in Part III. A. 1. b.*

***Change in Final Determination:***
*Instead of the phrase "the property at the facility," the wording has been changed to "the property at the facility permitted for Stormwater Discharges Associated with Industrial Activity as defined in Appendix E."*

## Regarding – Other Suggestions

- We suggest that the MDE consider a de minimis size and a sliding scale for degree of reduction relative to facility size.

*A sliding scale is already established based on the amount of impervious surface at the facility, as smaller facilities generally would have less restoration than a larger facility. We also recognize that it is the aggregate of the impervious surfaces that contributes to the load, not just larger areas. However, based on the fact that resources are going to be required to facilitate this process, including County agencies, engineering resources, permitting staff, the Department understands that focusing on larger facilities will be the best overall use of resources. Note that our review of the basis for the permit in previous section of this document "Regarding – Basis for 20% Restoration Goal Not Clear" did result in a change in the Final Determination which eliminates a great portion of small facilities from the 20% requirement in this permit, however they may still perform restoration as a result of financial incentives in the Stormwater Utility Fees.*

- There was a suggestion that the Department create a mechanism within the Permit whereby facilities may "self-certify." In addition there were suggestions that Professional Engineers may not be required for all projects.

*We can allow a Certified Professional in Stormwater Quality (CPSWQ) or a Registered Architects and Landscape Architects. For purposes of meeting the requirements of this permit, we will require a signoff by a professional.*

***Change in Final Determination:***
*Projects with restoration requirements will have additional options for signoff for their restoration activities.*

## 12. COMMENT CATEGORY – Coordination with local Stormwater Authority.

## Regarding – How will Restoration be accounted for?

- If an applicant is an existing NPDES MS4 permit holder, is the restoration accounted for under the MS4 or the 12-SW?

*Restoration done onsite or offsite within the MS4 jurisdiction to meet the requirements of the MS4 permit meets the requirements of the TMDL. We addressed the confusion on this topic by a change in the permit. For the restoration for properties owned by or leased from the MS4, the restoration will be reported through the MS4 permit, and the site will not have additional restoration requirements under this permit.*

***Change in Final Determination:***

*We exempt facilities that are MS4 owned, or where an applicant leases from an MS4, since they will be responsible for restoration under the MS4 permit, and progress will be reported through the MS4 permit.*

- If an applicant needs to use offsite practices to achieve the restoration work, is the work accounted for through the MS4 or the 12-SW permit?

*If offsite restoration occurs and is paid for by the permittee, this progress must be noted on the nutrient reduction report by those covered under this permit. The jurisdiction should report this as a reduction to the baseline in the acres that need to be managed. The MS4 should consult the Department if there is any question.*

- Clarify the 20% restoration rule and how it will apply to permittees with multiple facilities in different locations.

*In the case where an applicant has multiple facilities, the total restoration requirement must be calculated using the total impervious surface requiring treatment, but this treatment can take place at any combination of their facilities and report the chosen distribution on their restoration report. For example, if you have 5 properties with a total of 100 acres of impervious surfaces requiring treatment, you must restore a total of 20 acres (20% of 100 acres). You could treat four acres at each site for a total of 20 acres, all 20 acres at one site, or any combination totaling the 20 acre requirement.*

## Regarding – Offsite Alternatives because Onsite Not Feasible

- Establish a restoration offsite approval fee-in-lieu program or trading program as an option.

*The Accounting Guidance does provide some equivalent methods based on nutrients (septic upgrades) and some nonstructural practices that can be considered by the local jurisdiction. These equivalent measures are vetted through the Chesapeake Bay program, and provide the local authority with options to consider. Paying for a septic upgrade is in essence a fee-in-lieu, and would be allowed under the terms proposed in the permit. An allowance for restoration can also be made when onsite restoration is infeasible, through a number of equivalent measures which includes full payment of a stormwater utility fee. This subject is discussed further under a following comment regarding the stormwater utility fee.*

- For offsite practices on property not owned by the permittee, the final permit should require an easement or equivalent mechanism to allow for continued upkeep and maintenance throughout the permit term and beyond.

*There is extensive guidance provided in Appendix D of the Design Manual for consideration when working with offsite projects. This section specifies that it is for critical areas, but the considerations for offsite restoration apply. Our recommendation is that offsite projects should be designed to minimize maintenance requirements. In such cases where this is not feasible, a maintenance agreement should be established so as to insure long-term water quality protection. Maryland law requires BMP inspections once every three years and the Bay Program will require verification for credit as well.*

***Change in Final Determination:***

*A mechanism has been added to consider maintenance of restoration practices in your SWPPP.*

- The County does not want to be in the position of determining whether a third-party that is covered by the GP has complied with the restoration requirements in a state-issued permit.

  *The Department is not asking the county to verify if a third-party is compliant with the permit, but asking them to verify that when the permittee is unable to complete the restoration onsite, that equivalent treatment has been secured and completed offsite. The state will provide a worksheet to be completed by those covered under this permit, which will specify the amount of impervious surface to be treated offsite, or the amount of nutrients treated. We will work with these jurisdictions on any questions that they may have.*

  *Although MS4s that have restoration requirements will be in the best position to work on these issues with industries that discharge into their system, in cases where the County does not want to be in the position of determining whether a third-party that is covered by the GP has complied with the restoration requirements in a state-issued permit, MDE can work with the county to ensure the planned activity meets the requirements of the permit, and at the same time direct the opportunity. In any cases where the local stormwater authority is unable to determine where local impairments could benefit by the treatment prescribed in this permit, the applicant can contact the Department for other options.*

- County cannot foresee a circumstance where it would not require a permittee to cover the cost of restoration that the County might perform on its behalf.

  *We can appreciate the fact that costs will need to be covered for these offsite projects, but had used the wording "may ask you to pay" is case a county could establish another mechanism to cover this cost.*

- Whether it is "feasible" for restoration to be performed at the facility should not be between the jurisdiction and the industrial facility as this is a state issued permit.

  *The local jurisdiction is not responsible for determining if onsite restoration is feasible. In the added definition for infeasible, we specifically put the burden of proof to the permittee. Since going offsite doesn't relieve the industry from meeting the obligations in the permit, we will not expect documentation from the jurisdiction of whether the decision was valid, but will again be looking for the jurisdiction to verify that the project is completed.*

**Regarding – Treatment works**

- The comment about Sector T (Treatment Works) where we accept the routing of stormwater to a treatment works as an accepted facility control measure, for jurisdictions with separate storm and sanitary sewer systems, is tantamount to creating a combined sewer system at the treatment facility.

*"See also Part III.C.4. "In addition to the other control measures, consider the following: routing stormwater to the treatment works;…" This is an approach that is supported by the EPA in their MSGP. We believe is an acceptable control measure, with the potential to save money for the plants, and has precedent in pre-treatment in other NPDES permits. However, only discharges authorized by the treatment works are allowed to discharge into those works and the stormwater associated with industrial activity must be treated appropriately. Therefore, it is acceptable for those treatment work*

*operators being authorized by this permit to allow the stormwater associated with their industrial activity to be treated in their own facility with the appropriate design capacity and other consideration that the operator must weigh.*

- Facilities upgrading significant WWTPs to state-of-the-art Enhanced Nutrient Removal (ENR) treatment levels and achieving significant reductions in TSS/TP/TN as part of the WIP should be considered in-lieu-of dealing with stormwater.

*The Department cannot exempt an industrial category because the nutrient and sediment loads from all impervious surfaces, including those a WWTPs, was accounted for the model used to create the Chesapeake Bay TMDL. Therefore, load reductions in the stormwater from all facilities are necessary to meet the TMDL. However, if your facility is part of an MS4, your restoration requirement may be administers through your MS4. For budget prioritization of projects search the term "prioritizing investments" in this document. Also note that we have added an option when onsite restoration is infeasible, to reallocate a portion of a permitted load to their registration under this permit.*

**Regarding – Where should offsite work be performed?**

- The draft General Permit does not specify the requirements for offsite treatment/restoration or contacts at the local jurisdiction for obtaining permission.

*The Department will post the contacts within the local jurisdiction to use on the MDE website. We will also make it clear what is required with regards to offsite treatment and communicate this to the jurisdictions.*

*The concept of offsite restoration isn't new with this permit. There is extensive guidance provided in the Design Manual for consideration when working with offsite projects. This is in Appendix D, for critical areas, but is relevant. In Appendix D, our recommendation is that offsite projects should be designed having shown that onsite compliance is not feasible, the applicant may choose from the following Offset options in order of preference.*
*1. Construction and operation of an offsite BMP, sized to meet the removal requirements.*
*2. Retrofit an existing BMP or pond structure.*
*3. Retrofit an existing storm drain system to encourage infiltration.*
*4. Reduce the imperviousness of an existing property through reforestation.*
*5. Implement a riparian reforestation project (0.5 acres of tree planting per lb of removal requirement). Planting plan must meet local Critical Area reforestation standards, or Maryland Forest Conservation Manual, if no local standards exist.*
*6. In rural jurisdictions where retrofit options are limited, finance the installation of a structural agricultural BMP for a farm with a NRCS approved conservation plan.*
*7. Other innovative options: restore a degraded tidal or non-tidal wetland that has been disturbed by previous urban or agricultural drainage activity. This may be accomplished through removal of fill, restoration of original water circulation patterns, and wetland plantings.*

- Does the offsite restoration have to be within the same watershed, and if so, what level watershed - 6-digit, 8-digit, etc.?

*If offsite restoration is considered, the project must be implemented within the Chesapeake Bay Watershed. The jurisdictions responsible for stormwater are aware of where the greatest need is, which is why the permit requires working through the local authority when a project offsite is*

*required. We would recommend that offsite happen within the 8-digit watershed, however we didn't specify that it must occur within a specific watershed for the following reasons. The needs of the local stormwater authority may be in a separate subwatershed, where the need is greatest to benefit water quality. The offsite options may already have been addressed, and the only alternative will be further away.*

- The restoration requirement contains loopholes that will limit the effectiveness of restoration projects, and prevent the projects from leading to attainment of water quality standards and TMDL WLAs at the site. … For example, the Draft Permit allows restoration on "any untreated impervious surface on [the] facility, not just those in areas of industrial activity."

*There is no loophole for industrial areas, for which a Stormwater Pollution Prevent Plan must be created. This permit allows restoration on any untreated impervious surface, including non-industrial areas, because the goal is to treat nutrients and sediments in stormwater, not from the industrial process. Also, the Chesapeake Bay TMDL model was based on all impervious surfaces, whether industrial or non-industrial, onsite or offsite, so there is no loophole for the restoration obligation.*

**Regarding – Consideration in County Stormwater Fees?**

- The Department needs to work with the Counties as they implement their Stormwater Fees, so that they take the permit into account.

*The Department had issued a Tentative Draft in October, with 90 days of comments for the various stakeholder groups. There was also a focused outreach to MS4s, prior to the public hearings, to make sure they were engaged in the process. As a result of this public process, we did hear from the MS4s, from those covered by our industrial permit and from several counties involved in creating stormwater fee programs. We had requests from many of these counties to identify those permitted sites within their jurisdiction, and provided listings for them. At least one county, Anne Arundel, did identify facilities with industrial stormwater permits and contemplate a discount when they implement restoration practices onsite. Although this permit doesn't directly implement the fees, the open communication and coordination with the municipalities forming stormwater utilities has been an important step in finding the fairest implementation possible.*

**Regarding – Workload may cause delays**

- What if the "local jurisdiction" does not cooperate with efforts by land-locked facilities to conduct "offsite restoration"?

*The potential workload of the local jurisdiction should be reduced by the size exemption provided, as well as the equivalent options provided in the final determination.*

*In the event of a delay in the restoration process required by this Permit, by reason of a delay in governmental approvals, and despite the Permittee's reasonable and diligent efforts to perform, the Department's compliance program should be contacted for potential options.*

**13. <u>COMMENT CATEGORY – Control Measures.</u>**

**Regarding – Erosion and Sediment Controls.**

- The Department hasn't been specific enough in what type of erosion and sediment controls are required.

*The Department finds the permit language in the Erosion and Sediment Control section, adapted from the MSGP to include Maryland's Soil Erosion and Sediment Control resource, to provide sufficiently specific resources for choosing erosion and sediment controls.*

***Change in Final Determination:***
*A link was added to Maryland's Soil Erosion and Sediment Control resources.*

- Address storm events that exceed the design capacity of the existing controls.

*The intent of the 12-SW was to provide more support so that permittees can ensure they are providing the controls to meet the objectives of 'minimizing' pollutants. Any design will have limitations. As noted an owner should not be responsible for discharges above the design event of the controls provided they meet the design standards. Controls should address reasonable design constraints, such as a 10 year storm event, or for soluble toxic chemicals, potentially a 100 year design storm. The measures for restoration are specific to a 24 hour one inch storm event. Documenting these as part of the SWPPP would be wise so that when you are evaluating your stormwater discharges, you can refer to these constraints to understand if the measures are standing up to their designed capacity.*

*If by visual monitoring or other means it is determined that your controls are not addressing water quality concerns, you will need to take a corrective action to understand the potential failure of your design and control used to ensure it is adequate and correct. When working through corrective actions if required by an inspector or through your own visual or benchmark monitoring, you must fully evaluate that the design is adequate, that the maintenance is adequate, that you fully understand and can defend your use of controls. By way of example, if your control was designed for the appropriate storm event, and you find it isn't adequate by visual monitoring, and in re-evaluation you determine that the design failed to consider the slope of the land or the increase in impervious surfaces at your facility, a corrective action to upgrade the control is in order.*

**Regarding – Dealing with contact water discharges.**

- If stormwater from a containment structure can be treated onsite to meet visual, benchmark, and any other applicable quality requirements, then can it be permissible to discharge such treated contained stormwater.

*No, the permit would not allow that. This type of onsite treatment would require either an individual permit or an alternate general permit such as the 11-HT.*

- It should be permissible to have the contained stormwater removed as waste liquid, rather than a recyclable liquid. Recommend adding "or TSDF (Treatment Storage & Disposal Facilities) or disposal facility"

*Agreed. We have added this.*

***Change in Final Determination:***

*The phrase "or TSDF (Treatment Storage & Disposal Facilities) or disposal facility" has been added under the proposed "Spill Prevention and Response Procedures" (Part III.B.1.b.iv), the third bullet for minimum implementation.*

**Regarding – Scrap Metal vs. Raw Material vs. Trash.**

- Requirements for addressing trash should be consistent with the State's Narrative Water Quality Standards.

*The state's narrative standard for trash reads: "The waters of this State may not be polluted by: (2) Any material, including floating debris, oil, grease, scum, sludge, and other floating materials attributable to sewage, industrial waste, or other waste in amounts sufficient to: (a) Be unsightly; (b) Produce taste or odor; (c) Change the existing color to produce objectionable color for aesthetic purposes; (d) Create a nuisance; or (e) Interfere directly with designated uses;". The comment suggests that the States' narrative standard for trash does not require zero discharges of trash, garbage and floatable debris.*

*The Permit language is consistent with the EPA MSGP, and requires various control measures related to waste, garbage and floatable debris. The suggestion is that the permit goes beyond the states requirements by mandating that these materials are not discharged. The Department understands the concern. It does infer a zero discharge, but we don't have to permit a facility to discharge any pollutant. Littering is illegal, so we probably should not allow a trash discharge.*

*In certain cases, there are TMDLs for trash, and the Department may in those cases suggest a zero discharge rule. However, the intent of this Non-Numeric Technology-Based Effluent Limits (BPT/BAT/BCT) section is to include controls for waste, garbage and floatable debris. This is not a zero discharge permit, but is a requirement of the permit that the facility is taking great efforts to ensure these debris are not entering the surface waters. If the public claim that the visual trash leaving your property is detracting from their use of the water, a corrective action can be required to address it.*

- References to scrap materials should be removed from Part III.B.1.b.xi "Scrap metal, wood, plastic, miscellaneous trash, paper, glass, industrial scrap, insulation, and any other waste garbage or floatable debris, must be routinely removed from the general yard area." and Part III.B.1.b.i. Scrap metal, plastic, paper, and glass, among others, are not waste materials (either actually or by regulation), but rather the raw materials at industry facilities.

*Based on the feedback from the scrap industry, the wording added by the Department in the 12-SW was examined. The mention of 'scrap metal,' 'glass,' and 'industrial scrap' are not consistent with the intent of this section, as they are not floatable, and have minimal opportunity to impact waters of the state. Scrap metal or industrial scrap are addressed in other areas of the permit as potential sources of pollutants, and are addressed by other stormwater controls. The section has been rewritten to address the concern.*

***Change in Final Determination:***
*The permit requirement to remove certain materials such as scrap metal was deleted from the permit.*

**Regarding – Acknowledge use of BMPs.**

- One business provided evidence that they are a forerunner in implementing protections for the Bay and requested acknowledgement of this.

*Based on the type of BMP implemented, the applicant may actually be producing marketable credits when exceeding the permit requirements. The BMPs required by this permit, and other practices that applicants have put in place, can also be used when applying for the State's Maryland Green Registry. The practices mentioned in the comments fit the basics of that program. Furthermore, the Chesapeake Bay Program can credit BMPs required by this permit in their model if industries provide this information, including Erosion and Sediment Controls and Fertilizer Use.*

***Change in Final Determination:***
*The Department will recognize creative solutions for nutrient reduction, when it is infeasible to implement restoration all the requirements at the facility. These are considered equivalent measures and added to the final permit.*

## Regarding – Clarification Requests

- We believe that a warehouse located on a 'Water Transportation Facility' should be described as a 'storm resistant shelter'.

*The statement is sound, and would be accepted.*

- There are commodities discharged from ocean vessels that are not sensitive to inclement weather, such as blocks made of inert base metals that should be considered as a 'tightly sealed drum'.

*The Department would agree that non-reactive metals, which when subjected to stormwater, can safely be stored outside without benefit of cover. In the same way that materials stored in tight steel drums may be exposed to stormwater without benefit of cover. By their very nature, they present no potential for immediate concern. You will need to evaluate all material stored outside and verify if there are potential sources of stormwater contamination, and how you will deal with that in the Stormwater Water Pollution Prevention Plan.*

- MDE should integrate EPA guidance into the Draft Permit by clarifying ambiguous or vague phrases terms such as "feasible" and "as possible" and "practicable".

*The term infeasible has been added to our definitions, as provided by EPA, and further detailed in the response document under restoration. In each case we are using the selected terms used by EPA that we used specifically in cases where flexibility was needed for the action to take place. It should be noted that 'feasible' is used 4 times in this permit. The first time is with regards to the feasibility of performing restoration onsite vs. offsite. This is an appropriate use of the term, as it doesn't relieve the permittee from the responsibility but requires that onsite be evaluated to the extent that it can. The other cases were taken directly from the EPA's Multisector General Permit. The one case is when there are leaky vehicles, drip pans must be used or the vehicles must be stored inside when "feasible". Again there is no relieving the permittee of the obligation to deal with the pollutant, but provides for cases where there may be stormwater exposure. The other cases are all similar, not relieving the permittee, but directing to the practices to be used to protect the environment: "Drain vehicles intended to be dismantled of all fluids upon arrival at the site (or as soon thereafter as feasible), or employ some other equivalent means to prevent spills and leaks." "Immediately (or as soon thereafter as feasible) inspect vehicles arriving at the site for leaks, and address leaks when identified." "Source Reduction.*

*Minimize, and where feasible eliminate, the use of urea and glycol-based deicing chemicals…" We believe these terms are appropriate and enforceable.*

***Change in Final Determination:***
*We added a definition of infeasible to the permit appendix.*

Does Part III.B.2.b Discharges to Water Quality Impaired Waters address the Bay TMDL?

*The statement is "If you discharge to an impaired water, the Department will inform you if any additional monitoring, limits or controls are necessary for your discharge to be consistent with the assumptions of any available wasteload allocation in an EPA Approved TMDL…" applies to all impairments or TMDLs. The restoration requirements in Part III.A are the additional controls are specific to the Bay TMDL, however would provide benefits for other impairments as well. Since the restoration requirements specifically address the Bay TMDL, no other 'additional monitoring, limits or controls' will be considered for the Bay TMDL per Part III.B.2.b.*

- Some equipment may not require "testing" and therefore it may not be practical to perform testing.

*"You must regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters." The intent of the phrase prior is that inspection, testing, maintenance, and repair work must be performed to avoid situations that may result in leaks, spills and other releases of pollutants. In the case where certain equipment doesn't require testing to avoid the situation, it is not required. If a specific permittee is concerned and wants to document it in the SWPPP, that is entirely appropriate.*

- Does MDE expect applicants to analyze and implement treatment for run-on (Part III.C.4)?

*Regarding Part III.C.4 where the permittee "must describe how the control measures at your site address any stormwater run-on that commingles with any discharges covered under this permit," MDE does expect applicants to analyze and implement treatment for run-on that co-mingles with the permitted industrial stormwater runoff. One control measure would be to include berms that route the water around the permitted facility. As an example, if run-on were to flow into a covered salt pile, the runoff would be the applicant's responsibility to deal with. What is key for the applicant to do is evaluate where the facility is and whether the potential run-on has potential for beneficial use or if it will be excluded by an appropriate control measure.*

- Will a narrative description of how waste is managed be accepted in lieu of a set schedule (Part III.C.5.a.i)?

*If providing a schedule for all waste disposal is not be feasible because certain waste is only collected when the waste amount reaches a threshold (e.g. used oil, spent antifreeze, etc.), the narrative description of how waste is managed would be accepted in lieu of a set schedule with appropriate documentation of why the schedule isn't possible.*

- How does MDE define "high employee turnover"?

*We depend on the permittee to make the informed decision. We may suggest that if your employee turnover exceeds the training interval, for example, your workforce turns over every 6 months, then*

*your training interval may need to be more than yearly. It is up to the permittee to determine what is effective. Training may be most effective during the first few months that an employee works at the facility. For facilities that experience frequent spills, more frequent training may be part of a corrective action. It may be more effective for your organization to have everyone trained at the same time once a year. The permit is requiring that you provide at least yearly training and leaves it up for those covered to use reasonable judgment to determine if more frequent training is required based on their workforce, as a control measure to prevent pollution.*

- There was confusion about Appendix D, Part L.5.3. This refers specifically to the release of non-stormwater discharges from Landfills.

*Part of the requirement for this permit is to identify all non-stormwater discharges and eliminate them. Specifically for landfills, as in the MSGP, it is necessary to require certification that the water contains no leachate or vehicle washwater. These discharges are not authorized by this permit. If you are uncertain and feel testing is necessary, you will need to test the water. That test will depend on the type of material stored at the landfill. This verification should happen as many times as you think it needs to happen. Since you are required to test leachate as part of your land management permit, you should have a good baseline of what to expect. If you have never tested for leachate, then you should contact the Department for consultation.*

***Change in Final Determination:***

*There is a mistake in the section "L.6 Additional SWPPP Requirements," where the sections are number L.5.1 and L.5.2 instead of L.6.1 and L.6.2. These have been corrected in the permit.*

- MDE should require that inspection, testing, maintenance, and repair of equipment and systems be performed at specified intervals, such as quarterly, along with the facilities' quarterly visual inspections.

*Due to the variation in control measures used it would not be appropriate to require this maintenance to occur at a standard interval. If a specific control measure has a manufacturer maintenance interval, which should be documented and followed. Appropriate maintenance must be evaluated and performed. As verification, quarterly visual inspections, and potentially benchmark tests, the functionality of these controls will be evaluated at regular intervals. If proper maintenance is not occurring and the control measure fails, that would be a permit violation and invoke a corrective action if a problem is identified.*

- In Section III.A, it was suggested that MDE should also clarify that control measures used to meet the restoration requirement are enforceable effluent limitations, as the maintenance section appears to treat the two separately.

*However, as the entire permit is enforceable we and Section III.B.1.b.vi specifies control of runoff is an effluent limitation, we feel no change is required.*

- What is meant by "technologically available and economically practicable?" How should I comply with that?

*This wording is consistent with EPA's MSGP. In that permit, the EPA did not expect that the control measures selected, designed, installed, and implemented be highly engineered, complex treatment systems. Rather, the control measures used needed to be adequate to meet the effluent limits in Part 2.1 "Control Measures" (equivalent to Part III.B.1 of the 12-SW) and any water quality-based effluent*

*limits that EPA determined were necessary to meet TMDL or antidegradation-related requirements (equivalent language in the 12-SW). Consistent with their recommendation, the technology-based standard for the selection, design, installation, and implementation of control measures is that level of control that will "reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice." EPA had not defined a minimum storm event around which to design control measures, but rather is using a case-by-case best professional judgment approach that recognizes the tremendous variability among sites and between different climatic conditions in different parts of the country. The Department suggests designs that provide the restoration comply with a minimum Water Quality Volume to capture a one-year, 24 hour storm event. The Department expects that facilities will consider the best industry practices when determining which particular control measure to implement at their site; selecting practices that are clearly subpar will violate the technologically available and economically practicable standard in the permit.*

*The selection, design, installation, and implementation of control measures must also be "in accordance with good engineering practices and manufacturers specifications." See* ***Part III.B.1 of the 12-SW****. For this reason, if the Department finds that control measures have been improperly selected, designed, installed, or implemented at a particular site, in clear defiance of good engineering practice and/or in such a way that ignores applicable manufacturer's specifications to the detriment of the effectiveness of the control measure, then a permit violation will have occurred. However, if a particularly intense storm event overwhelms the site's control measures in such a way that they did not perform as intended, this may nevertheless not be considered a violation as long as the operator had properly selected and designed the controls to in conformance with the standard for selection and design.*

- Delete the last sentence under proposed "Minimize Exposure" (Part III.B.1.b.i), the final sentence reads: "Note: Industrial materials do not need to be enclosed or covered if stormwater runoff from affected areas will not be discharged to receiving waters or if discharges are authorized under another NPDES permit." It is impossible for many industries to fully cover the activities.

*This statement acknowledges that where 1) portions of the facility may be covered by other permits or 2) all stormwater contacting exposed materials is collected in designated areas, the concept of minimizing exposure is not applicable. This note has very little to do with typically large outdoor operations across many acres (often 10 or more) with large quantities of scrap materials moving in and out (often 100s of tons) and more staged onsite every day. This statement is consistent with the MSGP and does not negate the proposed requirements in the 12-SW Permit. This does not suggest a prohibition on stormwater discharges for normal industry operations, where other aspects of the permit were met, such as benchmark and visual monitoring.*

- The final permit should require that all salt piles or piles containing salt be covered or enclosed, regardless of whether their stormwater discharges are authorized under another permit. The final permit should not include any exemption for facilities that claim zero discharge from salt piles and piles containing salt.

*The wording for salt piles, also used in EPA's MSGP, follows the minimize exposure wording, acknowledging that all piles may not be equal and require a cover at all times. This would not excuse a permittee from covering a pile if it has the potential to be exposed to stormwater and to cause runoff into waters of the State, but merely acknowledges there may be circumstances where covering a pile isn't applicable under this permit.*

- The requirement to cover all materials should apply to all stored industrial materials, including coal piles, which can discharge several toxic pollutants, such as arsenic, iron and lead, into receiving waterways.

*There was a reason why the requirement to store materials under cover on an impervious surface is limited to "solid chemical products, chemical solutions, paints, oils, solvents, acids, caustic solutions and waste materials under cover on an impervious surface." This requirement was added into the 12-SW and isn't found in the EPA's MSGP. This applies to a number of commonly overlooked items that are easily dissolved and that can impact groundwater. EPA's permits typically don't address ground water, where our state permits do, thus the reason for the addition. Coal was not included because coal mines are not covered under this permit and coal handling facilities in the port have individual permits. Large coal piles in the state are either required to get an individual permit based on their effluent limitation guidelines or due to the significant risk for stormwater runoff related pollution. Requirement O.8 of Sector O – Steam Electric Generating Facilities, states that "discharges from coal storage piles at Steam Electric Generating Facilities are required to meet specific effluent limits (40 CFR Part 423) and are therefore not covered by this permit".*

- Minimizing dust generation should require covering the source, including coal piles and truck or freight shipments of coal, or enclosing the source.

*The requirement to minimize generation of dust and offsite tracking of raw, final, or waste materials was added to be consistent with the MSGP. While some operations may consider covering their facility to meet this requirement, other facilities may take other creative measures to comply. We will follow EPA guidance on this and can reconsider going further in the permit renewal, including mention of specific technologies used by facilities.*

## 14. COMMENT CATEGORY – Sampling Challenges.

*An overall observation is that the new requirements for sampling require a little more guidance. An excellent resource which will answer the majority of the questions asked is EPA's MSGP Monitoring Guide, available on-line at http://www.epa.gov/npdes/pubs/msgp_monitoring_guide.pdf. Portions of that guide are copied in this document, to specifically address the questions asked. Please refer to it for other questions as they come up.*

### Regarding – Representative Sampling Challenges

- Part V(C)(5) refers to a Part III(E)(3). There is no Part III(E)(3).

*Agreed.*

***Change in Final Determination:***
*We acknowledge this reference is in error, and have corrected Part V(C)(5) reference from Part III(E)(3) to Part V(A)(3), as it was meant to point to the similar section in Visual Monitoring.*

- Quarterly Visual Monitoring Form in Appendix B state that a "qualifying storm event is any storm with greater than ½ inch precipitation" which is not consistent with the wording in the main document.

*We agree with the approach of the current MSGP, to allow for an event that results in runoff, and have removed the ½ inch reference in the monitoring form.*

***Change in Final Determination:***
*Visual monitoring form has been revised to be consistent with the permit, and refers to a qualifying storm event resulting in runoff.*

- Can results from visual monitoring can be used for regulatory action for non-compliance.

*Both visual monitoring and benchmark monitoring are for self-evaluation. The results themselves are not considered as non-compliance with the permit. However, the requirement to perform the monitoring is not optional, and not performing the test is considered a violation. Also, if the results indicate there is an issue with your stormwater controls and you do not take appropriate corrective action, as spelled out in Part IV of the permit, then the registered facility is in violation of the permit.*

- Agencies with multiple sites with limited staff at sites may need time to set up and implement this visual monitoring effectively.

*The Department understands that starting the program may take some time to work through, and will be lenient for those covered until they have updated their SWPPP and performed the appropriate annual training for staff. We still require that your facility have appropriate controls to protect waters of the State from the time you are registered, even if you don't fully have a visual monitoring program to verify it.*

- The color and odor criteria on the Quarterly Visual Monitoring form are vague and subject to interpretation depending on the individual collecting and monitoring the samples.

*These criteria are from the EPA's MSGP and are meant to be flexible and provide those covered by this permit with tools that will avoid costly sampling. Odor and color are characteristics to evaluate the stormwater and the evaluation is meant to be what a reasonable person may determine based on the sample. Although the results may vary slightly, using the results to determine potential sources of pollution should provide the tools to verify your effective controls.*

- There was a request to allow flexibility where stormwater is sampled, especially where it may co-mingle with other stormwater runoff. There was a related question of whether this requirement is limited to outfalls that are discharging directly to a water of the State.

*The Department can only provide guidance that you monitor your facility in the best fashion possible and that the monitoring be representative of the volume and nature of your activity. The benchmarking and visual monitoring are tools to evaluate the effectiveness of your own control measures. We realize that there may be cases where some mixing happens prior to your monitoring location. This industrial stormwater permit requires that you sample stormwater discharges prior to the stormwater leaving your facility, and at a location downstream from all of your industrial materials and activities. We can allow flexibility up to the point where you discharge, and that is where the ultimate responsibility falls on the facility to have protected waters of the state. We recommend referring to the EPA Monitoring Guide for other tips on monitoring.*

*Several commenters asked where sampling is required. This is difficult to answer on a generic basis, however, whenever possible it should be representative so that you can evaluate the effectiveness of*

*your stormwater controls. This is a discharge permit, and deals with stormwater that will lead to surface water via any type of drainage, including but not limited to storm sewers, swales, outfalls from stormwater ponds, or sheet flow across grassy or vegetated buffers. Therefore, you are required to evaluate the stormwater as close to this discharge as possible. However, additional monitoring closer to your activities, may help you evaluate the controls.*

- What is the reasoning for quarterly vs. yearly inspections/monitoring?

*The Department does not feel that evaluating stormwater runoff once a year is sufficient. We decided to take the lead from the MSGP, and are now no less stringent than the EPA is with their permit.*

- How does a facility go about representative sampling?

*Your first priority is to map out the facility. By this, make sure to evaluate Appendix E's definition of Industrial Activity to define the area you need covered by this permit. It may be that the reason you are permitted is due to a maintenance garage on your facility. Look at the definition, and determine your 'manufacturing building,' your storage area, and the other components. In the case of transportation sector, the 'manufacturing building' is essentially the building and associated parking area where the maintenance occurs. And then remember what it doesn't cover, specifically office employee buildings and parking areas. Once you can map this, and once you understand the drainage from those areas, hopefully you can determine your monitoring points. Make use of the substantially identical outfall exception. Then evaluate the appropriate sample locations. The idea is to monitor the water from the industrial activity. Appropriate sample locations include:*

- *Underground pipes that collect stormwater from drop inlets and convey stormwater to an offsite location (e.g., street, curb, or MS4). Be sure you collect only the stormwater discharging from your facility and not the baseflow in the pipes that is being discharged from facilities upstream. Do not enter underground locations to collect samples. Use a pole with a sampling container attached at the end to collect the sample.*
- *Open ditches, gutters, or swales that carry stormwater from your facility to an offsite location. If these conveyances contain runoff from another facility, it is important to note that in your SWPPP;*
- *Facility driveways and other street access points; and*
- *Outlets discharging offsite from onsite stormwater detention ponds or other types of structural control measures. It is important to sample at the OUTLET of your structural control measures, as opposed to the INLET of such structures, in order to determine the quality of the water after treatment.*

- What if no discharge occurs during the storm?

*Your first step would be to note that on the visual monitoring or benchmark monitoring documentation. The second step would be for you to evaluate your stormwater controls. Are there stormwater ponds that are full of suspended sediments, or full of oil and grease? These types of visual observations are important for you to evaluate your controls and any corrective actions that may be required.*

- The final permit should also incorporate the explanation of "representative sampling" from Section V.C.6. into the quarterly inspection section by reference.

*Section V.C.6 refers to specific protocols used for the measurement of metals etc, which are not applicable. However, visual inspection does refer to representative sampling explicitly. Additional cross-reference isn't appropriate.*

- Part V(C)(6) should be revised to make clear that Quarterly Visual Monitoring is not subject to 40 CFR 136, as is clearly indicated in Part V(A)(3).

*Agreed.*

***Change in Final Determination:***
*We added that "Visual Monitoring is not subject to 40 CFR 136" to Part V(C)(6).*

- Several comments were received were concerns of staffing at remote locations was a concern for the visual monitoring requirements.

*Visual monitoring is to your advantage. If you cannot perform the monitoring because no one is at the site, then you will need to find the next event when someone is there to evaluate the water.*

*One exemption that was overlooked when MDE accepted the practices of the MSGP was for inactive or unstaffed sites. MDE originally included more stringent requirements than the MSGP in the Permit as an oversight, and not to meet water quality standards. We don't intend to have unstaffed sites monitored. However, when staff is present and it isn't reasonable for them to leave their operational responsibility, some type of automated system may be in order. The intent of the visual and benchmark monitoring is for operations to understand the effectiveness of their activities.*

***Change in Final Determination:***
*For inactive and unstaffed sites, the exemption as provided in the MSGP has been added to the 12SW. This change occurred in the SWPPP section, the inspections, the visual monitoring, and the benchmark monitoring sections.*

- Several concerns had to do with collecting the sample in the first 30 minutes for large facilities.

*If you define more sample points than you can practically monitor, you do have the options of substantially identical outfalls, and in addition, we specify that "if it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample must be collected as soon as practicable after the first 30 minutes and documentation must be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes." The reason the first 30 minutes is so critical is that is when most pollutants are being flushed from the facility.*

*If an outfall isn't easily accessed, then monitoring upstream of that outfall closer to where the activity occurs would be one option. Another would be to provide a plan on how this point will be accessed in the future. However, you must still monitor that point.*

- There was a concern that the employees at a facility would be dealing with stormwater instead of out dealing with health and safety.

*Stormwater is an issue of health and safety and you must monitor it at least once per quarter. This permit provides multiple options, such as automated monitoring.*

- There were several questions about during non-operational hours or during inclement weather that could be harmful to human health.

*The Department feels there will be ample opportunity during operational hours to take a visual sample once per quarter to evaluate your stormwater controls. We allow sampling off hours, as sites that do use automated sampling may take a sample during the 2am storm on a Sunday. MDE acknowledges there may be times you are unable to complete required monitoring. The following advice is included in the MSGP Monitoring Guidance.*
*• Adverse Weather Conditions – When adverse weather prevents sampling per your monitoring schedule, you must sample during the next qualifying storm event. Adverse conditions are those that are dangerous or create inaccessibility for personnel, caused by such things as flooding, high winds, electrical storms or situations that otherwise make sampling impractical (e.g., drought or extended frozen conditions).*
*• In cases where ice or snow cause proposed sampling locations to cause safety issues for the personnel doing the sampling, try to identify areas upstream closer to the industrial process where you can perform monitoring during those times. Alternate points may be proposed in your plan for those times. In the long term, think about how to make these locations safer for employees or consider some type of automated systems that may capture the sampling you will need during those times. If you are going to be operating in those conditions, you must be able to evaluate your operations discharges.*

- What is the discharge point from ponds; discharge to the body of water, discharge to grass areas, discharge to rip-rap?

*If your operations drain to a retention pond which only discharges during significantly heavy rain events, you have several options. The ultimate discharge point is where the pond discharges. However, evaluating the pond itself will provide insights into your controls. Furthermore, the closer you monitor to your activity, the more you will understand the monitoring results. If you have an overflow pipe from your pond, the outfall should be well identified as the point where the pipe discharges. Alternately, you can monitor near the point where the overflow is happening within the pond, with a constructed pier. If they discharge to rip-rap, identify a point to collect a sample. Again, this is a measure of the effectiveness of your controls. If a pond discharges to a swale, that has a designed overflow, you have multiple points to evaluate. If the water in the swale is visibly clean, no need to go further down stream. If the pond itself is clean, the overflow will also be clean. Be smart about identifying your points to evaluate your own process discharges.*

- There was a suggestion that we extend the sample to be taken in the first 60 minutes.

*The permit requires that "Samples may be taken during any precipitation event (except as noted in Areas Subject to Snow below) where there is a measurable discharge and must be sampled within the first 30 minutes of the storm event." The reason this is required is to sample the first flush. Stormwater ponds are designed as treatment of stormwater, intended to detain it and provide for settling of solids. So an exception for stormwater ponds would be possible, within the first 60 minutes, if the stormwater sampled is representative of the treatment of the first flush and you document your exception along with the Visual Monitoring form and keep this with the SWPPP.*

- There was a recommendation for "a plan for reducing sampling frequency after no contaminants are found over a defined period of time. For example, sample quarterly for one year then reduced monitoring to on sample per year."

*That has been considered in the benchmark monitoring. However, for visual monitoring, continued vigilance is suggested, with continued monitoring. You can modify your monitoring plan in your SWPPP to evaluate the discharges at points which may reduce the amount of monitoring that you do,*

*such as identifying additional substantially identical outfalls, identifying points further downstream where many of your outfalls combine. However we don't agree with not performing at least quarterly visual monitoring.*

- What would a facility do if all of their stormwater moved off the site as sheet flow into a field or natural area?

*Regarding sheet flow, Chapter 5 of the Design Manual includes many recognized practices that your facility can take credit for as Treatment of Impervious Surfaces. Specifically N-2. Disconnection of Non-Rooftop Runoff (page 5.61) and N-3. Sheetflow to Conservation Areas (page 5.66).*

*So if all your stormwater discharge is in the form of sheet flow, you should evaluate where your potential sources of pollutants are and determine how best to use monitoring to evaluate your controls. The EPA's MSGP Monitoring Guide, available on-line at http://www.epa.gov/npdes/pubs/msgp_monitoring_guide.pdf, provides ways to sample from sheet flow. Page 9 of that guide provides techniques to sample sheet flow. It acknowledges that in some areas of your facility it may be difficult to obtain a sample because the runoff drains as sheet flow before it becomes concentrated enough for sampling. It provides methods to use if the flow is too shallow to directly fill a collection bottle.*

- In the case where visual monitoring results in concerns by the facility owner, they should take a grab sample and have a lab test it.

*This would be encouraged, however, it may be obvious where the pollutant is coming from, and therefore the facility can take immediate corrective action without additional testing. Although additional testing isn't necessary, or described in the permit, making sure the pollutants are addressed is required. To that end, additional analysis may be required by the permittee to address the concern. The permit only expresses the end result and not the means to that end for all situations. If a permittee ever has questions about what to do, they can contact the Department for further advice.*

- There was a request to define what an outfall is.

*The MSGP provides an appropriate definition that has been added.*

***Change in Final Determination:***
*The following has been added to our definitions in Appendix E. "Outfalls are locations where the stormwater exits the facility, including pipes, ditches, swales, and other structures that transport stormwater."*

- The requirement for the inspections occurring during daylight hours should be modified so that the General Permit does not cause industries to have to extend shifts during seasons with longer daylight or create new "daylight" shifts.

*The reference to monitoring occurring during daylight hours has be reviewed the reference to "during daylight hour shifts" has been removed.*

***Change in Final Determination:***
*The reference to "during daylight hour shifts" has been removed from the Visual Monitoring Appendix.*

- Combine Annual inspection and Quarterly Inspections for a total of four inspections.

*This is possible under the existing permit, although not required.*

- SHA inquired if the DECs can sign the quarterly inspections to meet the signatory requirement of Part II.C.2.?

*We agree that for SHA, the District Environmental Coordinators (DEC) that work out of SHA's Office of Environmental Design (OED) - Environmental Compliance Division (ECD) can sign the quarterly inspections. The change made in signatory requirements (under the NOI section of this response document) will further detail how that can happen by the changes made to the permit.*

## Regarding – Substantially Identical Outfalls

- MDE should also require facilities seeking to use the substantially identical outfall exception to benchmark monitoring to include studies or monitoring results.

*Comments about the use of substantially identical outfalls did prompt a review of the document. We believe that benchmark monitoring and visual monitoring are the best available methods for determining the effectiveness of control measures. We do leave it up to industry to make the best decision for their facility when identifying these outfalls. However, we do like the MSGP method of requiring that visual monitoring be rotated across the outfalls that are identified as substantially identical as a practice that is a good quality check of the assumption.*

***Change in Final Determination:***
*The final permit will now require that visual assessments or benchmark monitoring for substantially identical outfalls rotate through each outfall that is certified as substantially identical.*

- There was a request for clarification of the criteria used to determine substantially identical outfalls.

*A selection from the EPA's MSGP Monitoring Guidance is included below for additional clarification:*

*The substantially identical outfall exception can not be used if there is a difference in any of the following:*
*• The locations of the outfalls;*
*• Estimated size of the drainage area (in square feet) for each outfall;*
*• General industrial activities conducted in the drainage area of each outfall;*
*• Control measures being implemented in the drainage area of each outfall;*
*• Why the outfalls are expected to discharge similar stormwater; and*
*• An estimate of the runoff coefficient of the drainage areas (0.0 no runoff potential to 1.0 all precipitation runs off).*

*The runoff coefficient is the ratio of excess runoff to the amount of precipitation for a given time over a given area, with a 0 (zero) runoff coefficient meaning no runoff potential and 1.0 (one) meaning a completely impervious surface and all stormwater runs off. The runoff coefficient is related to the amount of impervious surfaces (buildings, pavement, sidewalks, etc.) versus pervious surfaces (grass, graveled areas, etc.) at the site. The more impervious surface a facility has, the larger the runoff coefficient. Light industrial facilities typically have a runoff coefficient between 0.50 and 0.80 and heavy industrial facilities typically have a runoff coefficient between 0.60 and 0.90.*

*Here is an example where a facility could take advantage of the "substantially identical outfalls" exception: a metal recycling facility with a large scrap metal pile has three separate outfalls that are each connected by their own drainage ditch to different portions of the same pile, and the runoff that is discharged is managed using the same type of control measure in each drainage area. In this scenario, the facility's operator can use the "substantially identical outfall" exception because the industrial activities at the site are all the same, the runoff flows through exposed areas that presumably contribute the same type of pollutants, and the drainage area has the same or similar runoff coefficients. Note that the substantially identical outfall exception could not be used if there were in fact differences in any of the required components defined above.*

- Part V(C)(1) refers to Part III(D)(2). There is no Part III(D)(2). Should the reference be to Part III(C)(2)(x) and (xi)?

*Correct.*

***Change in Final Determination:***
*Part V(C)(1) now refers to Part III(C)(5)(b)(iii) and (iv).*

## Regarding – Automated Sampling

- If automated sampling is used, does the sampling device need to be licensed?

*You don't need to be certified in sampling, and the device you use doesn't need to be licensed. However samples taken must follow the requirements in the permit. For benchmark monitoring, or monitoring required for local water standards that may be required by the Department, "the sampling and analytical methods used must conform to procedures for the analysis of pollutants as identified in 40 CFR 136 - "Guidelines Establishing Test Procedures for the Analysis of Pollutants" unless otherwise specified." Visual monitoring can follow the processes as prescribed in EPA's MSGP Monitoring Guide, available on-line at http://www.epa.gov/npdes/pubs/msgp_monitoring_guide.pdf. Any automated sampling devices must follow the same requirements.*

- Please clarify that automated collection systems are an accepted method to collect first flush samples under the General Permit.

*In the case of remote areas, where the permittee wants to use automated sampling, there is nothing in this permit that would exclude that. Automated collection systems are still subject to the recording requirements of all monitoring, detailed in Part V.C.8. of the permit.*

- One commenter suggested it may be dangerous to test a discharge that is in "rough riparian terrain".

*This may be another good case for automated sampling, or perhaps choosing a point prior to that terrain where it is safer for the personnel doing the work. The idea is to evaluate your discharges where stormwater has had contact with your industrial activities. If the only point where it is meaningful is in that rough riparian terrain, then consider options for monitoring there.*

- Are there any maximum holding times for the stormwater samples prior to observation?

*If using automated sampling, make sure it is appropriate for the pollutants you are checking for. Plastic tubing, for instance, is not suitable for oil & grease. The maximum hold times possible for samples to be valid will depend on the type of pollutant. Visual monitoring is best performed and documented during the event. For Benchmark Monitoring or when the visual sample is located in hard to get to location, EPA provides the suggestion that automatic samplers may be used to collect samples within the first 30 minutes, triggered by the amount of rainfall, the depth of flow, flow volume or time. The MSGP Monitoring Guide, available on-line at http://www.epa.gov/npdes/pubs/msgp_monitoring_guide.pdf provides holding times for benchmark monitoring. "Samples that cannot be delivered to the lab on the same day may need to be preserved, often by cooling to 4°C (i.e., in an ice bath) and/or with added chemical preservatives (laboratory supplied bottles may already include preservatives). If your samples need to be analyzed for more than one parameter you may need to bottle more than one sample at an outfall using different preservatives. In addition, you should be aware of the maximum holding time allowed for a particular parameter before which the sample must be analyzed." The hold times are listed in their manual in a table. For situations when automated sampling is performed for visual monitoring, it is our suggestion that the sample be evaluated within 24-48 hours.*

**Regarding – Influence of Run-on**

- Will permittees be held responsible for treating contaminants generated elsewhere?

*You are responsible for discharges from your facility. If there is run-on that you can document isn't meeting state standards and influencing your run-off, it is appropriate to get MDE inspectors involved to assist in identifying the other discharger impacting your facility.*

- It will often be difficult to discern whether contaminates have originated onsite, or have been introduced by offsite flows.

*An initial inspection of your site should yield potential sources of run-on that would be of concern, though it may take some time to separate your own stormwater influence from the outside influence of run-on. It is correct that discharge monitoring by itself will not identify sources from offsite, and potentially only the regular inspections of the site may identify these.*

*In the case of a neighboring facility that has runoff entering your property and then the storm drain, as long as it isn't contacting your industrial activities, this isn't part of what we are concerned for in this permit. However, if the run-on is coming into contact with areas of industrial activities, one of the practices recommended is diverting it around your activities so that it isn't picking up potential materials and then discharging.*

*The Design Manual does provide sizing advice and consideration of run-on. It is recommended that runoff from offsite areas be diverted away from or bypass ESD practices. However, if this is not feasible, then ESD practices should be based on all pervious and impervious areas located both onsite and offsite draining to them.*

- A County requests clarification on monitoring requirements where the only outfall discharge available consists of comingled discharges, such as a storm sewer pipe that is partially submerged in the receiving water body.

*In the case where your outfalls are mixed with those of other facilities, it is suggested that the runoff from your facility's industrial areas be evaluated before draining into the storm sewer where other facility's runoff exists.*

**Regarding – Snow Melt**

- When do you collect the snow melt due to the variation in melting times?

*The reason snow melt is measured in this permit, is that 40 CFR 122.26(b)(13) defines stormwater to include "stormwater runoff, snow melt runoff, and surface runoff and drainage." Therefore this requirement cannot be eliminated as suggested. As with all requirements, this applies at remote sites. Some additional background may help in determining when to use snow melt.*

*The following references to snow melt are important to understand the requirement. First, all of Maryland is subject to snow. The permit requires that "in areas subject to snow, at least one quarterly visual assessment must capture snowmelt discharge. The assessment should identify the date when the sample was taken." This provides a 3 month period for those covered to identify a day when snow melt may be happening. Additionally the permit requires "in the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs at your site." For BMPs that are effectively collecting, infiltrating or re-using snow melt, where there is no discharge associated with your industrial activity, the quarterly visual monitoring report may be filled out to indicate NO DISCHARGE.*

- We have not had significant snowfall in the past two years. How do we comply during these low event years?

*If there is no discharge, you do not have to take samples. You will either have rain instead of snow and visible discharges, or you will have no precipitation, and no monitoring.*

**15. <u>COMMENT CATEGORY – Benchmark Monitoring.</u>**

**Regarding – Including Selected Benchmarking Monitoring Requirements**

- Several comments suggested that selecting benchmark monitoring for only a few industries was either unfairly burdensome on certain industries, or hadn't gone far enough on others.

*The intent of the benchmarks is to ensure the facility operator in industries that are often identified as polluters understands if the measures they have chosen are protecting waters of the state. Since benchmarks are a new tool for this permit, the requirements were an attempt to most effectively implement them. We selected a subset of industries because our resources are limited and we want to focus where the attention is warranted. We used our best professional judgment to identify the sectors and to validate this section we reviewed data from our field inspections.*

*Data was pulled from our Tempo database, which from 2010 through 2012 contains, for each violation, the SIC code and whether the 02-SW permit was involved. The table below highlights visits to permittees from MDE inspectors due to concerns either voiced by neighbors or concerned citizens. Two sectors, Sector L, Landfills and Sector U, Food and Kindred Products, stand out as having high visits, but did not have benchmarks in the draft permit. With the addition of these categories, 81% of the industrial stormwater inspections based on complaints would have fallen into a category requiring*

*benchmark monitoring consistent with the MSGP. Therefore, it is particularly important that MDE adopt this change with respect to Sector L and U as this is among the sectors that were shown in EPA's "Review of Discharge Monitoring Report Data from the 2000 NPDES industrial Stormwater Permit Program," to exceed benchmarks more than half of the time at facilities that did not report zero discharge. The high correlation between these sectors and complaints justifies including benchmark monitoring for this selection of industries.*

*Sector A, Timber Products, which also appears in the table was not selected. The MSGP breaks this sector into 4 subsectors with multiple benchmarks, which when followed dilutes the basis for selecting the sector as a whole. Logically, the subsectors individually represent lower number of sites.*

**Table 1 - Summary of Inspection from 2010 to 2012 based on Complaints**

| % of Visits | Industry Sector | Benchmarks | # of Sites |
|---|---|---|---|
| 14.0% | SECTOR L: LANDFILLS, LAND APPLICATION SITES | MSGP* | 65 |
| 14.0% | SECTOR P: LAND TRANSPORTATION AND WAREHOUSING | None | 372 |
| 11.6% | SECTOR C: CHEMICALS AND ALLIED PRODUCTS | 12-SW and MSGP | 21 |
| 11.6% | SECTOR M: AUTOMOBILE SALVAGE YARDS | 12-SW and MSGP | 87 |
| 9.3% | SECTOR U: FOOD AND KINDRED PRODUCTS | MSGP* | 51 |
| 8.1% | SECTOR N: SCRAP RECYCLING FACILITIES | 12-SW and MSGP | 25 |
| 7.0% | SECTOR A: TIMBER PRODUCTS | MSGP | 39 |
| 3.5% | SECTOR T: TREATMENT WORKS | None | |
| 3.5% | SECTOR AA: FABRICATED METAL PRODUCTS | 12-SW and MSGP | 33 |
| 3.5% | SECTOR D: ASPHALT PAVING AND ROOFING MATERIALS AND LUBRICANTS | MSGP | 27 |
| 3.5% | SECTOR Q: WATER TRANSPORTATION | MSGP | 13 |
| 2.3% | SECTOR E: GLASS, CLAY, CEMENT, CONCRETE, AND GYPSUM PRODUCTS | None | 42 |
| 2.3% | SECTOR AB: TRANSPORTATION EQUIPMENT, INDUSTRIAL OR COMMERCIAL MACHINERY | None | |
| 1.2% | SECTOR B: PAPER AND ALLIED PRODUCTS | MSGP | 1 |
| 1.2% | SECTOR F: PRIMARY METALS | MSGP | 0 |
| 1.2% | SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES | MSGP | |
| 1.2% | SECTOR X: PRINTING AND PUBLISHING | None | |
| 1.2% | SECTOR Y: RUBBER, MISCELLANEOUS PLASTIC PRODUCTS, AND MISCELLANEOUS MANUFACTURING INDUSTRIES | MSGP | 3 |

***Change in Final Determination:***

*Benchmarks for Sector L: Landfills, Land Application Sites and Sector U: Food and Kindred Products have been added. The parameters and concentrations from the MSGP for these are listed below and are adopted in the final permit. We have also reviewed benchmarks that would be required for industrial sites that specifically addressed nutrients. We did this to make sure the permit is fully addressing nutrients. Based on this review, we found two industrial subsectors that had benchmarks for nitrogen, which had not been selected before. To address this we have added Subsectors C2 (Industrial Inorganic Chemicals*

*for SIC 2812-2819) and C3 (Soaps, Detergents, Cosmetics and Perfumes for SIC 2841 – 2844) Benchmarks for Nitrate plus Nitrite Nitrogen.*

| Sector L - Landfills, Land Application Sites. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities. | | |
|---|---|---|
| **Subsector (You may be subject to requirements for more than one sector/subsector)** | **Parameter** | **Benchmark Monitoring Concentration** |
| **Subsector L1**. All Landfill, Land Application Sites (Industrial Activity Code "LF") | Total Suspended Solids (TSS) | 100 mg/L |
| **Subsector L2**. All Landfill, Land Application Sites, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60 (Industrial Activity Code "LF") | Total Iron | 1.0 mg/L |

| Sector U - Food and Kindred Products. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities. | | |
|---|---|---|
| **Subsector (You may be subject to requirements for more than one Sector / Subsector)** | **Parameter** | **Benchmark Monitoring Concentration** |
| **Subsector U1**. Grain Mill Products (SIC 2041-2048) | Total Suspended Solids (TSS) | 100 mg/L |
| **Subsector U2**. Fats and Oils Products (SIC 2074-2079) | Biochemical Oxygen Demand ($BOD_5$) | 30 mg/L |
| | Chemical Oxygen Demand (COD) | 120 mg/L |
| | Nitrate plus Nitrite Nitrogen | 0.68 mg/L |
| | Total Suspended Solids (TSS) | 100 mg/L |

**Table 2 - Subsectors C2 (Industrial Inorganic Chemicals for SIC 2812-2819) and C3 (Soaps, Detergents, Cosmetics and Perfumes for SIC 2841 – 2844) Benchmarks**

| PARAMETER | Benchmark | Units | Frequency | Sample Type |
|---|---|---|---|---|
| Nitrate plus Nitrite Nitrogen | 0.68 | mg/L | 4/year | Grab |

- Even where MDE does require benchmark monitoring, the requirements are inadequate. Although benchmarks are not effluent limits, the final permit should reiterate that any benchmark exceedance that also causes or contributes to a violation of WQS is a permit violation.

*The permit states that "if you are covered under this permit, a stormwater discharge to waters of the State that contributes to a violation of a water quality standard is a permit violation and subject to corrective actions." The commenter also cites "the tiny number of industry sectors subject to benchmarks" as a reason to suspect that this monitoring will not be effective. At this time we believe that the industries targeted, which would have addressed a majority (86%) of the industries involved in complaint driven visits by MDE inspectors, as sufficient evidence to say the benchmark monitoring is applied to the appropriate grouping and while smaller than the whole, addresses a large share of*

*concerns by the community. The additional requirements for control measures for all industrial stormwater coverage, restoration requirements, industry specific guidance and requirements, and addition of identifying specific impaired watersheds for additional measures will address the larger set of concerns.*

- Allowing permittees to stop monitoring if they do not violate a benchmark after 4 averaged quarters does not make sense given the sporadic nature of stormwater discharges.

*MDE does propose to use the MSGP standard for monitoring frequency and allow the same out if the permit registrant meets the requirements for 4 sampling periods to get out of further obligations. Our main concern is not to create work for facilities with exceptional stormwater controls, but to make sure facilities that are subpar will identify and address the weakness and further verify that they are working with continued testing.*

- MDE should require specific documentation, and establish the presumption that background pollutant levels are zero until a permittee demonstrates elevated background levels with relevant data and studies.

*Comments received about the consideration of natural background pollutants were reviewed. The Department had taken the lead from the MSGP in allowing for this exception, and agrees with that practice. The request to require additional documentation with the SWPPP as referenced in EPA, Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) – Fact Sheet at 108-09 referenced wording from the Alaska Department of Environmental Conservation (ADEC. 2006) Guidance for the Implementation of Natural Condition-Based Water Quality Standards – July 17, 2006 Draft. Although considered in the MSGP, these SWPPP requirements were not in the actual permit itself. The Department again prefers to follow the MSGP in this case. We believe that the requirements for notifying the Department is cases where this exception is used will provide the opportunity to review the reasoning and make a decision on if continued testing is justified.*

- Several errors in the cross reference in the document were noted.

*Agreed.*

***Change in Final Determination:***
*The corrections have been made as follows:*
*The second sentence of Subsection B "Industry Specific Benchmarks Monitoring Requirements" reference the effluent limitations from "Part II.B.1" to "Part III.B" of the Permit.*
*Subsection B.3.b.ii of the draft permit reference of the water quality based effluent limitations from Part II to Part III.B.*

## Regarding – Hardness Dependent Metals Clarification

- There were concerns that the default hardness for the metals selected for benchmark monitoring were worst case, that is the lowest hardness level, instead of the more commonly used default of 100 mg/L.

*Reviews of neighboring states and comments regarding the use of hardness have been useful in evaluating the practices proposed. The industries chosen for this monitoring are important to the state. The goal of this permit is to provide a level playing field that lets industry know the requirements and protects waters of the state.*

*The benchmark values for lead, zinc, and copper are hardness dependant. The comments suggest that this will cause uncertainty in developing a plan. Based on these concerns, we will take the same approach as Maryland's water quality standards where COMAR lists the specific numerical criteria based on a default hardness of 100 mg/l, but still require that the site evaluate hardness of the receiving waters to understand site specific requirements. This recognizes the data where hardness for streams is commonly found to be in the range of 100 mg/L, however provides for specific cases where it may be lower or higher.*

***Change in Final Determination:***
*The corrections have been made as follows:*
*The Benchmark values are set at the default hardness of 100 mg/l for copper at 0.014 mg/L, lead at 0.082 mg/L and zinc at 0.12 mg/L.*

## Regarding – Unobtainable for Industry

- The benchmark requirements are unreasonable and unobtainable. The Baltimore City drinking water would not meet these benchmarks.

*We are required to protect various uses of water. The uses include basic swimmable and fishable goals of the Clean Water Act. They also require protection of human health in certain cases. We refer to COMAR for our standards, which are largely based on EPAs criteria for many known pollutants. The example of copper was given to explain how stringent the standards are for the benchmarking. The table provided shows the basic criteria in COMAR for several metals. What this shows is that some substances, such as lead, have a more severe impact on humans, as the criteria for human drinking water is 15 micrograms per liter, where as the impact on aquatic life for lead is 65 micrograms per liter for acute effects. Copper however is less toxic to humans with concentration up to 1300 micrograms per liter allowed in drinking water, where aquatic life is impacted at just 13 micrograms per liter. When EPA evaluated the benchmarks they took the protection of aquatic life into account, which would be expected for a permit like this.*

| | Aquatic Life (μg/L) | | | | | | Human Health for Consumption of: | | |
|---|---|---|---|---|---|---|---|---|---|
| | Fresh Water | | Estuarine Water | | Salt Water | | Drinking Water + Organism (*μg/L*) | Organism Only (*μg/L*) | Drinking Water MCL (mg/L) |
| Substance | Acute | Chronic | Acute | Chronic | Acute | Chronic | | | |
| Lead[1] | 65 | 2.5 | | | 210 | 8.1 | | | 0.015[c] |
| Copper[1] | 13 | 9 | 6.1 | | 4.8 | 3.1 | 1,300 | | 1.3[c] |
| Zinc[1] | 120 | 120 | | | 90 | 81 | 7,400 | 26,000 | |

*Baltimore's water is tested and the results are provided below.*
*"Lead and copper testing was last required by regulatory standards in 2009. During that year, the testing involved 53 "tier 1" or high risks homes. To determine compliance, the 53 test results were arranged from the lowest value to the highest. The 90th percentile value is identified by: 53 x 0.9 = 47.7. Therefore, the 48th value, arranged from lowest to highest, must be below the "action level" for lead and copper. Our system met this compliance standard. Testing will be required again in 2012."*

| LEAD AND COPPER TESTING RESULTS (2009) | | | |
|---|---|---|---|
| SUBSTANCE | ACTION LEVEL | 90TH PERCENTILE | SAMPLE RESULTS GREATER THAN ACTION LEVEL |
| LEAD | 15 ppb | 7.6 ppb | 2 |
| COPPER | 1,300 ppb | 357 ppb | 0 |

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Baltimore is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

**Table 5 - Subsector N1 Benchmarks (Scrap Recycling and Waste Recycling Facilities)**

| PARAMETER | Benchmark | Units | Frequency | Sample Type |
|---|---|---|---|---|
| Chemical Oxygen Demand (COD) | 120 | mg/L | 4/year | Grab |
| Total Suspended Solids (TSS) | 100 | mg/L | 4/year | Grab |
| Total Recoverable Aluminum | 0.75 | mg/L | 4/year | Grab |
| Total Recoverable Iron | 1.0 | mg/L | 4/year | Grab |
| Total Recoverable Lead[1] | 0.082 | mg/L | 4/year | Grab |
| Total Zinc[1] | 0.12 | mg/L | 4/year | Grab |
| Total Recoverable Copper[1] | 0. 014 | mg/L | 4/year | Grab |

[1] The benchmark values of some metals are dependent on water hardness. For these parameters, you must determine the hardness of the receiving water per Appendix C.

*The table above including benchmark values for Subsector N1 is included to show how the elements of concern for drinking water, lead and copper, compare to the results for Baltimore City water. Lead is measured at 7.6 ppb, aka 7.6 ug/l, in drinking water, and the benchmark is 82 ug/l. For copper, drinking water measures 357 ug/l, much higher than the benchmark of 14 ug/l. In this case the water has passed over substantial lengths of copper piping. However, drinking water standards for copper are for human health, and humans can consume higher concentrations of copper than aquatic organisms in the stream or creek that stormwater will discharge into. The standards are based on the use of the water.*

*Based on data gathered by EPA for multiple permits over years of experience, these benchmarks are obtainable with effective controls. The Department queried other states on their analysis of Benchmark Monitoring. New York responded with their analysis showing the results for zinc across multiple industries. They found that 70% of the industries were able to meet the benchmark with their existing controls where the other 30% needed to address through corrective action.*

*The following is from EPA's fact sheet that established these benchmark concentrations. "Based on DMR data reported under previous permits, EPA believes that most facilities with effective control measures can meet these targets. Monitoring data suggest that the proposed benchmarks are achievable in general for the industries to which they will apply, although some facilities may need to make improvements to their controls to meet these benchmarks. Facilities may also demonstrate that exceedances are due to natural background, or that discharges cannot be further minimized if they believe this is the case…The process that EPA followed in selecting the benchmark values for this permit is as follows: Step 1: Use the promulgated acute criterion value; Step 2: If no EPA acute criterion exists, use the chronic criterion; Step 3: If neither acute nor chronic criteria exist, use data from runoff studies or technology-based standards to establish a benchmark."*

- How do you deal with potential of background condition less than the benchmark, but high enough to put the site over the limit?

*This would still be an exceedance of the benchmark.*

- Is exceeding a benchmark due to inflow from a neighbor considered a benchmark exceedence?

*Yes. Corrective action would be required to deal with the pollutant, which may involve notifying MDE inspector of a neighbor who is causing issues. It isn't considered a natural background condition.*

- Is exceeding a benchmark due to air deposition considered a benchmark exceedence?

*Yes, because air deposition is not considered a natural source of background pollutant.*

## Regarding – Sampling Frequency

- Several comments mentioned that neighboring states had less frequent monitoring.

*Some of the information provided by commenters isn't entirely correct. None of the surrounding states provide yearly benchmark testing. Effluent Limitation Guidelines are yearly, but benchmarks are either 2 or 4 times a year. It is clear that Pennsylvania, Virginia, Delaware and West Virginia require monitoring twice a year, where as Washington DC requires the monitoring four times a year. Virginia was once every 6 months, and provided an early out waiver for facilities that easily meet benchmark results. However, the EPA requires quarterly monitoring and the Department is imposing the same requirement to be no less restrictive than the MSGP.*

- Are substantially identical outfalls supposed to be available to Benchmarking?

*Yes. This was overlooked, as it was in the MSGP.*

***Change in Final Determination:***
*Substantially Identical outfall was added to the permit for benchmarking*

## Regarding – When does Benchmark Monitoring Start and End?

- Benchmark monitoring had several confusing statements regarding when it was to actually start.

*This section did have a conflict and caused confusion. Since this schedule has a relationship to the reporting of the monitoring, refer to the NetDMR section under Reporting Requirements, below, for more detail and actual changes.*

## 16. COMMENT CATEGORY – Reporting Requirements.

### Regarding – General Reporting Requirements

- It is imperative that the final permit include increased water quality monitoring, reporting, and public transparency.

*The permit is a significant step forward regarding reporting and transparency. With online access to benchmark DMR data, the Department and citizens will be able to see if the permittees are reporting their data as required. In cases where specific numeric criteria are assigned, results will also be viewable. They will also see what the results of benchmark testing are for a specific facility. In addition, the Department will receive a restoration report one year prior to the permit end date, which will be used to recalibrate the model and to evaluate progress towards meeting the TMDL. The increased water quality monitoring, reporting, public transparency, and maintenance requirements added will have a significant impact on pollution in the state.*

- Draft Permit fails to include any real reporting requirements.

*Several comments seem to infer that the Department is not made aware of violations because the reporting section of the permit doesn't require enough or adequate reports to be sent to the Department. What this comment neglects to acknowledge, is that in addition to benchmark and water quality monitoring that will be submitted, and the restoration plan update, is the number of notifications required, not as reports, but as actual phone calls or letters into the Department. Those covered by the permit must contact the Department in the following cases:*
*Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40 CFR.*
*If you make a determination that no further pollutant reductions are achievable.*
*If the benchmark exceedances are attributable solely to natural background pollutant levels.*
*If at any time you become aware, or the Department determines, that your discharge causes or contributes to an exceedance of applicable water quality standards.*
*We also added a Corrective Action Deadline requirement to call the Department when you cannot address a deficiency with 30 days.*

***Change in Final Determination:***
*A report must be filed to the Department at the end of one year of benchmark monitoring, if the all requirements have been met and they want to stop monitoring. This reporting requirement was added in order to get closure, but also to provide positive feedback that they had met the permit requirements.*

- MDE should revise Appendix B (Visual Monitoring Form) to include fields for more specific information on what procedures were followed during the monitoring.

*The monitoring form cannot include all instruction on appropriate monitoring technique, such as what type of container the sample was collected in or whether the collector wore gloves during sample collection, etc. This information would need to be part of employee training (Part III.B.1), and included as a procedure in the SWPPP (Part III.C.5.b.i).*

**Regarding – Restoration Reporting**

- Additional time requested to submit a progress report on your restoration plan.

*Based on the overwhelming number of responses requesting time to develop a strong and implementable restoration plan, this requirement has been changed.*

***Change in Final Determination:***
*A copy of the required restoration plan must incorporated into the SWPPP and be submitted with a complete NOI to the Department no later than one year after the permit effective date.*

- The final permit should emphasize the operation and maintenance requirement for all restoration or best management practices (BMPs) and control practices installed pursuant to its terms, and require confirmation that maintenance is being performed in reporting to the Department.

*Maintenance of controls is an important element of the permit. The suggestion to add maintenance of all restoration onsite control measures be reflected in the permittee's annual report is a good suggestion and will be included.*

***Change in Final Determination:***
*We added routine maintenance and inspection of all restoration BMPs as part of the items to consider for the steps required for restoration planning, and this is required to be incorporated into the SWPPP. We included confirmation of the last comprehensive site compliance evaluation report as part of the restoration reporting one year prior to the end of the permit. Inspection of the BMPs is required as part of that evaluation, which confirms that they have complied with the yearly evaluation.*

- What is a sufficient restoration plan?

*The plan details will now be part of the SWPPP, and specific directions to follow have been added to the permit language, so that there is no confusion on the Department's requirements.*

*The yearly requirement for restoration reporting has been replaced with a report one year prior to the end date of the permit. This report will provide the Department a status of the nutrient reduction. This report will be a one page, easily mailed summary of your plans. This is to provide the Department status on the efforts and for our use in evaluating progress for the Bay TMDL. We modified the report, still found in Appendix F, so that the information we need will be clearly called out. We will also still request a summary on the report. Language such as this would be expected. "We are addressed our restoration by adding a cistern to capture 2000 gallons of stormwater from our roof (project A), a bioretention facility to the facility parking lot (project B) and we worked with the County to assist in upgrading a pond for the adjacent HOA (project C). All work has been successfully completed and certified."*

***Change in Final Determination:***
*We have provided more specific steps in the planning process and clarified what MDE expects in the submitted restoration report.*

- Do all permittees need to file the restoration plan?

*All applicants who meet the requirements for restoration will be required to address nutrient reduction control measures in the SWPPP and to prepare the report one year before the end date of the permit. This is to account for the actual treatment at these facilities, as input for the model recalibration. We took great care to make sure there is no double reporting or accounting of these activities. MS4's who are covered under this permit, they would report through that MS4 permit. If the work had been completed and the facility was already up to appropriate treatment standards, this should be indicated on the form. The form in Appendix F has been updated to clarify this by providing instructions on how to file if it is completed or up to standards as defined in the permit. If you qualify for the Chesapeake Bay Restoration requirement, however based on the date and capacity of your controls do not have any additional work to complete, your report and plan can be very straight forward and certify that for consideration in the 2007 Chesapeake Bay model.*

***Change in Final Determination:***
*We added instructions on Appendix F on who needs to file, and what to file if the site's restoration is completed.*

- The restoration report should include if the restoration was completed onsite or offsite.

*Agreed. The specific location of all restoration activities (i.e. whether onsite or offsite, the receiving stream segment, etc.), are included in a map with the SWPPP. However, this onsite/offsite indication was added as an item to included in the restoration reporting..*

***Change in Final Determination:***
*A confirmation if all restoration was completed onsite was added in the restoration reporting documentation.*

- We suggest that MDE eliminate the duplicate annual reporting for tracking General Permit compliance that is within our current MS4 permit.

*We have eliminated this duplicate reporting by requiring that restoration for MS4's be performed and reported under the MS4 permit, and not under the 12SW. .*

## Regarding – NetDMR

- Additional clarification was required on reporting for Benchmark Monitoring and when NetDMR is available for on-line reporting.

*The wording was confusing, and has being addressed in the final.*
*The first thing noticed was that the reference section numbers didn't match intended section. That has been corrected specifically in Part V.B.4.b.*
*The permittee is required to submit the request for access to the NetDMR system within one month of authorization under this permit. This is to allow adequate time for the Department and applicant to work on set-up and training to use this tool.*
*Monitoring begins the first full quarter 6 months after registration. This provides time for the review and implementation of control measures and verification of the outfalls on the site.*
*Reporting begins 30 days following the monitoring period. By that time, NetDMR will be available for and understood by the permittee.*
*We also provided clarification that the permittee must notify the Department if they are eligible to discontinue benchmark monitoring.*

***Change in Final Determination:***
*Part V.B.4.b. was modified to clarify the correct reference.*
*Part V.B.4.a has been modified to clarify when you must apply for access to NetDMR.*
*We clarified that Benchmark Monitoring is to begin the first full quarter after you are registered under the permit in Part V.B.2. This section was also modified to clarify when the monitoring is to begin.*
*We have specified that after one year of monitoring the permittee must notify the Department if they are eligible to discontinue benchmark monitoring based on meeting the permit requirements, or will provide the corrective actions they are taking to try meet the requirements in the future.*

- The user-friendliness of the NetDMR should be enhanced to allow for maximal accessibility.

*We envision some confusion on how to use the NetDMR system. To address this, the system does have on-line training, as well as opportunities to take training via webinar. We have added an out for those who just cannot get access to perform reporting electronically, but highly encourage all to use the tool.*

- MDE should commit to report all benchmark Discharge Monitoring Report (DMR) data to EPA's Enforcement and Compliance History Online (ECHO) database.

*ECHO (http://www.epa-echo.gov/echo/index.html)is available to the public and contains everything reported either manually by the Department through the Integrated Compliance Information System (ICIS) about every facility, or directly by the permittee through NetDMR.*

## 17. COMMENT CATEGORY – Corrective Action Requirements.

- A commenter found Part III C.3.d redundant with Part IV.

*These sections are not redundant. Part III C.3.d required documentation of non-stormwater discharges, in the SWPPP. Part IV requires that corrective action be taken if an unauthorized non-stormwater discharge occurs. These could be discharges such as vehicle washing. If you determine you have this activity onsite, you must document that you acknowledge it exists and the action used to eliminate it, such as "a floor drain was sealed, a sink drain was re-routed to sanitary, wash water is collected and hauled away, or an NPDES permit application was submitted for an unauthorized cooling water discharges." This is typically found at the time of the permit application.*

- Please specify what corrective actions will be taken by MDE inspectors, and whether the end-of-outfall discharge or the pre-inlet conditions trigger corrective actions.

*With regards to what corrective actions will be taken by MDE inspectors, the Department will use a few different factors to prioritize site visits. We will continue to use citizen involvement as one trigger for a site visit. We will also use size, potential to impact watershed, and impaired waters as another way to determine or prioritize which sites are visited. Continued discharge monitoring reports exceeding the benchmark thresholds will be another. Whether the end-of-outfall discharge or the pre-inlet conditions trigger corrective actions is site specific. If pre-inlet conditions are used for the visual monitoring at a site, then the end-of-outfall discharge should be more likely to meet requirements as well. The closer you get to the source of pollutants the more likely you will be able to determine if you have issues that need to be addressed. Using end-of-outfall is the ultimate test of your facilities control measures. This is certainly what may trigger water quality issues in the local stream, or to get complaints from neighbors. The monitoring in the permit is ultimately for the permittee to use to determine if the control*

*measures are adequate. The bottom line is to use your best judgement in setting up your monitoring, and when figuring out when a trigger for a corrective action should take place.*

- Part IV.A should be amended to provide for the review and revision of the control measures only "if necessary" following the occurrence of a triggering event, suggesting that an Act of God be considered for the permit as relief for a corrective action.

*That is hard to implement. For example, some may argue that rain itself is an Act of God. However, more extreme events such as a hurricane may have caused dumpsters to tip or lightning caused power to go out. In the case of an event that triggers a corrective action, the Department would take that into account in any enforcement action; however it would still require an action to be taken. For instance in the hurricane situation, it may be necessary to secure dumpsters in future hurricanes, or if power is lost and results in some type of discharge, this must be considered and address in the corrective action. It was also suggested that a revision to the control measures by only as necessary. This is hard to implement as well. If all control measure are working and there is an indication through visual monitoring or local water quality impacts, then we would suggest that the control measures are not sufficient and need to be addressed.*

- It is important that the burden to comply with WQS be placed upon the permittee rather than placing a burden on MDE or another party to inform the permittee of discharges that cause exceedances of the WQS.

*The permittee must understand if their discharge is causing local water quality issues. If the Department becomes aware of local impairment and wants to direct the permittee to make changes, this wording allows for that as well.*

- Fourteen days may not be enough time to document a corrective action.

*We feel this is sufficient time to take care of the items requested. The wording for the MSGP and the final permit take into account that there may be design or alterations required that take more than 14 days, but what should be documented is the plan to address the issue.*

- MDE and citizens are not notified by the permittee of required corrective actions or their updates. The permit should require the permittee to inform MDE as soon as possible after corrective action is taken, certainly within 30 days. A permittee may go indefinitely without notifying the Department there is a problem.

*These comments make valid points. We will include a notification to the Department so that we will not go indefinitely with a problem without a notification. We will require a phone call if a deficiency cannot be addressed in the 30 days.*

***Change in Final Determination:***

*A requirement that the Department must be notified if a deficiency cannot be addressed fully within 30 days has been added to the 12-SW Corrective Action Deadlines (Part IV.C)*

- The Draft Permit must be revised to achieve consistency among the deadlines for the following: (1) corrective action of conditions listed under Part IV.A; (2) corrective action arising from a routine facility inspection; and (3) corrective action after a comprehensive site compliance evaluation.

*These three were contradictory and have been updated in the permit.*

***Change in Final Determination:***
*Part V.A.1. and V.A.2. now refer to Part IV.C for corrective action reporting deadlines.*

- The final permit should require that annual reports and associated documentation be submitted to MDE.

*The permittee is required to include all corrective action reports as part of the annual report with the SWPPP. The intent of the annual report is for the team involved at the facility to understand the stormwater controls and their performance. This is not for the Department to understand the facility. The Department is not requesting that this be provided, but requires it to be kept onsite as evidence that the permittee is evaluating the facility annual.*

## 18. COMMENT CATEGORY – Annual Evaluation.

- The 30 day timeline is an insufficient amount of time to revise and update the SWPPP if required by the Annual Evaluation. Can we accept changes will take 60-90 days?

*This extension is not acceptable because there could be many storm events during a 60-90 day window, leading to continued pollutants leaving the facility. If a quick fix cannot be put in place, then immediate temporary measures may be required, and ultimately a longer term fix put in place. Document these changes immediately in your SWPPP. One of the reasons we are requesting the SWPPP electronically is to make sure you have this available for your own modifications when necessary.*

- More time is required to change maps which may need to be modified by an external firm.

*For purposes of the SWPPP, using pencil or pen to mark-up the map with the planned changes is sufficient within the timeframes provided, and can be replaced later when the contractor or engineer provides an updated map.*

- The final permit must clarify whether the "comprehensive site inspection" identified in condition 5 under Part IV.C is the same as a comprehensive site compliance evaluation discussed in Part V.A.2.

*Agreed. We added the reference.*

***Change in Final Determination:***
*A cross-reference was added to Part IV.A.5 specifying that condition 5 under Part IV.C is the same as a comprehensive site compliance evaluation discussed in Part V.A.2.*

## 19. COMMENT CATEGORY – Change in Discharge.

- Please define 'significantly' in conditions requiring review to determine if modifications are necessary, as in "significantly changes nature of pollutants" and "significantly increases pollutants."

*The term significantly indicates expected pollutant concentrations that would exceed the States Numeric Criteria for Toxic Substances in Surface Waters (COMAR 26.08.02.03-2), or increase pollutants that are identified in local water impairments or established TMDLs.*

- There was a comment regarding Part II.F. Change in Discharge, which included requiring that facilities report "other" facility modifications what would not result in violations.

*Upon review the Department determined that the wording was confusing and when compared with the MSGP did go beyond the Department's intent. Part II.F was modified using the MSGP as a template.*

***Change in Final Determination:***
*Part II.F. was replaced with language from the MSGP, and has been added to Part II.F.*

## 20. COMMENT CATEGORY – Provide clear feedback.

- Due to the importance of this regulatory proposal, both in terms of ensuring water quality is protected but also ensuring that the final mandates are cost effective for the regulated entities, many requests were made that MDE prepare and make available for public review a Response to Comments document.

*This response document attempts to respond to all comments received.*