



Protecting Stormwater Best Management Practices During Their Construction: Questions and Answers During the September 28, 2023 Presentation

The following questions were discussed during the presentation on September 28, 2023, by the Maryland Department of the Environment (Department) Stormwater, Dam Safety, and Flood Management (SDSFM) Program. Guidance was provided on how to protect the footprint of stormwater BMPs from sediment-laden runoff and construction traffic prior to, during, and after excavation. This document provides additional information to the full guidance document and video recording available on the Department's website at:

mde.maryland.gov/programs/water/StormwaterManagementProgram/Pages/erosionsedimentcontrol.aspx

What methods are recommended to avoid sediment contamination of stormwater BMPs?

Site conditions and logistics will influence the selection of best diversion method for any given scenario. Ideally, these BMPs will not be constructed until the drainage area is fully stabilized and will not contribute any sediment load to the facility. If this is not practical, then runoff from areas that are not stabilized must be diverted away from or around the facility using an impermeable material. It is acceptable to install Diversion Fence (see Detail C-9 in the *Maryland 2011 Standards and Specifications for Soil Erosion and Sediment Control*) or another clearly defined diversion method. Silt fence or other geotextiles are pervious, and therefore do not provide the necessary protection as they will allow fine soil particles to pass through and contaminate the facility.

Is a stormwater BMP sufficiently protected by installing sod on the side slopes along with silt fence, super silt fence, or equivalent around the footprint? Is it sufficiently protected by installing permanent seed, straw, and tack outside the facility along with silt fence, super silt fence, or equivalent?

These controls would not meet the intent of diverting sediment-laden runoff around the practice. Fine particulates will pass through the silt fence geotextile as well as any geotextile placed over the media. A diversion allows no runoff into the facility.

Since drywells are considered an infiltration practice, is it expected that heavy machinery must be kept off the area around a house during construction?

Yes, depending on the depth of the drywell and the in situ soils.

Are submerged gravel wetlands considered a filter?

Yes, submerged gravel wetlands are horizontal flow filters that must be protected once installation of the filter media has begun. While this BMP provides treatment of runoff via biological processes within the gravel media, the forebay as well as the planting soil and other media layers do provide a mechanical filtering component that will be compromised by introduced sediment. Runoff must be able to freely flow through the media to ensure full treatment performance is obtained. Clogging of the media at any level will compromise this flow and the design intent of the BMP, resulting in loss of treatment efficacy.

Should plan reviewers for erosion and sediment control require any language in the sequence of construction that prohibits heavy equipment from being used within the footprint of stormwater BMPs throughout the construction process?

The Department strongly recommends that plan reviewers require notes detailing where and when protection is required.

Does failure to divert sediment laden runoff around a proposed filtering practice constitute a violation?

It is expected that as this issue is identified on plans that are either under review or approved, the plans will be revised to require proper diversion methods for all filtering BMPs. When this issue is identified on site, the inspector shall contact the plan review authority and discuss the appropriate solution to implement. Plan modifications may be needed as well.

Will this issue be regulated and enforced by the Department?

This guidance currently exists in the *2000 Maryland Stormwater Design Manual*. It is the responsibility of the local plan approval authority and the local inspection and enforcement authority to enforce this issue to ensure adequate stormwater management is provided.

Will the Department develop further training regarding this issue?

The video presentation, forthcoming guidance document, and the questions answered here may be shared publicly. Please contact the Stormwater, Dam Safety, and Flood Management Program if you have further questions.