

Ben Grumbles Secretary

# **Innovative Sediment Control Practice Review Checklist**

Name	Date Received
Manufacturer/Representative	email
Street Address	Phone Number

City/State/Zip

The Maryland Department of the Environment (MDE) requires that a formal request and accompanying specifications be submitted to Amanda Malcolm, Water Management Administration (WMA), <u>amanda.malcolm@maryland.gov</u>, to initiate the review process for innovative sediment control practices. A product application for MDE's review should include:

A letter introducing the practice: This should provide an overview of the practice's features and intended use, a brief comparison of the practice to others currently in use (if applicable), a history and/or development narrative for the practice, and any other information the applicant would like to convey about the product.

**Standards and Specifications for the practice:** These should follow the same format as the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control (the Handbook) and provide:

#### **Definition**

Include a brief description of the practice and instructions on how it will be used. The description should explain the proposed use and identify whether the practice is comparable to a standard sediment control practice listed in the Handbook.

#### Purpose

Describe the objective of the practice.

# Conditions Where Practice Applies

State the site location or situation where the practice would be used.

# Design Criteria

List all applicable criteria relating to and defining appropriate site location, application, site conditions, general constraints, sizing, materials, etc. Depending on the practice this could include limitations on contributing drainage areas, slopes, lengths, flow rates, volumes, etc.

#### Maintenance

All sediment control practices require maintenance. Detail the necessary maintenance and frequency.

# Construction Drawing

Provide standard construction drawings of the practice including a plan, section, and/or isometric views.

## **Construction Specifications**

Provide direction to the contractor on how to properly install the practice in a sequence format.

## Material Specifications

Depending on whether the innovative practice is manufactured as a unit or built on-site, the extent of the material specifications will vary. At a minimum, a material specification shall be provided for all filtering components such as geotextile. Additional material specifications that are necessary for proper construction should be described and be at least as stringent as existing similar practices in the Handbook.

**Supporting documentation:** this will include, when applicable: design calculations, photographs, laboratory and field testing results, journal articles supporting innovative theories, approval documentation from other agencies, and any other material necessary to support the practice claims.

**MDE initial review:** After reviewing the product information, MDE will provide feedback in the form of a comment letter possibly requesting additional information or recommendations for additional provisions. When making a satisfactory determination, MDE will issue a one-year provisional approval. The provisional approval will allow the practice to be used on a trial basis. During this one-year provisional approval period field implementation and monitoring will be required.

**Monitoring requirements:** Field monitoring results are needed to support performance claims; laboratory testing is not acceptable for full approval. The objective of the field monitoring is to test the effectiveness of the innovative Practice under natural conditions and where applicable compare its performance with a comparable MDE standard sediment control measure. The monitoring needs to occur on an actual construction site and will require cooperation from the appropriate approval authority. A monitoring plan fully describing the procedures must be developed and approved by MDE prior to commencing. The following information is required:

- □ Information on the proposed site, including the names of the owner/developer and contractor, the address, the size of the project, and a copy of the relevant sediment control plan sheets.
- A plan indicating the proposed location of the innovative sediment control practice and a

comparable approved sediment control practice.

- □ A monitoring schedule of the field installation. At least six months of field implementation is required and at least 12 storm events must be monitored during this time.
- □ The total drainage area to the practice, the disturbed area draining to the practice, the slope of the drainage area, and slope of the practice, and any other applicable site conditions.
- □ Details on the monitoring protocols and a companion checklist that includes: the date of the storm; the storm size in rainfall inches; the date of the site inspection (must be within 24 hours); the condition of the drainage area (active grading, unstabilized, mulched, vegetated, paved, etc.); written descriptions of the visual inspection of the innovative practice and comparison to an approved sediment control practice; photos documenting performance of both practices; and an evaluation of the effectiveness (bad, fair, good, excellent) of both practices.
- □ Sign-off from the local approval authority or enforcement agent confirming the practices's effectiveness and accuracy of the monitoring results.
- □ Back-up sediment control procedures to be implemented immediately should the innovative practice fail. Nothing in MDE's provisional approval of an innovative practice exempts the applicant from the enforcement of Maryland's environmental laws.

**MDE final approval:** Upon determining field implementation to be successful, MDE will issue a letter approving the innovative practice for use in Maryland.