

# FACTS ABOUT ...

# Maryland's Stormwater Program & Proprietary Practices

**Nonpoint Source Pollution** has a great impact on the quality of Maryland's waters. Stormwater management practices help control nonpoint source pollution through various techniques that intercept, filter, and treat runoff from developed areas. The Maryland Department of the Environment's Water Management Administration (MDE/WMA) recognizes that new structural best management practices (BMPs) are being developed, including many proprietary designs. This Fact Sheet provides additional guidance concerning the use of proprietary practices within Maryland.

What are Maryland's Rules? The Maryland Department of the Environment (MDE) has adopted new stormwater regulations [Code of Maryland Regulations (COMAR) 26.17.02] including the 2000 Maryland Stormwater Design Manual, Vol. I & II<sup>1</sup> (the Manual). These regulations represent a more comprehensive approach to stormwater design. Recognizing the importance of environmentally sustainable design, Maryland has developed fourteen performance standards that must be met at development sites. These standards, found in Section 1.2 of the Manual, apply to any construction activity disturbing 5,000 square feet or more of earth. While providing incentives for nonstructural practices, these performance standards also address the design of structural BMPs to mitigate water quality and channel stability impacts.

Is There a List of Approved Practices? Currently, the different structural BMPs used in Maryland are assigned into five general categories for stormwater quality control. Chapter 3 of the Manual outlines performance criteria based on general feasibility, conveyance, pretreatment, geometry, environmental and landscaping requirements, and maintenance concerns for these five groups. BMPs that may be classified into one of these five groups may be used as stand-alone water quality devices if designed and constructed in accordance with the methods and specifications detailed in the Manual.

#### Stormwater Ponds

- Micropool Extended-Detention (ED) Ponds
- Wet Ponds
- Wet ED Ponds
- Multiple Pond Systems
- "Pocket" Ponds

### Stormwater Wetlands

- Shallow Wetland
- ED Shallow Wetland
- Pond/Wetland System
- "Pocket" Wetland

#### Stormwater Infiltration

- Infiltration Trench
- Infiltration Basin

#### Stormwater Filtering Systems

- Surface Sand Filters
- Underground Sand Filters
- Perimeter Sand Filters
- Organic Filters
- Pocket Sand Filters
- Bioretention

#### **Open Channel Systems**

- Dry Swale
- Wet Swale

Structural BMPs that may be used for "stand-alone" water quality treatment in Maryland

What about practices not listed in Chapter 3? Section 2.7.2 of the Manual provides examples of some of the BMPs that do not meet the criteria for stand-alone treatment of the required water quality volume ( $WQ_v$ ). Some of these practices include catch basin inserts, dry extended detention ponds, water quality inserts, oilgrit separators, hydrodynamic devices, and street sweeping. While these and other devices do not meet the WQ<sub>v</sub> performance standards, there may be instances where their use would be appropriate, depending on the application. "In some cases, these practices are appropriately used for pretreatment, to meet recharge volume ( $Re_v$ ) requirements, as part of an overall BMP system, or...in redevelopment situations..." (the Manual, pg. 2.40). Additionally, WMA believes that these devices may be used effectively in certain retrofitting situations. What this means is WMA has no objections to the practices used for redevelopment, pretreatment, and retrofitting provided they are accepted locally.

<sup>&</sup>lt;sup>1</sup> Maryland Department of the Environment, April 2000

# What is the Review Process for New Technologies?

**Practices Designed for Pretreatment / Retrofitting / Redevelopment Only:** WMA has no objections to the practices used for redevelopment, pretreatment, and retrofitting provided they are accepted locally. However, local jurisdictions may request that a letter from MDE/WMA be provided verifying product classification. To receive this letter, a formal request for status verification, and other pertinent product information (e.g., design standards, specifications, maintenance requirements) should be submitted to MDE. In return, MDE will respond with a letter confirming product classification and use for pretreatment, retrofitting, and redevelopment purposes only.

**Practices Designed for Stand-Alone Water Quality Treatment:** Alternative structural stormwater management practices may be used for new development water quality control if they meet the performance criteria established in the Design Manual and are approved by WMA. To facilitate the product review process, WMA requires three (3) copies of the following:

- Product information including all pertinent design standards and specifications;
- Projected maintenance requirements and procedures;
- Information demonstrating compliance with the standards and specifications listed in Chapter 3 if the product is a proprietary form of an acceptable BMP type listed in the Manual;

In return, MDE will respond with a letter confirming receipt and identifying any missing items. In addition, MDE will also provide a tentative timeframe for its review.

**Please Note:** If the product is not listed as an acceptable BMP type, or deviates from the specifications listed in the Manual, monitoring data demonstrating compliance with the general performance criteria must be submitted.

## Monitoring Requirements:

- WMA recommends that all monitoring information conform to the *Technology Acceptance Reciprocity Partnership* (TARP) Protocol to ensure interstate reciprocity of data.
- Applicant's that choose not to conform to the TARP Protocol must submit copies of a monitoring plan for approval before WMA will review results. All performance monitoring must be based on in-field implementation.

All information and questions should be submitted to:

MDE/WMA Sediment, Stormwater, & Dam Safety Program 1800 Washington Blvd., STE 440 Baltimore, MD 21230-1708

If there are any questions, please contact WMA at 410-537-3543 or www.mde.state.md.us. Please recognize that WMA may not be able to meet and discuss product-related issues until a formal preliminary review is concluded.

The 2000 Maryland Stormwater Design Manual and related information are available on MDE's WEB Page – www.mde.state.md.us

