

Storm Water Pollution Prevention Clean Water: Our Only Choice

Shelby County has two drainage systems— the sanitary sewers and the storm drains. The storm drain system was designed to prevent flooding by carrying excess rainwater away from streets, homes and businesses. However, as development occurs, the amount of impervious surface such as parking lots, roof tops and roads increases. Impervious surfaces prevent storm water from filtering into the ground. Instead they increase the amount of water leaving an area. This often leads to increased flooding downstream.

Another problem caused by impervious surfaces is that any pollutant that is placed on these surfaces stays there until it is “washed” into our streams and the Mississippi River during the next rainstorm. The pollutants include: oil, other automobile fluids, paint and construction debris, yard and pet wastes, pesticides and litter. The mixing of rain water and these pollutants causes storm water pollution.

To help reduce storm water pollution, Shelby County requires that new developments maintain a zero increase in the discharge rate of storm water runoff leaving their property. For storm water information, call Chris Masin, Storm Water Manager 222-7705.

The most common approach to meeting these requirements is the installation of a detention pond with a sand filter and oil/floatables skimmer.

However, detention ponds can be designed and constructed to be aesthetically pleasing. Ponds can be vegetated and irregularly shaped with landscaping around the edges.

This pamphlet tells you how to properly maintain your detention pond. These Best Management Practices (BMPs) will help reduce downstream flooding and will ensure cleaner streams and River.

Hazardous Spill Response

Shelby County Fire Dept. 911 or (901) 222-8020
City of Memphis Fire Dept. (901) 458-3311

Recycling and Household Hazardous Waste Disposal

Shelby County (901) 222-7770
City of Memphis (901) 576-6868

To Report Illegal Dumping

Shelby County (901) 222-2300
City of Memphis (901) 576-4349

Memphis & Shelby County Health and Sanitation
Dept. (901) 222-9000

To Report a Drainage Problem

Shelby County (901) 222-2300
City of Memphis (901) 636-6933

This brochure is one of a series of pamphlets describing storm drain protection measures. Other pamphlets include:

Food Service Industry
Automotive Maintenance & Car Care
Heavy Equipment & Earth-Moving Activities
Home Repair & Remodeling
Landscaping, Gardening & Pest Control

Home repair or remodeling that includes electrical, plumbing or an addition to your home requires a permit. You must get a permit from the Memphis & Shelby County Code Enforcement at (901) 222-8300.

For more information or assistance, call, email or write:

**Tennessee Small Business
Environmental Assistance Program**

8th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1551

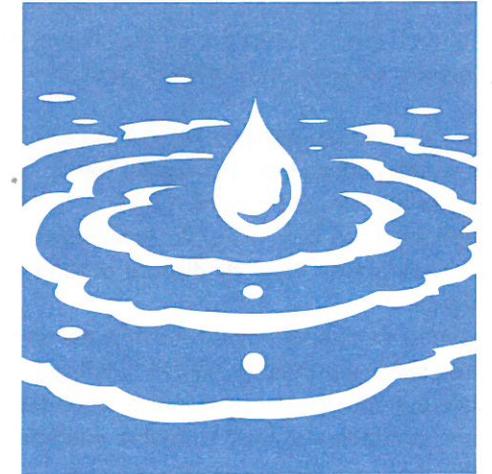
1-800-734-3619

BGSBEAP@tn.gov

<http://www.tn.gov/environment/section/sbeap-small-business-environmental-assistance>

Shelby County Storm Water Management Program
6463 Haley Road
Memphis, TN 38134
(901) 222-7705

Storm Water Best Management Practices (BMPs)



Detention Pond Maintenance

Brochure 5

Shelby County Businesses
Neighborhoods with
Detention Ponds

Detention Pond Maintenance

1. Pollution Prevention Plans

Often the easiest way to maintain a detention pond is to develop and implement a pollution prevention plan at your establishment. A pollution prevention plan drastically reduces the amount of pollution entering your detention pond; thus reducing the amount of time and money necessary to maintain the pond.

Important aspects of a pollution prevention plan:

Dry sweep parking lots on a regular basis. This prevents solids from entering the pond.

Keep kitty litter, sawdust or cornmeal handy to absorb small spills. Properly dispose of the collected material.

Materials that could pollute storm water should be stored inside a protected, roofed building.

Educate employees to be aware of potential storm water pollution and how to report potential problems.

2. Maintaining the Pond

Conduct routine inspections.

Remove any trash that may have accumulated.

Make sure that the pond's banks and bottom are stable. There should be no active erosion in the pond.

Remove excess sediment, trash or other debris that is blocking discharge pipes or the emergency spillway.

Remove and properly dispose of any pollutants such as oil that may have been trapped in the pond.

Excessive vegetation such as willows or other large trees and shrubs should be removed unless they serve some part of your treatment plan.

Minimum maintenance requirements include two cuttings per growing season by bush hog or mower and sediment removal when required.



3. Sand Filter Maintenance

Sand filters are designed to remove and trap pollutants from storm water. In order to be effective, the following procedures must be followed:

Routinely inspect the sand filter.

Keep vegetation growth on the sand to a minimum by hand removing sprouting vegetation.

Rake the upper layer of sand on a regular basis to loosen the sand and provide for better infiltration.

Flush the sand filter perforated pipe several times yearly.

Remove any oil, grease or other pollutant visible on the sand and dispose of properly. Replace the sand when it becomes clogged and ineffective.

4. Additional Detention Pond Hints

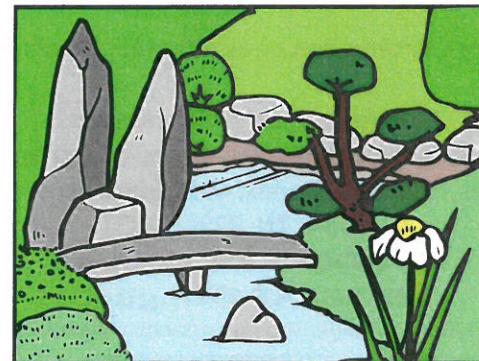
Detention ponds can be designed and constructed to be aesthetically pleasing. Ponds can be vegetated and irregularly shaped with landscaping around the edges.

All ponds can be made to be both functional and attractive. Many colorful and unusual aquatic plants can be used along the edges of a wet or partially wet pond. City ordinance allows a constructed wetland to be used to improve water quality in lieu of a detention pond or sand filter.

Do not use pesticides, herbicides or fertilizers in your pond. These products will leach from the pond and pollute our streams and river.

Make sure that your pond is draining properly. Detention ponds are designed to release storm water slowly not hold the water permanently. Improperly maintained ponds can harbor breeding areas for mosquitoes and reduce the storage volume of the pond.

Do not place yard waste such as leaves, grass



A permanent maintenance agreement for storm water detention/retention facilities will be required, including those components required for water quality control. Maintenance will be the responsibility of the property owner on which the facility is located and will be recorded as such on the plat with the appropriate notation on the particular lot unless that responsibility has been legally transferred to another person or entity by a properly recorded legal agreement.

The registered professional engineer who designs the facility will develop minimum maintenance requirements of the water quality for such facility to ensure that the facility is kept functional. The maintenance agreement will specify minimum maintenance requirements and intervals to be performed by the property owner. Minimum maintenance requirements will include two cuttings per growing season by bush hog or mower and sediment removal when required.

The maintenance agreement will also grant permission to the County to enter the subject property and to inspect the storm water detention/retention facilities as deemed necessary. If the facility is not being maintained, the County Engineer or his designee will notify the property owner to repair/maintain the facility within a reasonable period of time. If the property owner fails to repair/maintain the facility within the allotted time, the County Engineer shall authorize the required maintenance to be performed by or paid by Shelby County. A lien of up to double the expense to Shelby County shall be filed against the property. The County Engineer may designate other requirements and procedures if necessary for proper maintenance or sediment disposal. **For more information, call Storm Water Manager, Chris Masin 222-7705.**