

**BRIARCLIFF MANOR  
UNION FREE  
SCHOOL DISTRICT  
45 INGHAM ROAD  
BRIARCLIFF MANOR, NY 10510**

**MS4PY9 STORMWATER PROGRAM**

**NEWSLETTER #1  
NOVEMBER 2018**

**NYSDEC SPDES GENERAL PERMIT:  
BASIC REQUIREMENTS FOR  
STORMWATER DISCHARGES**

**FOR MORE INFORMATION, CONTACT  
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## **1. STORMWATER RUNOFF**

Stormwater runoff is water from rain or melting snow that does not soak into the ground but runs into our waterways. The key sources of stormwater runoff are:

- **Runoff from Rooftops:** It consists of rainwater and melting snow that run off the rooftops via roof gutters and leaders and flows onto the ground, to the nearest catch basin or nearby waterway
- **Runoff from Paved Areas:** It consists of rainwater and melting snow from impervious surfaces such as paved sidewalks, parking lots and blacktopped surfaces such as roads and driveways
- **Runoff from Lawns and Gardens:** It consists of rainwater and melting snow that run off sloped lawns and gardens
- **Runoff from Construction Activities:** It consists of rainwater and melting snow, exposed to sediment from excavated areas, construction wastes, vehicle washing, fuels, oils and other pollutants used in vehicle and equipment operation and maintenance

## **2. EXAMPLES OF POLLUTANTS IN STORMWATER**

Stormwater runoff may carry a number of pollutants, varying by the season, the rainfall event and the activities carried out in the path of the flow. Examples of pollutants in stormwater are:

- **Pollutants from Roofing Materials:** Old weathered roofs may contain tar and roofing chemicals
- **Pollutants from Paved Areas:** Paved areas may contain oils and greases from automobiles, trash and debris, as well as sand, salt and de-icing chemicals utilized during the winter season
- **Pollutants from Lawns and Gardens:** Excessive use of fertilizers from lawns and gardens contribute nutrients such as phosphorus and nitrogen, which can promote the overgrowth of algae. The algae may deplete the oxygen in our waterways and may be harmful to humans and animals. Careless application of pesticides, and herbicides affect the health of living organisms and cause ecosystem imbalances.
- **Pollutants from Animal Wastes and Illicit Connections:** Bacteria from animal wastes, improperly maintained septic systems and illicit connections from sanitary sewage system discharges can make nearby streams and waterways unsafe for wading, swimming and the propagation of edible shellfish
- **Pollutants from Construction Activities:** Sediment and construction wastes cloud waterways and interfere with the habitat of living organisms

### 3. STORMWATER PERMITS

In response to the 1987 Amendments to the Clean Water Act, USEPA developed the National Pollution Discharge Elimination System (NPDES) Stormwater Program. NPDES addresses sources of stormwater runoff that have the greatest potential to negatively impact water quality including small, medium and large

municipal separate storm sewer systems (MS4s) and construction activities that disturb more than 5,000 square feet (located East of the Hudson Basin) and more than one acre of land in other basins. These regulations apply to municipalities, as well as to all public entities that own and maintain a separate storm sewer system. To comply with the NPDES requirements, NYSDEC issued a **SPDES General Permit** for stormwater discharges from MS4s and a **Construction Activity Permit** for stormwater discharges from construction sites.

### 4. SPDES GENERAL PERMIT MINIMUM CONTROL MEASURES

The SPDES General Permit requires the development of a Stormwater Management Program (SWMP) that includes six required program components, or the six minimum control measures (MCMs), as outlined below:

- **MCM1: Public Education and Outreach:** This includes the distribution of educational materials and outreach information on the impacts of polluted stormwater runoff on our water quality
- **MCM2: Public Participation and Involvement:** This includes information on how the public can get involved in the stormwater management program process
- **MCM3: Illicit Discharge Detection and Elimination:** This involves the mapping of stormwater outfalls, and

an annual field inspection of these outfalls and municipal operations to prevent and eliminate illicit discharges to our waterways

- **MCM4: Construction Site Stormwater Runoff Control:** This involves the development, implementation and enforcement of an erosion and sediment control program for construction activities that disturb greater than or equal to 5,000 square feet (East of the Hudson Basin) or greater than, or equal to one acre of land for other basins
- **MCM5: Post-Construction Runoff Control:** This involves the enforcement of stormwater runoff from new development and redevelopment projects. Applicable controls include preventative measures that protect sensitive areas via the use of structural measures such as grassed swales or porous pavements
- **MCM6: Pollution Prevention/Good Housekeeping:** The program includes operation and maintenance staff training on pollution prevention measures and activities such as street sweeping, cleaning of catch basins and the reduction of the use of pesticides or street salt

## **5. STORMWATER MANAGEMENT AT THE SOURCE**

The best way to control contamination to stormwater is usually at the source, where contaminants can be identified, reduced or contained before being conveyed to surface water. It is frequently more expensive and difficult to remove stormwater pollutants that are present at the end-of-pipe where stormwater is

finally discharged directly to a receiving waterbody.

## **6. BMPS IMPROVE AND RESTORE WATER QUALITY**

Best Management Practices (BMPs) are actions on the ground that help to improve and restore water quality. Identifying the appropriate BMPs is critical to a successful reduction of nonpoint source pollution. The BMPs that are selected depend on the type of the Pollutant of Concern (POC) and the management goal specifically applicable to each MS4.

## **7. GREEN INFRASTRUCTURE PRACTICES (GI)**

Consider utilizing GI BMPs whenever possible. Such practices may include green roofs, pervious pavements, rain gardens, vegetated swales and planters. GI BMPs have secondary benefits including aesthetic improvements, cleaner air, energy savings and urban cooling.

## **8. LOCAL SCHOOL DISTRICT DECISION TREE FOR MS4 PERMIT**

Only those schools which meet the following criteria must comply with the MS4 permit:

- The school property must have more than a single building
- The school property is located in an Automatically Designated Urbanized Areas
- The school has a daytime population of more than 1000 students/staff