# PUTNAM VALLEY CENTRAL SCHOOL DISTRICT PUTNAM VALLEY, NY

# MS4PY4 SWMP: TRAINING WORKSHOP FOR O & M STAFF

## **JANUARY 15, 2014**

## PART 1: STORMWATER POLLUTION PREVENTION

PART 2: TRAINING PROGRAM QUIZ

FOR MORE INFORMATION CONTACT YOUR STORMWATER COORDINATOR:

PATRICK BELLINO AT: 845-528-8143 OR AT pbellino@pvcsd.org

# WORKSHOP PART ONE: STORMWATER POLLUTION PREVENTION

#### **1. Green Stormwater Practices**

Under pollution prevention, USEPA requires MS4s to adopt onsite treatment practices (green infrastructure practices) that not only reduce the quantity of offsite stormwater runoff but also minimizes the off-site long-term impacts of stormwater pollutants. The newsletters and fact sheets listed below discuss how these green infrastructure practices can be implemented.

#### 2. Stormwater Program Awareness

The **quizzes/ multiple choice questions,** in this document, are presented **to promote an understanding/awareness** on how these green infrastructure practices can be implemented. The following newsletter and fact sheets were distributed to the District and have been posted on the stormwater website:

- Newsletter #1 Green Stormwater Infrastructure Planning Practices
- Fact Sheet #1 Algae Blooms and Stormwater Pollution
- Fact Sheet #2 Green Infrastructure Program By the NYCDEP
- Fact Sheet #3 Reducing Stormwater Pollution by Utilizing Phosphate Free Detergents

#### 3. Preparation for Stormwater Training Program Quiz

In preparation for your Stormwater Training Program Quiz, please complete the following steps:

- 1. Please **contact your Stormwater Coordinator** to obtain access to the Stormwater Website
- 2. After you have understood how to access the Stormwater Website **download the above newsletter and fact sheets**
- 3. **Review the newsletter and fact sheets** in preparation for the Training Program Quiz
- 4. After you have reviewed the content of these documents, you may take your Training Program Quiz
- 5. If you have questions **obtaining the link** to your stormwater website, **downloading the material** or **understanding the content**, you should get assistance from your Stormwater Coordinator, prior to taking the quiz.

## 4. Training Documentation

In order to ensure that District Operations and Maintenance Staff have received training in stormwater pollution prevention, please provide the following records to CFE Consulting Services, LLC (CFE), after staff have taken the required training and have answered the quiz questions:

- Date of training
- Staff training attendance sheet
- Comments on staff understanding/awareness of the stormwater program

# **WORKSHOP PART TWO: TRAINING PROGRAM QUIZ**

#### **Newsletter #1 – Green Stormwater Infrastructure Planning Practices**

- 1. The traditional stormwater management practices have focused end-of-pipe systems Select your choice below.
  - o True
  - o False
- 2. Traditional stormwater management practices discharge collected runoff to a nearby ditch or an offsite municipal conveyance system. Select your choice below.
  - o True
  - o False
- 3. As a separate MS4 permittee, you are required to continue discharging pollutants to an offsite municipal conveyance system. Select your choice below.
  - o True
  - o False
- 4. Commonly utilized onsite retrofit projects may include the retrofit of existing parking lots and the retrofit of recreational and athletic fields. Select your choice below.
  - o True
  - o False

5. The newest sustainable strategy for clean stormwater has included: planting in road median strips, landscaped islands and cul-de-sacs, parking lots/athletic field's perimeter swales and planting in parking lot islands. Select your choice below.

- o True
- o False

6. Potential benefits of onsite planting typically include: stormwater volume reduction, plant nutrient uptakes, pollutant removals, phytoremediation, parking lot ambient temperature reduction, environmental, community and economic benefits. Select your choice below.

o True

o False

#### Fact Sheet #1 – Algae Blooms and Stormwater Pollution

1. Algae blooms may be triggered by a combination of: excess nutrients, sunlight, low water flow conditions and warmer temperatures. Select your choice below.

- o True
- o False
- 2. Phosphorus and nitrogen, the essential nutrients that promote algae growth, end up in our streams and waterways through stormwater runoff. Select your choice below.
  - o True
  - o False
- 3. Both green algae and blue-green algae are harmful to people and animals. Select your choice below.
  - o True
  - o False
- 4. Blue-green algae that produce toxins are referred to as harmful algae blooms (HABs). Select your choice below.
  - o True
  - o False
- 5. Harmful impacts of algae blooms in streams and lakes include: sunlight reduction, toxins, and oxygen depletion. Select your choice below.
  - o True
  - o False

- 6. Causes of algae blooms are an overabundance of essential plant nutrients, nitrogen and phosphorus from;
  - A. Improperly maintained septic tanks and septic leaching fields
  - B. Excessive amounts of fertilizers applied in lawns and gardens
  - C. Phosphate detergents from car washing in driveways near storm drains and ditches and swales
  - D. Leaves and grass clippings blown into nearby waterways and storm drains
  - E. Pet waste not picked up and properly disposed
- F. Sediment from construction sites carried to nearby waterways Select your choice below.
  - o True
  - o False
- 7. The most suitable way to wash your car is in your driveway, utilizing phosphate-containing detergents. Select your choice below.
  - o True
  - o False

## Fact Sheet # 2 – Green Infrastructure Program by NYCDEP

1. The purpose of citing the green infrastructure measures adopted by the NYCDEP are: lessons learned from the DEP, understanding the successes of the NYC green infrastructure program, public education through MS4 Inter-Regional Participation and the DEP Stormwater Outreach Program.

Select your choice below.

- o True
- o False

#### Fact Sheet # 3 – Reducing Stormwater Pollution by Utilizing Phosphate Free Detergents

- 1. Phosphates are added to soaps, detergents and other household cleaning agents to soften the water and allow for the formation of soap suds. Select your choice below.
  - o True
  - o False
- 2. In 2010, New York State enacted a law that requires all household and commercial soaps and detergents, as well as floor cleansing products to be phosphorus-free. Select your choice below.
  - o True
  - o False
- 3. Effective July 1, 2013, commercial establishments in New York State may not possess or use or authorize the possession or us of dishwasher detergents that contain phosphorus. Select your choice below.
  - o True
  - o False
- 4. The impact of the phosphorus detergent ban are several-fold:
  - A. Improvement to the water quality of the state, in recreational and other uses
  - B. Reduction to the harmful impacts of blue-green algae
  - C. Reduction in costs to municipalities for the treatment of phosphorus in drinking water, wastewater and stormwater. Select your choice below.
    - o True
    - o False

## PUTNAM VALLEY CENTRAL SCHOOL DISTRICT MS4PY4 SWMP:TRAINING WORKSHOP FOR O & M STAFF ANSWER SHEET TO QUIZ

Newsletter#1- Green Stormwater Infrastructure Planning Practices	TRUE	FALSE	REMARKS
Question 1	X		
Question 2	X		
Question 3		X	You are not permitted to discharge pollutants offsite
Question 4	X		
Question 5	X		
Question 6	Χ		
Fact Sheet #1 – Algae Blooms and Stormwater Pollution			
Question 1	X		
Question 2	X		
Question 3		Х	Only Blue-Green Algae are harmful
Question 4	X		
Question 5	X		
Question 6	X		
Question 7		X	A car commercial carwash w/ phosphate-free detergents is the preferred way
Fact Sheet #2 – Green Infrastructure Program by NYCDEP			
Question 1	Х		
Fact Sheet #3 – Utilizing Phosphate-Free Detergents	X		
Question 1	Х		
Question 2	Х		
Question 3	Х		
Question 4	Х		