MAMARONECK UNION FREE SCHOOL DISTRICT 1000 WEST BOSTON POST RD MAMARONECK, NY 10543

MS4PY5 SWMP: TRAINING WORKSHOP FOR O & M STAFF

JANUARY, 2015

PART 1: STORMWATER POLLUTION PREVENTION

PART 2: TRAINING PROGRAM QUIZ

FOR MORE INFORMATION CONTACT YOUR STORMWATER COORDINATOR: GEORGE W. MCNALLY, P.E. 914-220-3082 GMcNally@mamkschools.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. It also discusses the new MS4 Permit GP-0-15-003 requirements. The following newsletter and fact sheets were distributed to the District and have been posted on the stormwater website:

- Newsletter #1 Climate Changes and Green Stormwater Infrastructure Planning Practices
- Fact Sheet #1 Sustainability of our Water Resources
- Fact Sheet #2 Ongoing Stormwater Management Program under MS4 Permit GP-0-15-003

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 - Climate Changes and Green Stormwater Infrastructure Planning Practices

1.	The Traditional Stormwater Management I	Practices	have 1	focused	l 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.** The Effects of Climate Changes include: 1) Greater and Unpredictable Rainfall Events 2) Warm Weather Spring Snowmelts and 3) The Increase of Ocean Swells. Select your choice below.
 - o True
 - o False
- **4. Green Infrastructure Stormwater Practices** include: 1) Planting of Trees to reduce the Carbon Footprint 2) Filtration and Infiltration Basins 3) Planting of Wetlands Buffer Strips and 4) Green Retrofit Projects such as the Retrofit of Existing Parking Lots with Perimeter Vegetative Swales and Bioretention Basins. Select your choice below.
 - o True
 - o False

Fact Sheet #1 – The Sustainability of our Water Resources

- 1. Water, our Most Precious Commodity is generated from rainfall, snow and ice melt. Select your choice below.
 - o True
 - o False
- **2. Water Demand:** As populations grow, farms, business and industry utilize less water for their needs. Select your choice below.
 - o True
 - o False
- **3. An Approximate Breakdown of Water Usage:** 1) Older toilets use 3.5 to 7 gallons per flush, whereas newer toilets use 60% less water. A leaky toilet can waste 200 gallons of water per day 2) Older models clothes washers use about 50 gallons or more per load, whereas newer front-loading machines use less than 27 gallons per load 3) A ten minute shower can utilize 50 gallons of water. By reducing the shower duration and/or changing the shower head, you can save a considerable amount of water 4) Pipeline and fixture leaks account for 13 to 15 gallons of water per month and 5) We typically use 50% or more of our daily water consumption on lawns and outdoor landscaping. Select your choice below.
 - o True
 - o False
- **4. Hydraulic Fracking:** is 1) A drilling process that injects a mixture of water, chemicals and sand into dense rock formations to crack the rock open and release natural gas 2) It takes millions of gallons of water to frack a single well, which can draw down local water supplies and dry up nearby creeks 3) Some of fracking chemicals could potentially seep into the groundwater and contaminate drinking water aquifers 4) Well failures can cause methane gas to migrate into nearby household wells and drinking water and 5) Fracking wastewater may be radioactive that local wastewater treatment plants are not equipped to remove. Select your choice below.
 - o True
 - o False

5. Water Conservation Practices will 1) Reduce our Water Utility Bills 2) Reduce Community Costs for
expanded Water and Sewage Treatment Costs and 3) Protect Water Resources for Future Generations. Select your
choice below.

- o True
- o False

Fact Sheet #2 – Ongoing Stormwater Management Program under MS4 Permit GP-0-15-003

- **1. Phase II Stormwater Program:** The Phase II Stormwater Program not only applies to all public entities but also applies to all private entities that discharge stormwater to the surface waters of the United States. Select your choice below.
 - o True
 - o False
- **2. Expiration of the Current Phase II Stormwater Program:** The current Phase II Stormwater Program expires on April 30, 2015. Select your choice below.
 - o True
 - o False
- **3. Continuance of Permit Coverage:** The new stormwater permit extends from May 1, 2015 to April 30, 2017. Select your choice below.
 - o True
 - o False
- **4. Shift to Green Stormwater Practices:** There has been a full scale shift to green stormwater practices, which include rain gardens, biofiltration/retention systems, green roofs, rain harvesting, porous and permeable pavements and select proprietary products. Select your choice below.
 - o True
 - o False