WORKSHOP A

Workshop A: Methods to Meet New Construction Site Stormwater Quality Requirements

Wednesday, July 18 8:00am – 5:00pm

8:00am Introduction

Purpose of course, environmental issues, advanced BMPs for sediment control.

8:15am Polymers: Relevant Chemistry and Applications for Water Quality

Basic polyacrylamide chemistry, others (e.g. polyDAC, chitosan), applications in water treatment, reactions with constituents (clay, organic matter), sediment

chemistry effects.

9:00am Erosion Control Enhancement with PAM

How PAM can help with erosion control with different products, including straw, blankets, and hydromulch. What rates to use and methods of application.

10:00am Break

10:30am Toxicology 101: Determining Risks and Benefits of Turbidity Controls

Key elements of real and perceived risks of chemical flocculation relative to suspended sediment and turbidity. Getting comfortable with chemical treatments

11:00am Testing Soils and Sediment

We will bring example soils for the class to conduct jar tests of different polymers. Do not bring your own soil – it is illegal to transport soil across state lines because of the chance of transporting diseases or insects along with the soil.

Our soils will be sterilized prior to transport.

12:00pm Lunch

1:00pm Passive Dosing Approaches for PAM

How to adjust and combine different products with PAM to get the flocculation

you need. Wattles, pipes, powder, logs, and more!

2:00pm Active Dosing Systems

Pumped water can be treated in many different ways, from simple and

inexpensive to portable water treatment plants.

2:30pm Calculations:

Basic conversions and units, Passive Dosing Calculations, Active Dosing

Calculations

3:00pm Break

3:30pm Group Work:

Design Plans for Construction Sites, Cost estimation, Presentation of plans

5:00pm Adjourn