



Navigating the New Stormwater Permit

New Tools for Smooth Sailing through MS4 Compliance

Join Comprehensive Environmental Inc. (CEI) along with U.S. EPA, MassDEP and other stormwater managers to learn about the recently issued MS4 Stormwater Permit and how you can move your community smoothly through compliance.

March 30, 2017

Courtyard Boston Marriott, 75 Felton St, Marlborough, MA

REGISTRATION AND BREAKFAST

7:30 – 8:15 AM

WELCOME AND INTRODUCTIONS

8:15 – 8:30 AM Morning Program Moderator: Matt Lundsted, P.E., CFM

SESSION 1 – HOW TO MEET THE NEW PERMIT REQUIREMENTS

8:30 – 10:15 AM

Permit Overview, Background, and How to Comply

8:30 – 9:30 AM

Newton Tedder, U.S. EPA Stormwater Administrator

This session will provide an overview on the permit, including background, discussion of the six minimum measures, and an analysis on how best to comply with permit requirements.

Field Work Methods and Techniques

9:30 – 10:05 AM

CEI Field Staff and EagleEye Aerobotics™

The permit requires extensive field work, including outfall inspections, sampling, and system mapping. This topic will address field work, including a demonstration of field sampling kits and discussion of opportunities to combine efforts for cost savings purposes. This topic will also discuss opportunities to use unmanned aerial vehicles to perform tasks that may otherwise be difficult, as well as features such as 2D orthomosaic creation, 3D digital surface modeling and other value-added opportunities.

M\$4CASTER™ Pricing Model and How it can Help with Budgeting

10:05 – 10:15 AM

Rebecca Balke, P.E., LEP, Principal, Project Manager, Comprehensive Environmental and **Nick Cristofori, P.E.**, Principal, Project Engineer, Comprehensive Environmental

A new model called M\$4CASTER™ is an advanced pricing model that considers the 140+ Performance Action Items in the new permit to provide budgetary figures, including a breakdown of municipal and consultant costs, multi-year schedules, and work done to date, to develop a program cost.



NETWORKING BREAK

10:15 – 10:30 AM

SESSION 2 – IMPLEMENTATION CASE STUDIES

10:30 – 12:00 PM

Yarmouth MS4 Program Implementation

10:30 – 11:00 PM

Jeff Colby, P.E., DPW Director, Town of Yarmouth and **Rick deMello**, DPW, Town of Yarmouth, with **Rebecca Balke, P.E., LEP**, Principal, Project Manager, Comprehensive Environmental

As one of the leading Massachusetts communities, Yarmouth is actively implementing many of the new MS4 program requirements. Work to date has included completion of a written Stormwater Management Program (SWMP) Plan, Illicit Discharge, Detection, and Elimination (IDDE) Plan, and much of the required mapping. This presentation will discuss lessons learned, as well as ongoing Operation and Maintenance (O&M) work currently ongoing throughout the community.

Cape Cod Nitrogen BMP Construction

11:00 – 11:30 PM

Ray Cody, U.S. EPA Region 1, with **Matt Lundsted, P.E., CFM**, Principal, Project Manager, Comprehensive Environmental

The Town of Barnstable and Town of Chatham both have waterbodies subject to Nitrogen TMDLs that identify stormwater as a source of nitrogen load. In cooperation with U.S. EPA Region 1, Town of Barnstable and Town of Chatham, two stormwater BMPs were designed and constructed consisting of a hybrid above-ground bioretention area with a subsurface gravel wetland to remove nitrogen from stormwater. The project also has an ongoing water quality monitoring component.

IDDE & CSO Investigations in the City of Fall River

11:30 – 12:00 PM

John Lincourt, Industrial Pretreatment Coordinator, City of Fall River and **Valarie Francis**, Stormwater Associate Fall River WWTP, Veolia North America, with **Nick Cristofori, P.E.**, Principal, Project Engineer, Comprehensive Environmental

As one of the largest cities in Massachusetts and with approximately 75% of stormwater collected in combined sewer systems, the City of Fall River has unique challenges to maintain compliance with both Combined Sewer Overflow (CSO) and MS4 permit requirements. This presentation will discuss methods and techniques used to perform IDDE inspections, the ongoing results of the City's program, as well as what methods will be used in the future to ensure compliance.

LUNCH – ASSORTED SANDWICHES, SALAD, & DESSERT

12:00 – 1:15 PM

1:15 – 3:15 Afternoon Program Moderator: Sebastian Amenta, P.E.



SESSION 3 – AVAILABLE RESOURCES AND ASSISTANCE

1:15 – 2:45 PM

Tree Canopy Stormwater Credit System

1:15 – 1:45 PM

Dave Nyman, P.E., Senior Engineer, Comprehensive Environmental

As part of the new permit, communities must develop a regulatory mechanism and accompanying regulations that in part address Low Impact Development (LID), street and parking lot design, and opportunities for implementation of Green Infrastructure. Through a project funded by EPA and MassDEP, CEI has compiled data showing the stormwater benefits of retaining or planting trees, as overhanging tree canopy can effectively reduce annual runoff from paved surfaces. CEI has also developed an innovative regulatory component, including a stormwater credit system, to promote the preservation and planting of trees. This session will summarize the study's findings.

Regional Approach to MS4 Compliance

1:45 – 2:15 PM

Melissa Provencher, Brownfields Program Coordinator, Berkshire Regional Planning Commission, with **Rebecca Balke, P.E., LEP**, Principal, Project Manager, Comprehensive Environmental

Recognizing the benefits of a regional approach to complying with the new permit, the Berkshire Regional Planning Commission (BRPC) is working with the Towns of Adams, Cheshire, Dalton and Lanesborough and the City of Pittsfield to form a NPDES Regional Working Group for a collaborative approach to permit compliance. The M\$4CASTER™ was used to compare permit compliance costs on an individual vs. regional basis and outline the potential savings and benefits from a regional approach.

MassDEP and U.S. EPA Resources and Assistance

2:15 – 2:45 PM

Newton Tedder, U.S. EPA Stormwater Administrator and **Fred Civian**, MassDEP Stormwater Coordinator

MassDEP, the U.S. EPA and other agencies have a number of resources and materials available to help communities comply with the new permit. Available resources include public education and outreach materials, cost estimating spreadsheets, templates, and fact sheets. This topic will include a description of items available, a demonstration of their intended function, and where to find them.

WRAP-UP

2:45 – 3:30 PM

Round-Table Discussion

2:45 – 3:15 PM

Conference speakers will address remaining questions and comments that attendees may have.

Conclusion

3:15 – 3:30 PM

