



September 29 – October 3 | New Orleans



Stormwater Technology and Innovation Meeting

Monday, October 1, 2012

1:30 p.m. – 3:00 p.m. – Rm. 264

Morial New Orleans Convention Center, New Orleans, LA

Meeting Minutes:

A meeting of professionals representing the regulatory, non-profit and stormwater device manufacturing sectors was conducted on Monday, October 1, 2012. The meeting began on or about 1:30 PM and concluded on or about 3:00 PM. The purpose of the meeting was to focus on topic of testing and evaluation of practices and devices in the stormwater and wet weather sector. The following is a list of action items resulting from the meeting along with a brief summary of the discussion:

Attendees:

See end of meeting minutes

Action Items:

1. Meeting notes will be compiled and sent out to meeting attendees.
2. Consideration will be made regarding next steps, including a possible follow up scoping meeting.

Meeting Summary:

- There was a consensus that there is a need for a national, standardized testing and verification program for proprietary stormwater devices. This is due to:
 - The large amount of poorly-performing stormwater management devices currently in use today;
 - The costly nature of existing state and regional testing/verification protocols;
 - The lengthy timeframe and significant effort required to receive approval from these existing programs;
 - The state and regional programs, which many believe are onerous in procedure, create barriers to the implementation of effective stormwater products at a national level;
 - The large costs and long time horizons associated with getting new, and potentially effective stormwater treatment devices to the market are significant barriers to innovation in the stormwater sector;
 - The need to raise the bar on stormwater management devices and products in order to address the growing problem of water quality and quantity impacts from urban runoff.
- Disagreement exists regarding the role of lab versus field testing as they inform a testing/verification program.
- There was consensus that there is a need investigate the issue of stormwater testing and evaluation/verification, which may include future meetings and scoping efforts.
- The development of a testing/verification/evaluation program for stormwater should include input from the non-profit, regulatory, municipal/utility, and private/manufacturer sectors.

Discussion:

- I. Introductions
- II. Discussion on background/motivation for testing:
 - a. There should be a national standard for testing stormwater devices
 - i. Reciprocity of state projects was attempted with the Technology Acceptance Reciprocity Program (TARP), but eventually this failed.
 - b. There are millions of dollars worth of stormwater infrastructure in the ground that does not perform adequately.
 - i. Low-cost solutions are leading to poor-performing practices and devices.
 - c. Manufacturers should be part of the process in developing a verification testing program
 - d. A testing and verification program should not have a book or publication, but rather a web-based tool as well
- III. Discussion on field versus lab testing
 - a. False claims on performance of products in the field have driven the need for manufacturers to do their own testing.
 - b. Lab testing differs from field testing results
 - c. Field testing is the most expensive part of getting a product approved.
 - d. A lab protocol that allows for field analysis through modeling or an algorithm to predict field testing would help to drive down costs.
 - e. Lab testing should be able to suffice for verification purposes without a heavy field component due to unpredictable field conditions that may not reflect the actual level of performance of the device.
 - f. Since the “rubber meets the road” for performance in the field, there has to be a field testing component for verification.
 - g. Provisional allowance based upon lab testing results should be provided for devices while field testing is done in order to get devices to market quicker.
 - h. This type of provision is part of some existing programs.
- IV. Discussion on examples/case studies
 - a. As the sector is now structured, there is little/no incentive to take risks – this needs to change.
 - b. An example regarding a lawsuit over the efficacy of over 13,000 BMPs installed in California was highlighted to illustrate risk-averse motivations in the sector.
 - c. The cost to go through the Virginia approved process program is \$500,000, and it takes 3-4 years to go through this process – and it requires an estimated minimum amount of 7 years to recover costs to get product approved in Virginia.
 - d. What can we learn on this process from the wastewater sector?
 - i. This is a more mature industry.
 - ii. Due to the more predictable nature of wastewater loads and flows, there is less of a difference between lab and field performances.
- V. Discussion on other items and future steps

- a. There is a need to leverage capital from the private sector in the stormwater field
- b. Testing protocols are constantly changing – we need more certainty and consistency in this.
- c. The municipal sector should be involved with testing/verification efforts.
- d. There is a need for minimum data requirements to verify protocols proposed in a program.
 - i. This would be a good catalyst to start a national dialogue on this topic
- e. There should be consideration to developing testing/verification program and protocols for non-proprietary devices as well as proprietary.
- f. There is a need for a follow up meeting to scope the issues on this topic.

MEETING ATTENDEES

Sl. No	Name	Affiliation
1	Chris Kloss	US EPA, Office of Water
2	Connie Bosma	US EPA, Office of Water
3	Deborah Nagle	US EPA, Office of Water
4	Bob Adair	Convergent Water Technologies
5	Larry Coffman	Stormwater Services, LLP
6	Corey Simonpetri	ACF Environmental
7	Eliot Sherman	US EPA, Office of Water
8	Jeff Lape	US EPA, Office of Water
9	Sally Gutierrez	US EPA/ORD-Cincinnati
10	Craig Beatty	Kristar Enterprises / SWEMA
11	Walter Trnka	Fresh Creek Tech
12	Nancy Stoner	US EPA, Office of Water
13	Alex Sandu	MWH Global
14	Tom Carpenter	Stormwater Consultant
15	Jim Lenhart	Stormwater Northwest
16	Randy Hill	US EPA, Office of Water
17	Elizabeth Southerland	US EPA, Office of Water
18	Seth Brown	WEF