



Programmatic Management of the Verification and Certification of Stormwater Control Measures

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Overview

There is a demonstrated need to have the ability to verify the performance characteristics of stormwater control measures (SCMs), also known as Best Management Practices (BMPs) and Stormwater Quality Improvement Devices (SQIDS). In the US there have been a number of successful verification programs and a good number of failed programs over the past twenty years.

When the need to verify an SCM is identified, typically through regulatory bodies and the product suppliers, the initial focus is on the development of a protocol. Protocols entail data quality objectives (DQOs) such as analytical methods, sample numbers, statistical methods, storm event qualification criteria, etc. and method quality objectives such as Quality Assurance Project Plans (QAPPs), sample handling, data management and reporting.

Another critical but often overlooked element is program management. How do you establish a management framework that is fair, robust, sustainable, funded and recognized by regulatory bodies as a verification entity?

This paper provides draws on past experience to provide insight on common elements of success and pitfalls that increase the risk of failure. A new national multidisciplinary and multi organizational approach is now being formed that will reduce costs and speed times to acceptance of SCM for use in stormwater quality management in the United States.

Objectives

The objectives are to develop a nationally based organization or cooperative to manage national level processes and protocols for the evaluation and verification of stormwater control measures including proprietary and nonproprietary designs.

Method

Methods used include high level communication and collaborations between national technical and regulatory organizations. The use of meetings and funded research by the USEPA and other institutions

Results

The reported results summarize observations and experience from both successful and failed programs in the US and other locations.

Conclusions

The conclusion includes statements for the need to provide

- Program recognition and participation by regulatory agencies
- Evergreen process to manage and change technical protocols, test standards, and methods

- Funding mechanism to pay for program management
- Recognized experts to provide oversight and review of technical reporting