

TESTING SUMMARY

Massachusetts Strategic Envirotechnology Partnership (STEP) Program Stormceptor® Report

Summary: The Massachusetts STEP Program has completed a six-month evaluation of the function and performance tests of Stormceptor. Upon the completion of the evaluation and verification program, which occurred during the end of December 1997, the STEP Program summarized its findings as follows:

- Performance data available demonstrates that the Stormceptor System can provide TSS removal rates of 77% when sized according to the "Sensitive Area" criteria.
- Evidence suggests that the Stormceptor System may be capable of achieving TSS removal rates between 89% and 99% under certain climate conditions and land use intensity when sized accordingly.
- Performance data available suggest that the Stormceptor System can provide TSS removal rates of 52% when sized according to the "Treatment Train" criteria.
- Use of the Stormceptor System as a stand-alone device may be justified when sized according to the Sensitive Area criteria.
- The Stormceptor System is useful for new and retrofit installations in Standard 7 of DEP's Stormwater Management Policy and Standards (DEP and CZM 1997), especially where space is limited.
- The Stormceptor System is also suited for secondary sediment control from construction related sediment loads specified in Standard 8 of DEP's Stormwater Management Policy and Standards.

In March 1997, the Massachusetts Department of Environmental Protection (DEP) issued Stormwater Management Standards* to address both qualitative and quantitative controls to protect waters of the Commonwealth of Massachusetts from impacts of untreated stormwater runoff. Local Conservation Commissions will implement DEP's new Stormwater Policy through the Standards. The Standards establish the level of required controls that can be achieved primarily through the installation of Best Management Practices (BMPs).

Opportunities exist for the use of innovative stormwater technologies such as the Stormceptor System, especially in areas where site constraints make it very difficult to install the more typical BMPs such as retention ponds. With the increase in the use of innovative technologies, DEP has entered into an agreement with the Commonwealth's Strategic Envirotechnology Partnership (STEP) Program to allow for the verification of the function and performance of stormwater innovative systems. Upon verification by the STEP Program, local Conservation Commissions are allowed to accept the use of the innovative systems. DEP also allows for independent verification by local conservation commissions. The Massachusetts STEP is part of a six-state partnership for Environmental Technology including Illinois, California, Pennsylvania, New Jersey and New York.

In summary, the Massachusetts STEP Program reports that the Stormceptor System "should be capable of providing an effective solution for treatment of stormwater runoff" (STEP TECHNOLOGY ASSESSMENT, DRAFT REPORT, DECEMBER 1997).

*Standards issued in March, 1997 by the Massachusetts DEP, available upon request