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MASTEP Technology Review

Technology Name: Contech Stormwater Solutions StormScreen

Studies Reviewed:

- Environmental Technology Verification Report - Stormwater Source Area Treatment Device – Stormwater Management Inc. StormScreen

Date: December 20, 2007

Reviewer: Jerry Schoen

Rating: 3

Brief rationale for rating: *Note: This product was formerly offered by Stormwater Management Inc. now owned by Contech.* The major problem with this field study is that while the vendor's claim is that the unit will remove all particles greater than 2.4mm in diameter, no verification of the removal of material of this size is presented. No sediment concentration or size analysis was performed.

TARP Requirements Not Met:

- No quantitative pollution removal claim tested.
- At least 50% of annual rainfall must be sampled (only 24% was sampled)
- Minimum of 15" of precipitation must be sampled (only 12.11" were sampled)

Other Comments:

- The study mainly consists of visual observation of trash and sediment depth in the unit. Although the report mentions the possibility of combining the StormScreen with a StormFilter (same manufacturer) to obtain two-stage treatment with more comprehensive removal capabilities, the study did not quantify the StormScreen's sediment removal at any particle size, and therefore provides no estimate of the StormScreen's contribution to such an arrangement.
- The study discussed possible reasons for failure of the unit to pass a 10 CFS flow through cartridge system without bypass, but was not able to definitively state why the problem occurred. It posits that some clogging occurred between the date of system installation and the test start date, but provided no supporting evidence.
- The study has some value as a narrative discussion of qualitative benefits of the system; it also includes photographs showing that a great deal of material was caught in the cartridge chamber, with apparently debris-free flows occurring in the outlet chamber. The study did document the overall weight of material captured in the system, but did not measure the amount of material entering (or bypassing, in high flows) from upstream, so no comparison of total loads is possible.
- The study also provides a useful narrative discussion of maintenance problems encountered and how they were addressed.