

# **Stormwater Testing and Evaluation of Products and Practices (STEPP)**

## **Laboratory Testing Verification Summary**

### **Documentation**

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#### **Overview**

Stormwater Testing and Evaluation of Products and Practices (STEPP) has been established to promote the development of a national testing and verification program for proprietary and public domain stormwater control measures (SCM). This Lab Testing Verification Summary (LTVS) accompanies STEPP's verification letter to the proponent and will be posted on the STEPP technology database. It outlines the critical aspects of laboratory system verification and includes valid system application parameters. Detailed information can be found in the Lab Testing Evaluation Report (LTER).

#### **Performance claim**

Device tested (trash capture or HDS (hydrodynamic separator))

Performance claim/objective:

Was the performance claim met:

#### **SCM Information**

Product:

Manufacturer:

Testing lab:

Analytical lab:

Media or filter name (if applicable):

Briefly identify lab Third Party observers, leaders, testers, and/or facility and whether they were first-party or third-party:

Verification Date:

Identify Pollutant of Interest (sediment or trash) and performance objectives as described in the Enrollment Application

#### **General Description of Technology**

Description of technology to be provided here:

### **Applicable ASTM Standards**

List of applicable ASTM standards to be provided here:

## **FOR TRASH CAPTURE**

The trash standard is a combination of six different tests. Summarize which of the tests were conducted, which were verified and what the results were.

### **Test Unit Details**

Model Number (if applicable):

Length (ft) x width (ft):

Diameter (ft):

Depth (ft):

Effective trash storage volume (cf):

Effective Treatment Area (sf):

Screen area:

Screen aperture size:

Maximum treatment flow rate (cfs):

### **Test Unit Results**

## **HDS SEDIMENT TREATMENT**

### **Test Unit Details**

Model Number:

Dimensions:

Length (ft) x width (ft)(if applicable):

Diameter (ft)(if applicable):

Other description of dimensions:

Effective Treatment Area (sf):

Treatment Chamber Depth (ft) (from outlet pipe invert to 50% sediment storage depth):

50% Sediment Storage Depth (ft):

Total Unit Depth (ft) (from outlet pipe invert):

Drop (ft) (from inlet pipe invert to outlet pipe invert):

Maximum Treatment Flow Rate for test unit (cfs) (specify project removal goal, as a percent):

Hydraulic loading rate at Maximum Treatment Flow Rate (MTFR)(gpm/sf)

### **Test Unit Results**

Note the following table includes examples for the State of New Jersey. Weighting factors may differ for areas with hydrology/rainfall characteristics that differ from New Jersey.

<b>System Sediment Removal Performance</b>				
<b>Tested Flow Rate (% MTFR)</b>	<b>System Performance (% Removal)</b>	<b>Head loss (ft)</b>	<b>Annual Weighting Factor (New Jersey example)</b>	<b>Weighted Performance (New Jersey example)</b>
10%				
25%			25%	
50%			30%	
75%			20%	
100%			15%	
125%			10%	
150%				
Annual Percent Removal				

<b>System Scour Performance</b>	
Average adjusted effluent concentration	
MTFR at project sediment removal goal (indicate percent ___), cfs	
Scour test flow rate, cfs	
Ratio of scour test flow rate to MTFR, %	

### **Verified Results for Product Application**

Total Suspended Solids Removal Efficiency (%):

Maximum flow rate tested without scour (gpm)(if applicable):

Approved for online use? (Yes/No):

If Yes, maximum flow rate approved for online use

Plot of or equation describing removal versus flow:

### **Maintenance Requirements**

Maximum Sediment Storage Depth (ft)

Maximum Sediment Storage Volume (cf):

Recommended Sediment Depth Prior to Cleanout (ft):