



UNIVERSITY OF MASSACHUSETTS AT AMHERST

Water Resources Research Center
Blaisdell House, UMass
310 Hicks Way
Amherst, MA 01003

Massachusetts Stormwater
Evaluation Project

(413) 545-5532
(413) 545-2304 FAX
www.mastep.net

MASTEP Technology Review

Technology Name: Kristar FloGard+Plus

Studies Reviewed: Auckland UniServices Lab study (2003);
Laboratory Evaluation of Four Storm Drain Inlet Filters for Oil Removal (CA, 2005).
Saint Claire Shores Catchbasin Insert Evaluation Project (2005)
Oil and Grease and Particle Removal By Kristar FloGard (2002)

Date: December 31, 2007

Reviewer: Jerry Schoen

Rating: 3

Brief rationale for rating:

None of the four studies reviewed met TARP requirements. All had some problems, ranging from inadequate documentation of methods, insufficient number of test runs, limited range of test conditions, to faulty sampling methods.

Other Comments:

All studies tested sediment removal efficiency. Two studies tested oil and grease removal; one study also tested metals and bacteria removal. Removal efficiency varied widely among studies. For sediments, results ranged from zero or negative efficiency to nearly 100% depending on particle size, analysis method, and flow. Oil and grease efficiencies ranged from 25 – 80% between the studies. Metals removal efficiency (St. Claire Shores study) was 2-3%; bacteria (same study) removal was reported as minus 147%. The Saint Claire Shores study was conducted in the field. All others were laboratory tests. All studies contained some useful information, but significant caveats exist regarding use of any of the pollution removal rates they report. See test report summaries for more details.