Technical Note

TN 1.11 Oil Absorbent Pouch for Barracuda® MAX

Overview

The Barracuda MAX is a hydrodynamic separator system designed to remove total suspended solids, trash and other contaminants from stormwater such as oil and grease. The device can employ an oil absorbent pillow, or Rubberizer[®], for oils removal. This pillow is installed within the inlet bay of the structure, upstream of the vertical weir wall separating the inlet(s) and outlet pipes to enhance hydrocarbon removal. This Rubberizer allows the unit to intercept excessive stormwater oil and grease internally at the designed treatment flow rate (MTR). This document describes the mechanism implemented to the Barracuda MAX device to achieve oil retention.

Oil Absorbent Rubberizer Pillow

The ADS oil absorbent kit consists of a Rubberizer pillow designed to transform oils and hydrocarbons into a solid on contact. The EPA has approved Rubberizer as a sorbent for its non-chemical sorption and solidification capabilities. It's constructed from a fiberglass mesh and contains a mixture of non-hazardous polymers with high sorption efficiencies when in contact with hydrocarbons such as gasoline, jet fuels, solvents, diesel fuels, hydraulic, transformer and lube oils, chlorinated solvents, and light crudes. This oil absorbent pillow enhances the Barracuda's oil removal capacity. Third-party testing has been performed on the Barracuda MAX system equipped with the Cleartec Rubberizer pillow showing the device achieves an 80% Oil Removal efficiency when the oil absorbent pillow is installed ⁽¹⁾. Oil absorbent pillow replacement is recommended during routine Barracuda MAX system maintenance.

Table 1: Oil Removal Efficiency of Barracuda S4 Separator

Measure Flow Rate (cfs)	Influent Conc. Oil (mg/L)	Average Effluent Conc. Oil (mg/L) During 15-min Run	Oil Removal (%)	Average Effluent Conc. Oil (mg/L) During 10- min Flush
0.625	29.5	6	80	6
1.25	32.9	7.7	77	5.5

ClearTech Rubberizer Pillow Absorbs ¾ gallons per square foot ⁽²⁾



Barracuda system equipped with Oil Rubberizer Pillow



Notes:

(1) Refer to "Laboratory Testing of Baysaver Barracuda S4 for Oil Retention" test report.
(2) Refer to Rubberizer® ClearTec Technical Manual.



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