

filtr^{re}xx[®]

ENVIROSOXX[®] POLLUTANT FILTER SOCK



**STOPS POLLUTANTS FROM
LEAVING YOUR SITE.**



EnviroSoxx by Filtrexx is the most versatile and cost effective filter for stormwater pollutant removal.

A passive filtration system ready to install on any site, EnviroSoxx targets the most common pollutants in stormwater runoff.

ABOUT ENVIROSOXX

EnviroSoxx helps industrial stormwater permit holders/MS4s comply with their permits, easily and quickly. EnviroSoxx can be applied on bare soil, vegetation, or impervious surfaces in the path of sheet flow or concentrated flow to target stormwater pollutants.



EnviroSoxx contains compost FilterMedia™ plus natural sorbents used to increase pollutant removal capacity, and to reduce pollutant transport in runoff and absorption by plants. EnviroSoxx is filled with all natural materials.



COMMON USES

- Agriculture
- Brownfields
- Bulk storage
- CAFO's
- Compost facilities
- Drilling/fracking sites
- Fueling stations
- Golf courses
- Heavy industry
- Industrial sites
- Landfills/transfer stations
- Marinas & boat washes
- Nurseries
- Parking lots/roadsides
- Pet parks
- Recycling yards
- Rooftops
- Sewers & septics
- Vehicle wash stations
- Wetland overflows



HEAVY METALS



NUTRIENTS



HYDROCARBONS



BACTERIA



SEDIMENT

APPLICATIONS

- In swales, bioswales, ditches, or channels
- Around site perimeters or contaminated areas
- Across landscapes or impervious surfaces
- Around curb or drain inlets or outfalls
- As flow or filtration baffles
- Pre-treatment for bioretention, rain garden, storm water ponds, or similar storm water treatment systems
- Flow velocity reduction
- Infiltration enhancement
- Compliance with industrial or municipal storm water permits, part of TMDL, Green Infrastructure, or Low Impact Development ordinances
- Treatment on or around animal feeding operations, agricultural cropping systems, and mining operations
- As an integral component of a holistic, treatment train approach to site stormwater management

ADVANTAGES

- Reduces stormwater pollutant loads
- Fits existing infrastructure
- Easy to maintain & replace
- Third-party researched
- Use on hard & impervious surfaces such as pavement/ asphalt without the need to trench or stake
- Cost-effective system
- **EXTREME** durable mesh stands up to hard surfaces and harsh site conditions

TESTING & REMOVAL EFFICIENCY

EnviroSoxx is available in two filter blends to target common pollutants.

Industrial Blend: Targets a range of heavy metals, hydrocarbons, nutrients, and sediment. Also targets pH.

Advanced Blend: Targets bacteria, nutrients, hydrocarbons, select heavy metals, and sediment.

Removal efficiency test results vary by pollutant and are based on third-party and in-house research.

Actual removal rates are highly dependent on site specific environmental conditions including:

- flow rate
- flow volume
- pollutant concentration
- pollutant load
- proper installation
- maintenance
- design
- sampling methods

Filtrexx uses multiple test methods to assess EnviroSoxx pollutant removal efficiency. See Removal Efficiency References at right for individual pollutant testing. Actual removal rates may vary and are not guaranteed.

Contact Filtrexx for design guidance based on your specific site conditions.

RESOURCES & REFERENCES

Refer to Design Specifications for complete application, design, installation, maintenance, and removal documentation at www.filtrexx.com/specs. Refer to Research Papers and TechLinks at www.filtrexx.com/research

Faucette, B., F. Cardoso, W. Mulbry, P. Millner. 2013. Performance of compost filtration practice for green infrastructure stormwater applications. *Water Environment Research*. 85:9: 806-814.

Faucette, B., F. Cardoso-Gendreau, E. Codling, A. Sadeghi, Y. Pachepsky, D. Shelton. 2009. Storm water pollutant removal performance of compost filter socks. *Journal of Environmental Quality*. 38:1233-1239.

Faucette, L. B., K. A. Sefton, A. M. Sadeghi, R. A. Rowland. 2008. Sediment and phosphorus removal from simulated storm runoff with compost filter socks and silt fence. *Journal of Soil and Water Conservation*. 63:4:257-264.

Filtrexx TechLinks #3308, #3317, #3322, #3325, #3328, #3333, #3343, and #3344.

Each TechLink represents different test methods. Refer to each TechLink for test results based on test method.

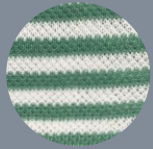


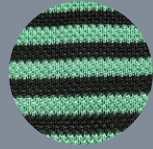
Filtrexx lab testing for EnviroSoxx performance.



EnviroSoxx Industrial Blend now removes Aluminum, Arsenic, Iron, Selenium, and Total Nitrogen

PLUS significantly raises low pH and lowers high pH

ENVIROSOXX INDUSTRIAL BLEND FILTER		Pollutant Group	Pollutant	Removal Efficiency (up to)	TechLink Reference
 <p>Industrial Blend Identification: white and light green stripes</p>	Heavy Metals		Aluminum (Al)	44%	#3343
			Arsenic (Ar)	11%	#3343
			Cadmium (Cd)	73%	#3325
			Chromium (Cr)	47%	#3325
			Copper (Cu)	70%	#3325
			Iron (Fe)	44%	#3343
			Lead (Pb)	73%	#3325
			Nickel (Ni)	69%	#3325
			Selenium (Se)	18%	#3343
			Zinc (Zn)	53%	#3325
Hydrocarbons		Diesel	99%	#3325	
		Gasoline	54%	#3325	
		Motor Oil	99%	#3325	
Nutrients		Ammonium Nitrogen (NH4-N)	54%	#3328	
		Total Nitrogen (TN)	20%	#3343	
Sediment		Total Solids	97%	#3333	
		TSS	80%	#3317	
		Turbidity	63%	#3308	

ENVIROSOXX ADVANCED BLEND FILTER		Pollutant Group	Pollutant	Removal Efficiency (up to)	TechLink Reference
 <p>Advanced Blend Identification: black and light green stripes</p>	Heavy Metals		Cadmium (Cd)	73%	#3325
			Diesel	99%	#3325
	Hydrocarbons		Gasoline	54%	#3325
			Motor Oil	99%	#3325
	Nutrients		Ammonium Nitrogen (NH4-N)	54%	#3328
			Soluble Phosphorus	92%	#3322
	Bacteria		E. coli	99%	#3325
			Total coliforms	99%	#3325
	Sediment		Total solids	97%	#3333
			TSS	80%	#3317
		Turbidity	63%	#3308	

MULTIPHASE FILTRATION DESIGN: DOUBLE REMOVAL EFFICIENCY*

The design and installation of multiple EnviroSoxx in a single application can significantly increase pollutant removal performance. New research provides science-based evidence that this technology can be a very effective best management practice and storm water treatment system used in a comprehensive treatment train design approach to meet a variety of industrial and municipal stormwater permit requirements. Space EnviroSoxx 12 inches apart for Multiphase Filtration Design.



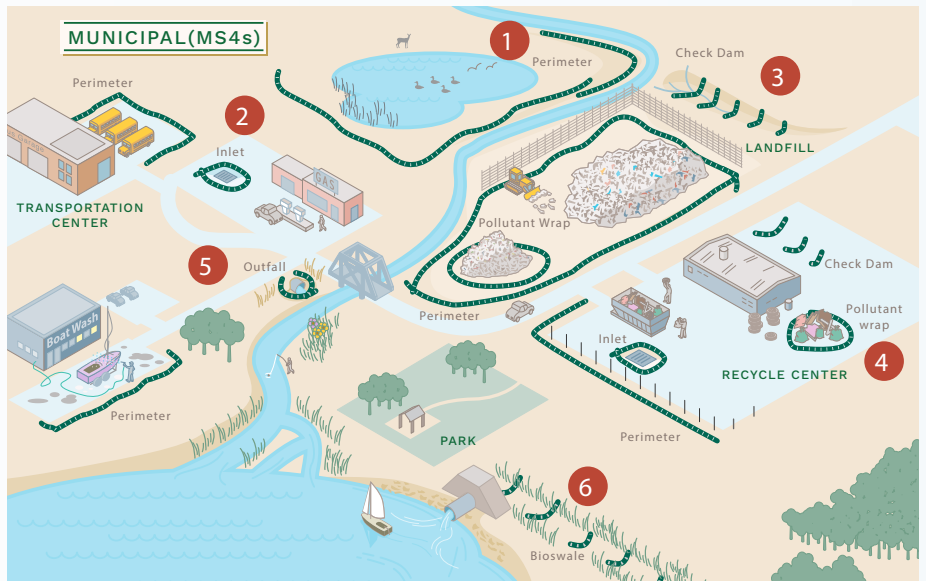
On average, **double** your removal rates with three EnviroSoxx filters.

*See Research Reference TechLinks #3343 and #3344. Based on removal efficiency averages of select pollutants.

TREATMENT TRAIN DESIGN

When designing a passive filtration system, water gets cleaner as it passes through multiple filters – therefore a combination of inlet protection, runoff diversion, channel protection, and outfall filtration using EnviroSoxx is typically recommended. EnviroSoxx can also be stacked in a pyramid style to increase the capacity of the system. As this illustration shows, each number represents a different EnviroSoxx application in a Treatment Train approach.

- 1 Perimeter
- 2 Inlet
- 3 Check Dam
- 4 Pollutant Wrap
- 5 Outfall
- 6 Bioswale



RECOMMENDED REPLACEMENT METHODS

Replacement schedules may vary and are highly dependent on site specific environmental conditions including flow rate, flow volume, pollutant concentration, pollutant load, proper installation, maintenance, design, and sampling methods. Replacement of EnviroSoxx filters is designed according to site conditions, but is typically recommended on a quarterly basis.

Refer to Design Specifications for complete application, design, installation, maintenance, and removal documentation at www.filtrex.com/specs

ENVIROSOXX PRODUCTS

EnviroSoxx are available on pallets in precut sections or continuous lengths for easy delivery and installation.

EnviroSoxx Diameter	Pieces / Length (per pallet)
8"	8 / 10' ea (half pallet)*
	16 / 10' ea (full pallet)
	2 / 80' ea (full pallet)
12"	5 / 10' ea (half pallet)*
	10 / 10' ea (full pallet)
	1 / 100' (full pallet)

*Half pallets available in select locations.



STORMEXX CATCH BASIN FILTER

Pair EnviroSoxx with StormExx® CLEAN Catch Basin Filter for under the grate treatment train.

StormExx CLEAN catch basin filters are designed to fit any existing stormwater drain system to capture sediment and pollutants. StormExx uses filtering media and additives in a replaceable cartridge for under the grate stormwater treatment.



filtrexx®

filtrexx.com | 877-542-7699 | info@filtrexx.com



EnviroSoxx by Filtrexx is available through distributors nationwide.

Contact us to find a distributor or inquire about joining our distribution network.