

## StormSafe

Modular Stormwater Filtration System







## **Maintenance Guide**

Vault and Manhole Configurations

## Manufacturer:

Fabco Industries, Inc 66 Central Avenue Farmingdale, NY 11735 Phone: (631)-393-6024

#### **Caution:**

The StormSafe should be maintained by trained individuals who are familiar with all confined space entry, disposal procedures and traffic safety regulations.

## fdbco Industries Inc

#### StormSafe Vault and Manhole Maintenance Guide

#### 1.0 Inspecting the StormSafe

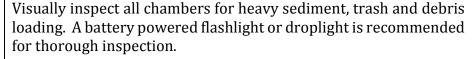
The StormSafe Cartridge System, like any other stormwater treatment device requires maintenance to remain efficient as a stormwater filter. Fabco Industries highly recommends inspecting the system within the first year after installation following the steps below.

Inspection and cleaning should be performed only after NO rainfall for at least 24 hours.

If working in the street, proper safety equipment should be worn, including but not limited to a hardhat, vest, gloves and eye protection, and local traffic safety rules & regulations should be followed.

Begin by removing the manhole access covers located over the inlet forebay, cartridge filtration deck and effluent chamber. Allow several minutes for the system to vent.

**<u>CAUTION:</u>** Grates can be extremely heavy. Some type of lifting mechanism is highly recommended.



Some telltale signs that cleaning or filter replacement is necessary are as follows:

- ☐ Waterline marks within a couple inches of the top of the bypass weir.
- ☐ Standing water in the outlet chamber because it was designed to drain down after a storm.
- ☐ Cannot see the tops of the cartridges because they are covered with sediment, which indicates a sediment depth on top of the deck of greater than 6 inches.

Record observations and comments on the maintenance log sheet. In addition, the use of digital photographs and/or sketches may be warranted to maintain the most accurate historical records.









## fdbco Industries Inc

#### StormSafe Vault and Manhole Maintenance Guide

#### 2.0 Cleaning Frequency

The StormSafe Cartridge System requires periodic cleaning. There are no hard and fast rules in this regard. Small units and installation sites with higher than expected sediment loads or areas with significant trees and foliage require more maintenance. In general, Fabco Industries recommends cleaning out the unit(s) at least once per year by removing the debris, sand and silt from the inlet forebay and cartridge chamber with a vacuum assisted device and changing out the cartridges.

#### 3.0 Cleaning out the StormSafe:

Be sure to follow all safety and traffic control protocols.

With the manhole access covers or hatches removed, the StormSafe is available for cleaning.

Remove the sediment and debris from the system. This can be done manually or with a vacuum device.

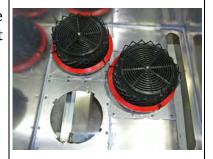


With the debris and sediment removed, the filter cartridge(s) will be visible on the deck surface. Fabco suggests removing the cartridge(s) from the StormSafe and removing any loose debris, sediment, trash from the blue foam pre-filter.

To remove the cartridge(s) reach down into the basin and firmly grasp the plastic outer rim of the cartridge bod just below the foam. Twist the cartridge body counter-clock-wise about ¼ turn until it stops. Lift the cartridge straight up to remove.



The filter cartridge(s) install through a hole in the bottom of the support deck or collection basin. The hole has four (4) slots that accept 4 tabs molded into the underside of the cartridge body.



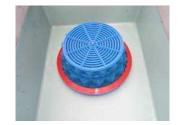


#### StormSafe Vault and Manhole Maintenance Guide

Insert the filter cartridge down through the hole in the base of the unit. The colored ring on the cartridge should be facing upwards. Push the cartridge all the way through the hole until it rests on the bottom. Slowly turn the cartridge in a clockwise direction until the tabs align with the slots and the cartridge body drops about ¼' further down.



Once the tabs fall through the slots, continue turning firmly in a clock- wise direction until the tabs contact the STOPS. The cartridge is now installed.





With the StormSafe chambers and new cartridges installed the maintenance process is complete. Re-install the manhole access covers and demobilize.



#### 4.0 Disposal

All liquid, oils, sediment, debris, trash and other accumulates removed from the StormSafe must be handled and disposed of in accordance with local, state and federal regulations.

Disposal considerations must be part of a well-planed and scheduled maintenance regime. Solid waste disposal can typically be coordinated with a local landfill, whereas liquid waste can be disposed of at either a wastewater treatment plant, or a municipal vacuum truck decant facility.





#### StormSafe Vault and Manhole Maintenance Guide

#### 5.0 Selecting replacement cartridges

The Fabco filter cartridges used in the StormSafe product are designed primarily to capture: floating materials, sediments and suspended solids and emulsified products such as hydrocarbon compounds, dissolved heavy metals, nutrients (P&N) and pathogens (bacteria). Before ordering your cartridges make sure you select the correct type. Each cartridge type can be identified by a colored "Ring" located at the top of the cartridge.

Part Number	Targeted Pollutant	Ring Color
9718-1	Standard Cartridge	
	Good All-purpose cartridge for common surface runoff that may contain a little bit of everything.	Red
9718-2	Pathogen Cartridge	Yellow
	2x's more pathogen treatment Vs. Std Cartridge. Use near sensitive water ways to keep beaches and shell fishing areas open.	
9718-3	Hydrocarbon Cartridge	Blue
	25% more hydrocarbon filter media Vs Std cartridge. Excellent for vehicle or maintenance related applications.	
9718-4	Heavy Metals Cartridge	
	Uses unique FABLITE filter media for HV metals. Suggested for industrial usage where persistent HV metals have been identified in surface runoff.	Grey
9718-5	Standard Short Cartridge	Mint
	Reduced height version of std Cart.	
9718-6	Nutrient Cartridge	Green
	Uses proprietary FABPHOS media for nutrients. Highly effective on the critical dissolved Ortho- Phosphates. Helps reduce algae blooms keeping the water clean and healthy.	
9718-7	High Flow Cartridge	Red with Black mesh
	Good all-purpose cartridge More high flow open cell foam layers than std Cart.	



## StormSafe Vault and Manhole Maintenance Guide

# Inspection and Maintenance Log-Sheet

StormSafe Cartridge Vault or Manhole System			
Maintenance Company			
Company Name:	•		
Onsite Technician:			
Contact Phone No:			
Treatment System			
Date of Maintenance:	StormSafe Model		
Vault\Manhole Location:			
Maintenance Item	<u>Comments</u>		
Water Depth (prior to maintenance) in forebay:			
Sediment Depth (prior to maintenance) in forebay:			
Sediment Depth (prior to maintenance) on cartridge deck:			
Structural Damage:			
Maintenance Performed:			
Additional Work Required:			
Structural Repairs:			









## **LOCATIONS & CONTACT INFO**

#### **ASP ENTERPRISES**

aspent.com

salesasp@aspent.com

St. Louis, MO Omaha, NE 636.343.4357 402.861.8579

Kansas Citv. MO 816.554.1191

Wichita, KS 316.393.1554

**BOWMAN CONSTRUCTION SUPPLY** bowmanconstructionsupply.com

salesbcs@bowmanconstructionsupply.com salesquick@quicksupplyco.com

Denver, CO Colorado Springs, CO

303.696.8960 Loveland, CO 970.535.0863

**OUICK SUPPLY CO.** 

quicksupplyco.com

Des Moines, IA 515.289.1271

**CASCADE GEOSYNTHETICS** 

cascadegeos.com

salescascade@cascadegeos.com

Portland, OR 971.339.1020

## **SOLUTIONS WE SUPPLY**

#### **GEOSYNTHETICS**

Filter Fabrics

Stabilization Fabrics

#### Geogrids

- Road Grids
- Wall Grids
- Slope Stabilization

#### **Specialty Fabrics**

#### **Composite Geomembranes**

• GCLs, PVC, HDPE, LLDPE, EPDM, Granular Bentonite

#### **SEDIMENT CONTROL**

#### **Inlet Protection**

· Grated Inlet, Curb Inlet, Area Inlet Protection

#### **Ditch Checks**

- · Triangle Silt Dike
- GeoRidge

#### **Perimeter Protection**

- · High and Low-Porosity Silt Fence, Straw Wattles, Silt Socks
- Safety Fence

#### Flocculants & Water Treatment

Polymer-Based & Natural Flocculants

#### Sediment Basin Skimmers

**Dewatering Bags** 

#### **Trackout Control**

- FODS
- Rumble Grates

#### **Turbidity Curtains**

#### **EROSION CONTROL**

719.257.7840

#### **Basic Hydraulically Applied Mulches**

- Wood
- Paper
- Blends
- Straw

#### **High-Performance Hydraulically Applied Products**

- FGM
- · Additives & Tackifiers

#### **Temporary Erosion Control Blankets**

- Coir & Jute Mat/Nettings
- Short-Term ECBs
- Extended-Term ECBs

#### **Permanent Erosion Control Blankets**

- Turf Reinforcement Mats
- HP-TRMs
- Anchor Reinforced Vegetation System

#### Structural BMPs

- Transition Mats
- Geoweb Cellular Confinement
- Composite Vegetated Armor System
- Flex MSE Vegetated Wall System
- Articulated Concrete Block
- Gabions
- · Grout-Filled Geotextile Mats

#### Vegetation Establishment

- · Native Seed & Turf Seed
- Fertilizers
- · Organic Soil Additives
- Stratavault Soil Cells

#### STORMWATER MANAGEMENT

#### Water Quality

- Inlet Filter Boxes
- Pre-Treatment Chamber
- Nutrient Separating Baffle Boxes
- · High-Flow Biofiltration Media
- · Hydrodynamic Separators
- Stratavault

#### Water Ouantity

- · Modular Underground Storage Systems
- Chamber Detention Systems

#### Drainage

- HDPE Swale Liner
- Pipe & Fittings
- · Drainage Composites
- Strip Drain

#### **Inlet Structures**

- PVC
- · Drain Basins, In-Line Drains
- Landscape

#### Permeable Pavers

- Permeable Articulating Concrete Block
- Grass Pavers
- Gravel Pavers
- Concrete Pavers

#### **SPECIALTY**

Natural & Synthetic Coir Fiber Logs **Vegetated Reinforced Soil Slopes** Soil Anchors **Root Barrier System** AquaBlok Muscle Wall

We are full line distributors of construction materials for all project types. Contact us for assistance with a project. From specification and development to installation and completion, we're here to help with all of your site solution needs.