



SEDIMENT & SHEEN IN STORMWATER RUNOFF

# Simplify Spill Control

Control spills in wet weather. Reduce cleanup costs.  
Save hours of time. Eliminate NOVs.



Spilltration® materials are  
manufactured exclusively by  
HalenHardy®



Announcing HalenHardy Spilltration® Husky materials.  
Our fibers are made from 100% post-consumer waste to  
help support your company's sustainability initiatives.





## SEDIMENT & SHEEN IN STORMWATER RUNOFF

### My Client Chuckled When I Admitted I Had No Clue what the terms **TSS & FOG** Meant

**PART 1:** In the winter of 2018, one of our clients asked, “How does your Spilltration® Husky oil filter fabric work on FOG & TSS?” Not wanting to sound stupid, I excused myself for a few seconds and searched for the terms on my iPhone. I came back even more clueless. I was pretty sure he wasn’t talking about “clouds that hug the earth,” “Fear Of God” or “Toxic Shock Syndrome.” When I reemerged, I had to admit I was clueless on the terms. Our host was gracious and said, **“Total Suspended Solids and Fats, Oils & Grease.”**

I breathed a sigh of relief. Actually, we had a lot of experience using Spilltration® Husky pads for TSS & FOG. We had contracted to launder thousands of greasy sand-covered gloves for the fracking industry in the previous two years.



Basin lined with  
Spilltration®  
Husky material

We figured out how to clean the gloves’ oil, grease, and sand and restore them to near-new condition. The only problem was prefiltering the dirty, sand-filled wash water. So we built a Spilltration® basin in our slop sink and lined it with Spilltration® Husky material. The setup grabbed all of the suspended solids and grease. **So, we had a hunch our products could work well for his problem.**

**PART 2:** It turns out, our client’s company had been out of compliance with TSS & FOG measurements for a long time. He recently assumed the Clean Water Act duties for this site and was bound and determined to fix the problem. We told him we thought our products would work and guaranteed that we would refund his money if we failed to get him back in compliance. Long story short, he contracted us to install our first Spilltration® Husky stormwater filter system. **Within weeks his TSS fell from more than 320 mg/L to under 20 mg/L - a 94% reduction.** These results were well within the scope of his 100 mg/L limits under his NPDES permit. His FOG levels dropped to non-detect.

Our HalenHardy® crews perform simple monthly maintenance of the system, and the client’s outfall measurements remain in compliance to this day. **And thanks to this case, we gained a whole new set of stormwater filtration applications that we never imagined.** That’s the power of literally living “in the trenches” with our customers.



1

A pile of storage yard silt, loaded with fine coal, gravel, and oily dirt at the head of a ditch that leads to a trout stream.



2

This toxic brew piled up at a trout stream outfall two hundred feet down the ditch from the silt pile.



3

We lined the ditch with Spilltration® Husky rolls & surrounded it with Husky filter dikes.



4

Spilltration® Husky filter dikes installed across the ditch stop heavy sediment.



5

As a final touch, we fabricated a Spilltration® filter sleeve at the head of the outfall culvert.





HalenHardy® crew installing Spilltration® Husky rolls to stop the erosion of a ditch leading to a trout stream.



Job complete. Husky filter liners on both banks. SkimBoa oil sheen filter socks installed to capture fugitive oils.



Spilltration® Husky culvert inlet filter sleeve protects trout stream from TSS & FOG. Change out monthly. **NEED CUSTOM SIZES? CALL 814-822-2004.**



**SPL077**

### Spilltration® 10' Stormwater Oil & Sediment Filter Dike

|               |                               |
|---------------|-------------------------------|
| dimensions    | 5.5" W x 10' L                |
| sold as       | 3 dikes per case              |
| absorbency    | 24.2 gal/case<br>8.1 gal/each |
| max flow rate | 5 gal/min                     |
| msrp          | \$154                         |



**SPL088**

### Spilltration® 13' Stormwater Oil & Sediment Filter Dike

|               |                              |
|---------------|------------------------------|
| dimensions    | 5.5" W x 13' L, 2 dikes      |
| sold as       | 2 dikes per case             |
| absorbency    | 21 gal/case<br>10.5 gal/each |
| max flow rate | 5 gal/min                    |
| msrp          | \$221                        |



**SPL138**

### Patent Pending Spilltration® SlurrySox™ Weighted Filter Dike

|            |                |
|------------|----------------|
| dimensions | 3"D x 8'L      |
| sold as    | each           |
| msrp       | \$189 per case |



**2 SIZES**

### Spilltration® Stormwater Oil & Sediment Filter DamSock™

| mfn        | SPL092                           | SPL120                       |
|------------|----------------------------------|------------------------------|
| dimensions | 3" W x 42" L                     | 3" W x 8' L                  |
| sold as    | 3 socks/case                     | 2 socks/case                 |
| absorbency | 1.78 gal/case<br>75.8 fl oz/sock | 3 gal./case<br>1.5 gal./sock |
| msrp       | \$67 per case                    | \$569                        |



**SPL023**

### Spilltration® Husky Oil Filter Mini Roll

|            |               |
|------------|---------------|
| dimensions | 32" W x 25' L |
| sold as    | each          |
| absorbency | 20.2 gal/roll |
| msrp       | \$88/roll     |



**SPL018**

### Spilltration® Husky Oil Filter Master Roll

|            |                |
|------------|----------------|
| dimensions | 64" W x 100' L |
| sold as    | each           |
| absorbency | 161 gal/roll   |
| msrp       | \$672          |







Oil sheen at fueling station.



Rain lifts oil and carries it to storm drains.

## Capture Diesel Dribbles and Engine Oil Oozes with Spilltration® Oil and Sediment Drain Filters

Many fleet vehicle operators and technicians don't give much thought to the drips of diesel fuel that leak from the fuel nozzle or the few drops of engine oil that collect under practically every vehicle or piece of equipment in the parking lot and maintenance facilities. But, for most Environmental Coordinators and Fleet Managers, they are a fairly constant source of aggravation.

### Diesel Fuel Drips and Engine Oil Leaks

**Diesel Fuel Drips and Engine Oil Leaks:** Each time someone fuels a vehicle, at least a few drops of diesel hitting the ground are almost a guarantee. In fact, it's so common that most operators anticipate it happening. They'll even take special care to make sure that it doesn't hit their uniform or boots on its way to the ground so that they're not stuck smelling it all day.

Not only does that make fuel islands an eyesore, but it can also create environmental headaches. Meanwhile, it's not hard to find equipment with blown hydraulic lines or out-of-service transformers leaking throughout the facility. Plus, nearly every vehicle - whether in service or not - is silently dripping engine oil wherever it's parked or has had a chance to sit for more than a few minutes. That leaves tell-tale oil stains all over the lot.

These incidental leaks and drips are more than just a nuisance or housekeeping woe. Left unchecked, these pollutants can enter storm drains and create environmental compliance problems every time it rains. Leaked petroleum products like diesel fuel and engine oils can be difficult to manage. Unlike water-based liquids, they never fully evaporate. Instead, they soak into asphalt and concrete and will cling to many sealed surfaces.

### Shimmering Sheens

When it rains, raindrops and flowing water lift these small amounts of oil and carry it to storm drains. Rainbow sheens or milky discolorations on puddles or near storm drains are two indicators that stormwater has picked up residual fuel or oil somewhere at the facility. Most facilities are prepared to handle larger fuel and oil spills, but being prepared to handle small sheens (although they are much more frequent) is sometimes overlooked. This can lead to big fines because under the Clean Water Act, oil (and fuel) discharges that create a sheen violate water quality standards.



## Mud and Other Muck

Even in an ideal world where fuel leaks and drips are contained at pumping stations, all vehicles are stored indoors and nothing leaks, there's still a chance for stormwater permit problems.

Dirt, mud, debris, sand and silt are all forms of Total Suspended Solids (TSS) that can also violate water quality standards. Regardless of whether it is due to onsite construction, used for traction in bad weather, or if it is brought in on vehicle tires; these tiny particles can be just as inconvenient to control as oil and petroleum leaks and drips.

## Best Practice Failures

Because EPA's Stormwater and Spill Control and Countermeasures (SPCC) Regulations are performance based, facilities have the liberty of choosing how they will comply with these regulations and how they will prevent pollutants from being discharged. The methods that they choose are Best Management Practices (BMPs).

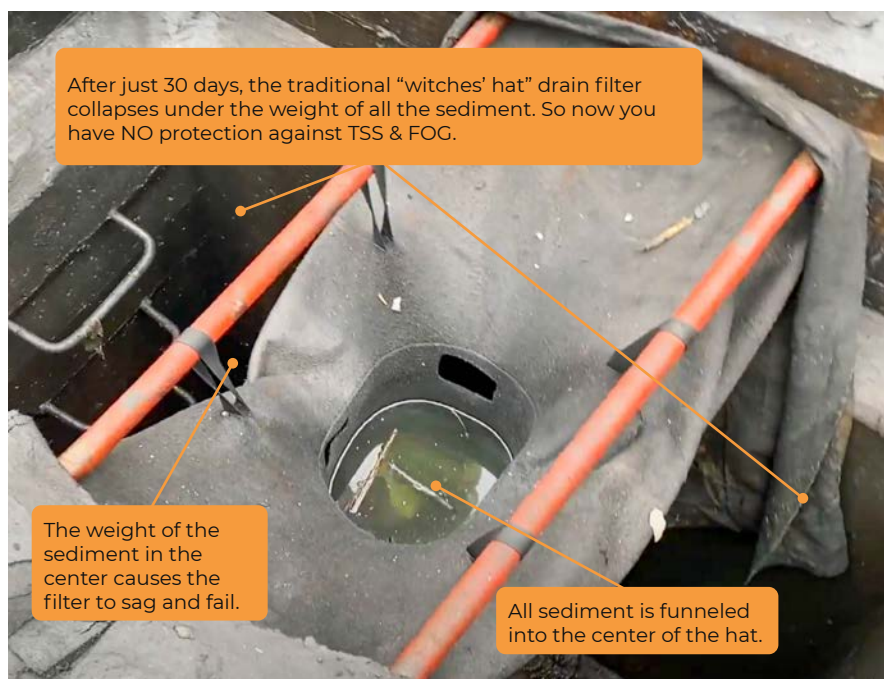
A facility's BMPs include a combination of engineering controls, administrative controls and work practices that collectively serve to keep pollutants like fuel, oil, grease and TSS from entering storm drains or waterbodies. The solutions do not need to be costly or difficult to implement. They just need to be effective. In fact, the only cost may be manpower - and the simpler they are, the easier it is to ensure compliance.

Storm drains are often the last line of defense before a pollutant leaves the facility. That's a good reason why most facilities have at least one BMP that addresses keeping oil sheens and TSS from reaching the drains - or outlines how those drains will be maintained to prevent harmful discharges.

One of the most common BMPs is good housekeeping that usually includes sweeping up dirt and removing oil stains from the lot on a routine basis: either daily or weekly. However, it can be very time consuming - even with mechanical sweepers and scrubbers. In bad weather conditions, it may not be practical. During large storm events, any dirt or oil that has not been removed (because the regularly scheduled sweeping day is tomorrow) can still be carried to storm drains.

Geotextile drain inserts are another common BMP that some facilities install under storm drain grates to collect sediment and sometimes trace oils. But they are difficult to maintain because they become heavy and often fall into the drain catch basin when the storm grate that holds them in place is removed. They also tear easily if sharp debris or twigs enter the drain, causing them to fail and necessitating removal of silt, sediment and debris from the bottom of the catch basin.

A third option is having a cleaning service remove the storm drain grates and vacuum the collected dirt, debris, sediment and trash out of the catch basin. This can be expensive, and often needs to be done on at least a seasonal basis to prevent the catch basin from becoming filled and ineffective.



Geotextile drain inserts tear easily and are difficult to maintain.



**I wanted to thank HalenHardy® for introducing us to Spilltration®!**

The system's effectiveness is cutting edge with complete containment of any leaks we may have on our equipment.

**- JM, HESQP, Coordinator  
VPP Star Site - Chemical Refinery**







| mfn                | SPL098                            |
|--------------------|-----------------------------------|
| dimensions         | made to order                     |
| substance filtered | Oils, Sediments, Debris and Trash |
| pore size          | 53 Microns                        |
| overflow hole size | 6"x 6" - 12" x 12" (Range)        |
| sold as            | each                              |
| recycled content   | Yes                               |
| UV -resistant      | Yes                               |
| msrp               | Call for Pricing<br>814-822-2004  |

**PATENT PENDING**

#### STORM DRAIN SOLUTIONS FOR NO TRAFFIC AREAS

## Spilltration® Above-Grate Oil & Sediment Stormwater Filter

### Fits over the drain for easy maintenance.

Maintaining storm drains and preventing oil sheens and TSS from leaving the facility shouldn't be frustrating, time-consuming, or messy. Plus, for the employees tasked with maintaining storm drains, the easier solution, the better. So, anything that does not involve removing storm grates or getting covered in muck will make it easier for facilities to comply with the routine maintenance requirements outlined in their plans.

Storm drains located near the edges of paved areas are unlikely to see much, if any, traffic. When this is the case, oil sheens and TSS can be stopped from ever entering the drain with Spilltration® Above-Grate Oil & Sediment Filters. Installed directly over existing storm drain grates, Spilltration® Above-Grate Oil and Sediment Filter captures oil sheens, traps dirt, sand, and silt, and prevents trash and debris from entering storm grates. Then after a storm event or during regularly scheduled housekeeping, simply sweep up any accumulated dirt, debris, or trash around the drain.

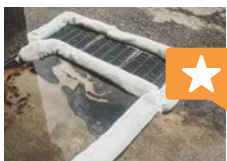
Because the storm grate remains in place and oil and debris are prevented from entering, cleaning up the area around the drain can be completed in less than five minutes without the need to remove the grate. When the Spilltration® Above-Grate Oil & Sediment Filter has reached its oil absorption capacity, it can be removed and replaced with a fresh one in less than ten minutes with no special tools.

✓ **Effective:** Spilltration® Husky filtration layers for removing oils, fuels, sheens, and sediments.

✓ **Durable:** Built to withstand high flow rates. Raised center captures debris.

✓ **UV-Resistant:** Will not degrade in sunlight.

✓ **Eco-Friendly:** Spilltration® Husky filter material is made from post-consumer waste.



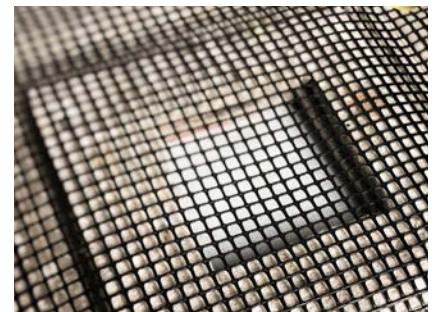
### Use with Spilltration® Husky DamSock

Use Spilltration® Above-Drain Oil & Sediment Stormwater Filter in combination with Spilltration® Husky DamSocks, for added filtration power in heavily contaminated areas. **See page 17 for more info.**

#### PRODUCT FEATURES



**Heavy-duty polyethylene mesh top** for added durability creates 'speed bumps' to cause sediment to drop out.



**Overflow port** prevents water from backing up in a heavy rain event.

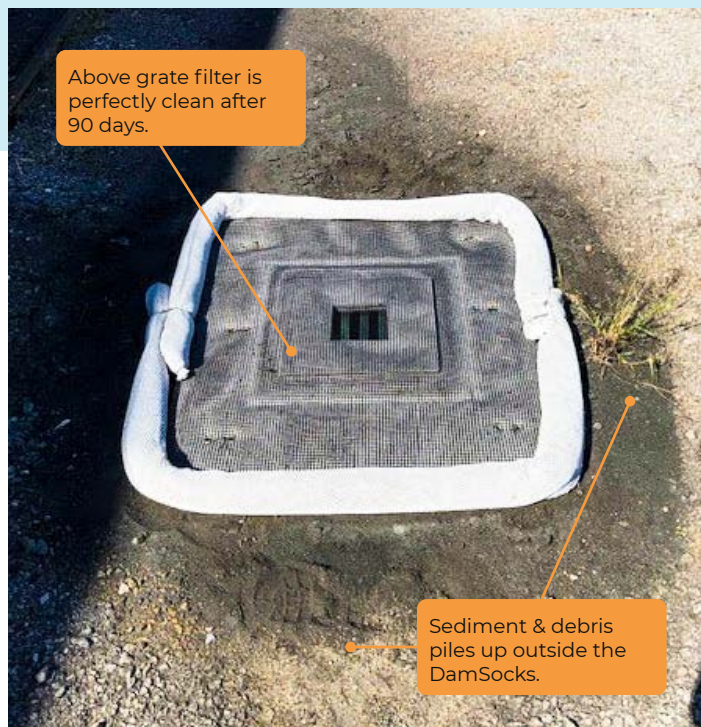


**Extra-strength magnets** for easy installation and removal.

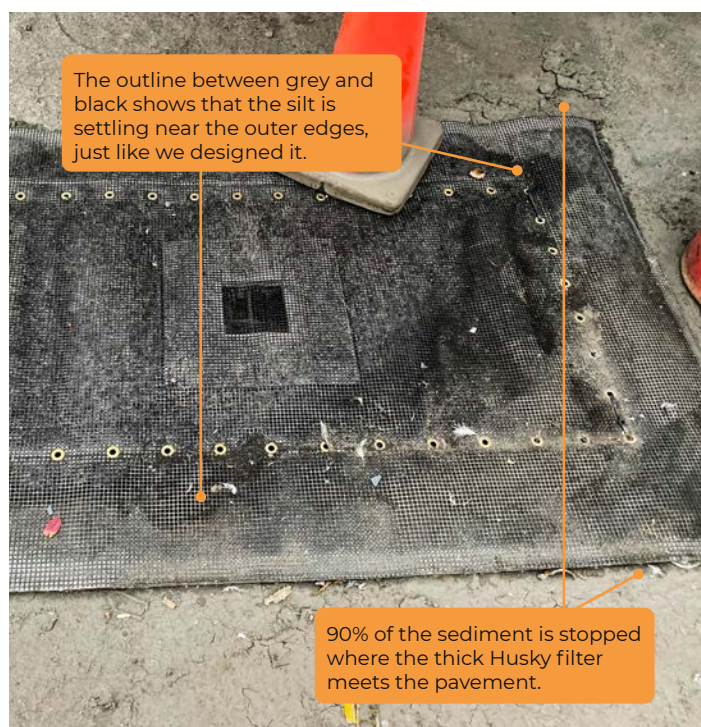


# IN THE FIELD

## Spilltration® Above-Grate Oil & Sediment Stormwater Filter



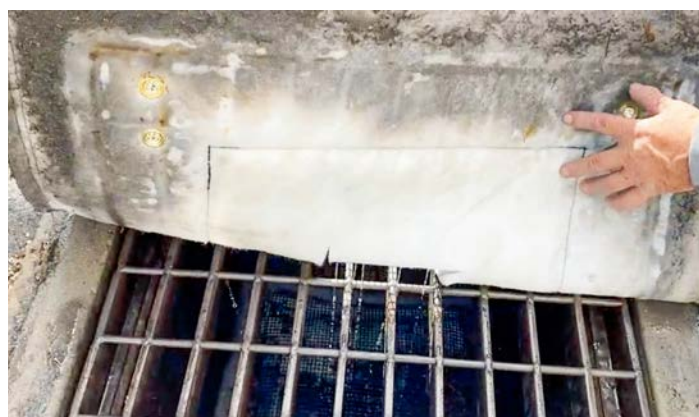
My dad was a banker, and he would call this the “Belt & Suspenders” approach. To protect the Spilltration® filter grate cover, we added a couple of Filter DamSocks around the perimeter.



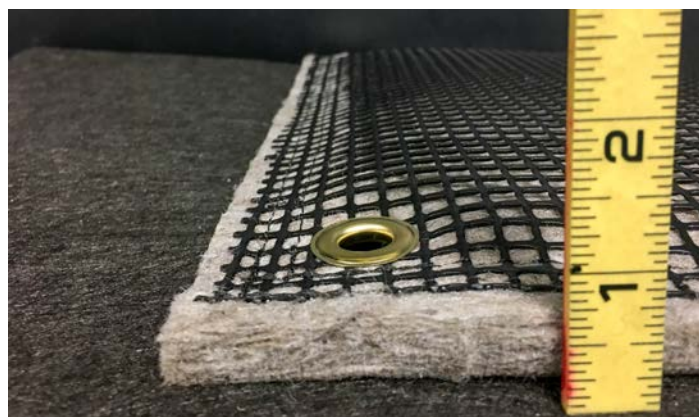
One month of construction sediment captured by the Spilltration® Above-Grate filter.



When Spilltration® Husky fibers get wet, they hug the ground and conform to uneven surfaces. As sediment collects, it forms a tighter seal. Note how the sediment is captured on the outside of the storm grates.



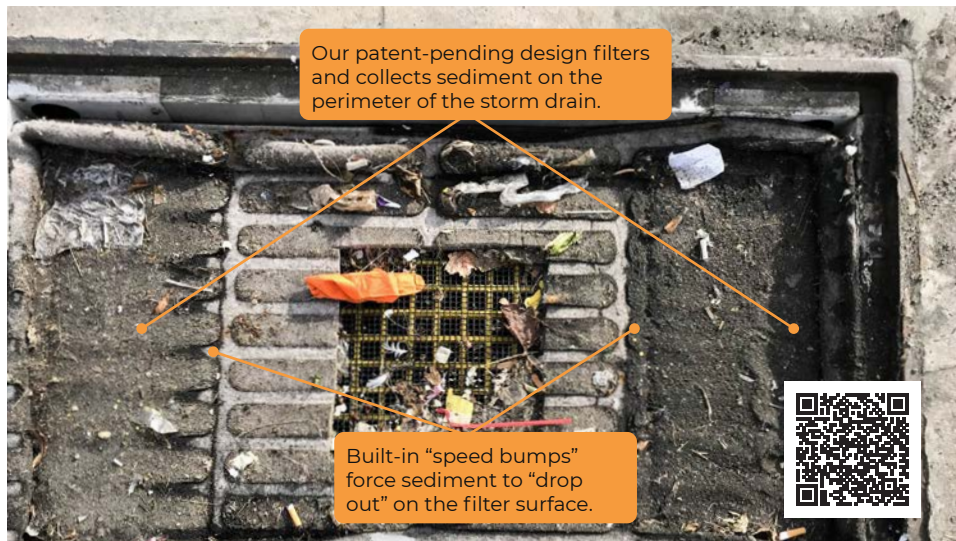
After 90 days, the underside of this filter reveals all the dirt is on the perimeter. The center fibers are still clean. Under these conditions, this filter will be good for another three months.



Super thick Husky fiber base offers 10x the protection of traditional “witches’ hats.” Plus, it can be changed out 1,000% faster with no exposure to confined space.







| mfn                | SPL108                            |
|--------------------|-----------------------------------|
| dimensions         | made to order                     |
| substance filtered | Oils, Sediments, Debris and Trash |
| overflow hole size | 6"x 6" - 12" x 12" (Range)        |
| sold as            | each                              |
| recycled content   | Yes                               |
| UV -resistant      | Yes                               |
| msrp               | Call for Pricing<br>814-822-2004  |

**PATENT PENDING**

#### STORM DRAIN SOLUTIONS FOR HIGH TRAFFIC AREAS

## Spilltration® Under-Grate Oil & Sediment Filter

**Sits just below the grate for convenient inspection and maintenance.**

When storm drains are located in traffic areas, above-grate solutions aren't practical. But, the Spilltration® HuskyGuard Under-Grate Oil and Sediment Filter can still save hours over traditional storm drain cleanouts and cost far less than fabric drain inserts or vac trucks. Instead of relying on drain insert bags that fall into the catch basin or shoveling and vacuuming out accumulated dirt and trash at the bottom of catch basins, Spilltration® HuskyGuard Filters capture TSS and oil sheens just below the storm grate.

The under-grate filters initially take about 30 minutes to install. The frame attaches to the walls of the storm grate with an electric drill. This frame supports a fiberglass grate that stays in place just below the level of the storm grate. The fiberglass grate is a stable, flat surface that holds the replaceable absorbent and filtration media.

Because dirt and debris accumulate less than two inches from the top of the storm grate, it can be vacuumed with a standard wet/dry vacuum at regular housekeeping intervals. There is no need to remove and replace the grate each time. The oil-absorbent filtration media just below the grate should be checked at least quarterly and replaced when it has become fully saturated. Although this does involve removing the storm drain grate, there is no risk of the absorbent media falling to the bottom of the catch basin; which means that inspecting and changing out the absorbent media, when necessary, still takes less than five minutes.

- ✓ **Easy to Use:** Sits right below the grate for easy inspection and maintenance.
- ✓ **Stays in Place:** Will not fall into catch basin even when full of debris and sediment.
- ✓ **Durable:** Heavy-duty fiberglass reinforced plastic grating holds the HuskyGuard filter in place. Won't corrode or rust while being strong enough to hold the weight of the filter and all the sediment.
- ✓ **Removes Oil and Sediment:** Spilltration® Husky filtration layer removes oils, fuels, sheens, and sediments.
- ✓ **Captures TSS and Sheens:** Raised center for capturing TSS and sheens during higher flow situations.
- ✓ **Overflow Port:** Prevents water from backing up in a heavy rain event.

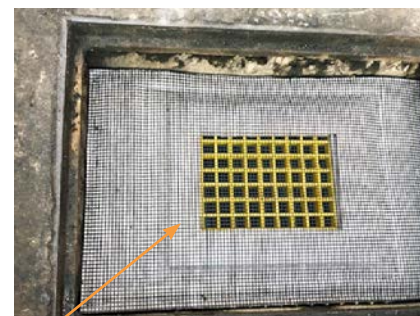
#### AS EASY AS 1, 2, 3



**Step 1:** Install L-Channel Brackets



**Step 2:** Install Pre-Cut Fiberglass Grating



**Step 3:** Install HuskyGuard Filter and Replace Storm Grate



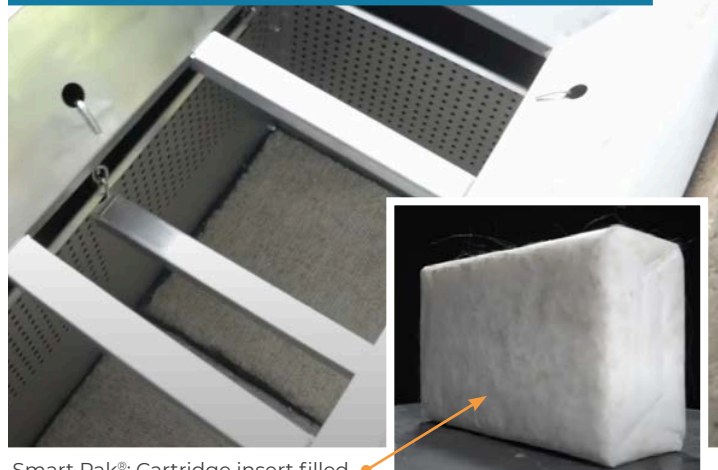
# Ultra-Urban® Filter with Smart Sponge® Media

**Absorb, encapsulate, and solidify a wide range of contaminants in your stormwater runoff.**

Are you looking for a long-term solution for stormwater catch-basin filtration? The Ultra-Urban® Filter is a stainless steel drain insert that can filter out trash, debris, and sediment. Its stainless steel construction makes it a permanent solution for TSS removal. It can be customized to fit any sized surface grate or curb inlet opening. Combine with Smart Sponge® media (see below), and you can remove a wide range of pollutants like hydrocarbons, heavy metals, bacteria, and other dissolved contaminants. The Ultra-Urban Filter helps meet NPDES requirements with effective filtration, efficient application, simple installation, and low maintenance.

## Storm Drain Solutions

## for Purification of Stormwater Runoff



Smart Pak®: Cartridge insert filled with Smart Sponge® Media

### Mounting collar:

A customizable stainless-steel collar for mounting

### Hook and chain:

Mounting system to secure UUF in place

### Full-trash capture:

Full trash and debris capture greater than 5 mm

### Smart Sponge® :

Advanced purification media

### Smart Paks®:

Designed with replaceable Smart Sponge® media for use in new or existing containment structures

### Stainless-steel:

All stainless-steel with 20-year warranty

## FEATURES AND BENEFITS

- ✓ Certified full trash and debris capture of pollutants larger than 5 mm
- ✓ Both curb opening and surface grate options
- ✓ All stainless steel with a 20-year warranty
- ✓ Can be upgraded for different contaminant removal needs during its lifespan
- ✓ Capable of bypassing on average up to 10x its design flow
- ✓ Simple installation, maintenance, and servicing

## Innovative Technology that Targets Contaminants Directly



**Smart Sponge®** targets Hydrocarbons



**Smart Sponge® Plus** targets Bacteria



**Smart Sponge® HM** targets dissolved Heavy Metals & Phosphates



**Smart Sponge® AC** targets dissolved Hydrocarbons & Organics



**Smart Sponge® BC** targets Nutrients Metals & Emerging Contaminants

## PRODUCT SIZES

| mfn     | size            |
|---------|-----------------|
| DI1212N | 12" x 12" x 18" |
| DI1212H | 12" x 12" x 10" |
| DI1414N | 14" x 14" x 18" |
| DI1414H | 14" x 14" x 10" |
| DI1616N | 16" x 16" x 18" |
| DI1616H | 16" x 16" x 10" |
| DI2020N | 20" x 20" x 18" |
| DI2020H | 20" x 20" x 10" |
| DI2814N | 28" x 14" x 18" |
| DI2814H | 28" x 14" x 10" |
| DI3216N | 32" x 16" x 18" |
| DI3216H | 32" x 16" x 10" |





Other sizes available upon request.  
Call 814-822-2004 for a quote.





# HalenHardy®

[www.halenhardy.com](http://www.halenhardy.com)

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## FOR ORDERS & SUPPORT:

Call us at **814-822-2004**

Email us at [sales@halenhardy.com](mailto:sales@halenhardy.com)

Order online at [www.halenhardy.com](http://www.halenhardy.com)

