July 2014

The Rain Events

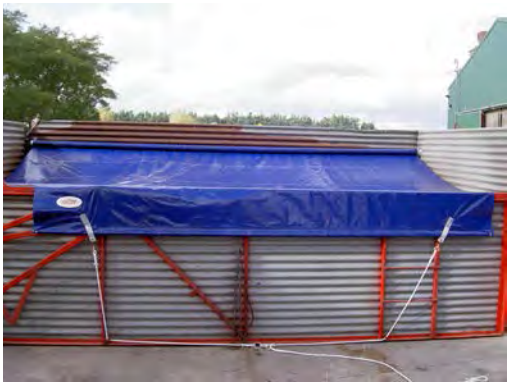
A Monthly Newsletter on the California Industrial General Permit
By WGR Southwest, Inc.

REDUCING HEAVY METALS

Is your facility into heavy metal? No, we aren't talking about Metallica. If your facility is required to sample for metals as part of the IGP table D parameters, or for known site pollutant activities, you are likely familiar with these types of heavy metals. Problematic heavy metals for IGP permittees include aluminum, zinc, copper, lead, iron, and others. This month's edition of ***The Rain Events*** focuses on BMPs, practices, and techniques for reducing heavy metals at your facility.

Step 1 – Evaluate: Is your facility in compliance with benchmarks for metals? If not, or if the potential to exceed a benchmark value exists, you should evaluate your pollutant (metals) sources. Walk the facility and observe operations, materials, and potential sources. Evaluate if pollutant activities and sources are under cover or performed in an area that does not have exposure to storm water. Evaluate housekeeping measures such as daily sweeping activities and container management. Consider sources that may not be obvious such as galvanized roof tops, surfaces, and materials (zinc); forklift and truck tire markings (zinc); dust from vehicle brakes (copper); oil staining from lubricants (zinc); or concrete / cement / fly ash (aluminum). Inspect your facility's BMPs for condition and effectiveness.

Step 2 – Mitigate:

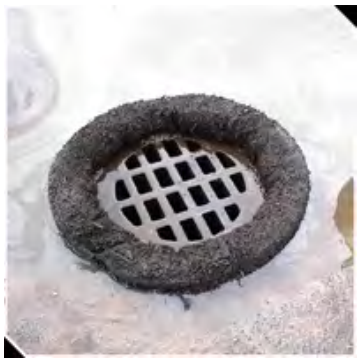


Using what you have learned from the evaluation in step 1, begin to develop mitigation measures to improve on areas that were identified. Where feasible, move pollutant generating activities and sources under cover. Cover can be as complex as building a structure to provide area coverage or as simple as securing a tarp over sources (i.e., metal recycling bins).

An ounce of prevention is worth a pound of cure. This is definitely true when it comes to housekeeping measures. Routine sweeping and drip-stain management reduces heavy metals from your facility. Train your staff on good housekeeping measures and discuss with them the vital role they each play in reducing pollutants in storm water. Replace older, less effective BMPs (i.e., drain inserts) with new ones. If the facility's current configurations of BMPs are proving to be ineffective for reducing heavy metals, it may be time to go back to the drawing board. This does not mean that the only option is an expensive end of pipe treatment system. One of the most effective treatment methods we have seen is to slow down the flow by using various combinations of BMPs such as ballast rock, rock bags, wattle, compost socks, and inlet protection. The slower the flow, the more solids (particulate metals) are reduced from the discharge. Removing heavy metal sources by overhead coverage, practicing good housekeeping, and using a multi-layered approach to slowing the flow through the facility's BMPs should make a positive impact in reducing the metal concentrations.

Compost Filtration

When selecting filtration BMPs for heavy metals, thoughts tend to wander toward inlet protection and end of pipe treatment options. There is another BMP option that has been used for years for metals but is recently gaining popularity – and that is compost. The compost can be utilized as a blanket on the surface, in filter socks, or in underground vaults and LID devices. Water flows through the compost which retains sediment, metals, and other pollutants. The compost filter socks are particularly useful and versatile and can be used in a variety of storm water management applications such as: perimeter sediment control, check dams to reduce soil erosion in swales, ditches, channels, and gullies, storm drain inlet protection, and reduction of pollutants from storm water. Filtrexx® is one manufacturer / designer of compost filter socks and has a variety of media blends to treat various pollutants common to industrial facilities. According to Filtrexx, typical metal removal efficiency via compost socks ranges from 47 to 73%.



		Metals					
Application	**Category**	**Cd**	**Cr**	**Cu**	**Ni**	**Pb**	**Zn**
Filtrexx® FilterMedia™ & Metals Agent	Removal Efficiency (soluble)	72%	29%	70%	69%	79%	57%
	Removal Efficiency (particulate)	77%	78%	45%	63%	61%	47%
	Removal Efficiency (total)	73%	47%	70%	69%	73%	53%

Additional Information See USDA Published Research and Filtrexx TechLink #3325

Other pollutants that can be removed or treated with compost include sediment, hydrocarbons, nutrients (nitrogen and phosphorus), and bacteria. Again, the key to using compost is to slow the rate of discharge to allow greater residency time in and through the compost. More and more industrial facilities are incorporating compost into storm water conveyance swales, permeable areas of sheet flow runoff, retention basins, and in drain inlet filter socks. Other benefits of using compost include greater dust control, improved erosion control, and a more aesthetically pleasing environment than bare soil.

"To Do List" for July:

- **Annual Report was due July 1st; make sure you turned it in.**
- **Make sure the 1st Quarter Non-Storm Water Observation is performed (Forms 2 & 3) by September 30.**
- **Seal off drain inlets to keep windblown dust and debris from entering them.**
- **Clean out drain pipes, manholes, and catch basins.**

Storm Water Contest …

Each month, we invite our readers to participate in a contest to test their knowledge of the Industrial General Permit and their storm water compliance program. We enter all submittals to our monthly newsletter question into a drawing, and one person is selected at random to receive a $25 gift card.

Last Month, the question was …

How many separate forms are in the State's Annual Report Template?

Corrie Chitlik provided the correct answer: *"There's 5 forms (that are in the template)"*
Corrie won a $25 gift card to Chipotle Mexican Grill.

This Month's Contest Question …

Where can benchmarks for storm water analytical results be found?

By August 8, 2014, submit a response for the following question by email to steravskis@wgr-sw.com. All persons submitting the correct answer will be placed in a drawing. The winner will receive a $25 gift card to Lowes.

Something to Watch …

On June 10, 2014, the much anticipated staff report for the *Draft Amendments to Statewide Water Quality Control Plans to Control Trash* (Trash Amendments) was released by the State Water Resources Control Board. [1] The proposed amendments would require IGP permittees to achieve what the SWRCB refers to as a "zero trash" Water Quality Objective (WQO). This would be done through implementing facility controls to fully capture and prohibit the discharge of trash from the facility. It is expected that the trash prohibitions would take effect as new permits are drafted and adopted. It is unclear at this time whether the new IGP (effective 7/15) will be re-opened to include these prohibitions. We encourage all of our readers to review the amendments and make formal comment. We will continue to keep monitoring the progress with the draft Trash Amendments and will provide updates in future issues.

The State Water Board will accept both written and oral comments on the proposed Trash Amendment. **Written comments** must be received by **12:00 noon on August 5, 2014** and addressed to:

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

[1] http://www.waterboards.ca.gov/water_issues/programs/trash_control/

Please contact us if you have any questions …

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Technical Questions about Environmental Compliance?
Call …
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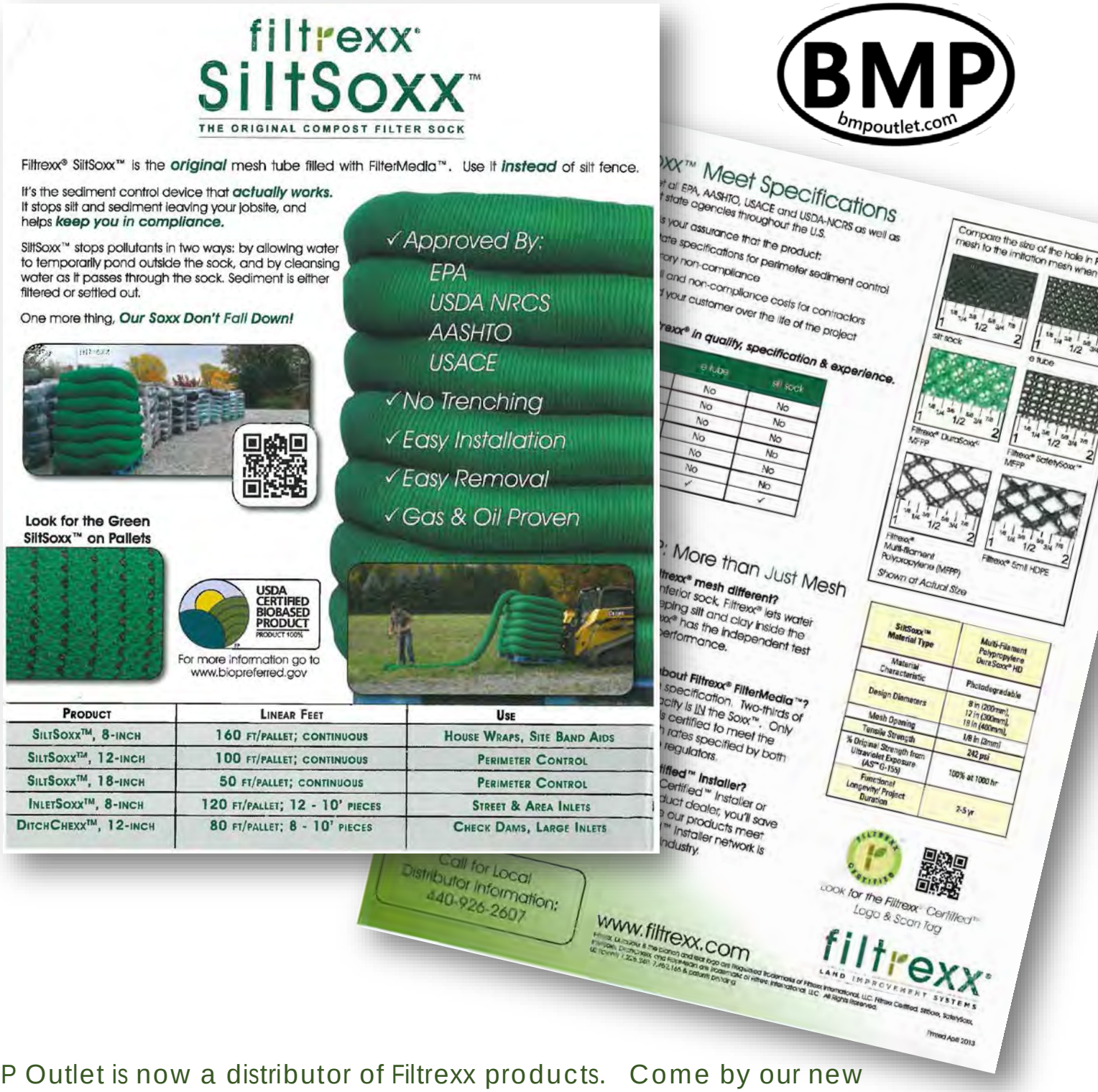
Office (209) 334-5363 ext. 115 Cell (209) 642-5020
Chelsea Dreyer, cdreyer@wgr-sw.com
Office (562) 799-8510 ext. 205 Cell (714) 926-9081



Product	Linear Feet	Use
SiltSoxx™, 8-inch	160 ft/pallet; continuous	House Wraps, Site Band Aids
SiltSoxx™, 12-inch	100 ft/pallet; continuous	Perimeter Control
SiltSoxx™, 18-inch	50 ft/pallet; continuous	Perimeter Control
InletSoxx™, 8-inch	120 ft/pallet; 12 - 10' pieces	Street & Area Inlets
DitchChexx™, 12-inch	80 ft/pallet; 8 - 10' pieces	Check Dams, Large Inlets

BMP Outlet is now a distributor of Filtrexx products. Come by our new retail warehouse to check out the Filtrexx products and other BMPs that we have in stock. The BMP warehouse is located conveniently off of Highway 99 near Stockton, California. Pick up a whole pallet or a single piece; or call Steve for a quote at (209) 334-5363 x115.

BMP Outlet Retail Location:
11780 N. Hwy. 99, Lodi, CA
(East side of the freeway, between Armstrong Rd. and Eight Mile Rd.)

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SEPTEMBER 22-26, 2014