DRAINage

The Stormceptor® Newsletter

SUMMER 2006
ISSUE 17

In this issue:

Stormceptor®
www.stormceptor.com

Number of Stormceptor Installed Worldwide:
17,457

Stormceptor® Becomes Imbrium Systems

Stormceptor Canada Inc. and Stormceptor Corporation have changed their company name to Imbrium Systems.

We will continue to market, manufacture and distribute Stormceptor Systems through our global network of affiliates.

Our new name, Imbrium, is Latin for "of rains". The Imbrium team is in the process of developing new technologies to continue assisting customers in environmental compliance and Best Management Practices for dealing with stormwater runoff and associated pollutants. Watch for our new products and visit us online at: www.imbriumsystems.com

Kelowna, British Columbia: Stormceptor® Stops Pollutants in High-Collision Intersection

Kelowna, a city of 105,000 on the shores of Lake Okanagan in British Columbia, has been installing Stormceptor Systems at high-traffic intersections to prevent oil and fuel from leaking into its waterways in the aftermath of traffic accidents.

Recently, a gravel truck collided with a passenger vehicle at a busy intersection. The truck's fuel tank ruptured upon impact. As firefighters worked to contain the massive spill, they were surprised to discover that there was no oil loss into the storm sewer pipelines at the accident scene.

After careful examination at the scene, city officials determined that the oil and fuel spill from the collision had been fully captured by the Stormceptor System installed at the intersection, protecting Lake Okanagan and other adjacent waterways from the hydrocarbons spill.

The Stormceptor System's performance exceeded the city's expectations resulting in Kelowna installing 12 new systems in known high-collision intersections.

With its simple design and small footprint, the Stormceptor System is the ideal retrofit for cities such as Kelowna. The city has relied on Stormceptor Systems for more than a decade as part of its long-term pollution prevention strategy.

Stormceptor Systems are available and manufactured in British Columbia by the Langley Concrete Group of Companies. www.langleyconcretegroup.com

Austin, Texas: Stormceptor® Ideal Retrofit for Established Neighborhoods

A recent study commissioned by the City of Austin found Stormceptor Systems to be an ideal retrofit technology for controlling stormwater runoff in the city's established neighborhoods. Austin has been making proactive improvements to its storm drains in order to protect water quality and respond to the challenges of re-development.

The city's Department of Watershed Protection and Development asked ESPEY Consultants Inc. to independently review and evaluate water quality control technologies. Over 40 different systems were included in the ESPEY study*. Pollution-capture efficiencies, costs, agency approvals and ability to retrofit were key indicators.

Superior Performance and Removal Efficiency

The report identified the unique strengths of constructed inlets in retrofit situations, and selected the Stormceptor System as the ideal choice for a performance study in the Ridgelea neighborhood. According to the study: "Constructed inlets can easily be applied to a retrofit project and provide high levels of pollutant removal."

The assessment found that the Stormceptor System provides total suspended solids (TSS) removal efficiency of up to 80 per cent, and oil and grease removal between 80-97 per cent. Stormceptor System also stood out as a result of its strong technical history, ability to retrofit, durability and ease of maintenance.

For John Gleason, an engineering consultant for the City of Austin, the ESPEY study was a key factor in the city's decision to install a Stormceptor System. "It's a good fit because of its small footprint and its scour protection during high flows," said Gleason. "Other competing products don't have that advantage."

An Ideal Design for Retrofit

Cities that are committed to mitigating polluted runoff in established neighborhoods must consider a host of factors, including the need to update existing infrastructure in order to meet increasingly stringent water quality regulations. As the Austin study shows, Stormceptor is a simple and effective retrofit solution, due to its high TSS removal efficiency, its anti-scouring technology, its compact size and simplicity of maintenance.

Stormceptor Systems are available and manufactured by Rinker Materials in Texas. For more information, please visit www.rinkerstormceptor.com

* The ESPEY Consultants Inc. report "Water Quality Control Technologies Inventory" for the City of Austin can be found at: www.ci.austin.tx.us/watershed/downloads/prod_inv_rpt.pdf

Stormceptor® Now Available through Northern Concrete Pipe, Inc.

Imbrium Systems is pleased to announce Stormceptor Systems are now available from Northern Concrete Pipe, Inc.* in the State of Michigan. Since May 2005, Northern Concrete Pipe, Inc. has been marketing and manufacturing Stormceptor Systems for the Michigan marketplace.

Northern Concrete Pipe is a leader in the precast concrete industry. Since 1958, it has been providing clients with quality products and services through an experienced production, engineering and sales staff. With two manufacturing facilities in Michigan, Northern Concrete Pipe has the ability to manufacture products efficiently and meet the demands of its customers.

Welcome, Northern Concrete Pipe, to the Stormceptor family!

* The Northern Concrete Pipe, Inc. sublicense agreement to market and manufacture the Stormceptor System is held with Rinker Materials.

Developing Design Criteria for Manufactured BMPs: The Need for Uniform Standards

Commentary

Until recently, stormwater quality treatment criteria developed by state governments has been focused on traditional Best Management Practices (BMPs) such as ponds, providing little guidance on requirements for manufactured BMPs. As a result, regional and local governments have been left with the difficult task of developing design criteria for manufactured BMPs. This has often resulted in a morass of regulations that are not consistent from one municipality to the next.

With scientists estimating that more than 80 per cent of our water pollution is attributable to non-point source contaminants, it is inevitable that stormwater management criteria will become more uniform, and more stringent. Thus, when selecting a manufactured BMP, consider the following factors in order to avoid costly complications down the road.

Small Storms and Cumulative Pollutant Load

Many stormwater treatment guidelines mandate the treatment of "design storms" (two-year or ten-year storms) and an average annual total suspended solids (TSS) removal of 80 per cent. But stormwater professionals now recognize that small storms dominate the watershed hydrologic parameters usually associated with water quality management issues and BMP design.

The US EPA[1] has found that although large storms contain significant pollutant loads, their infrequent occurrence results in a smaller contribution to the annual average pollutant load. The EPA advises that treatment systems need to be designed to address the cumulative effect of small storms, which contribute to the majority of annual runoff.

Pollutants in Fine Sediment

In addition, some regions are just beginning to adjust their standards for particle size distribution (PSD) to address the need to remove finer particles/sediment. This is a crucial shift, because pollutants attached to fine sediment are more harmful to the receiving water. Yet, many BMPs do not capture and contain fine sediment. Given the impact of pollutants in sediment upon water quality, state and federal bodies will need to factor in particle size as they develop more uniform standards for stormwater management.

Stormceptor® Clear Advantage

The Stormceptor System is an ideal choice because it exceeds the highest standards of particle size removal by capturing fine sediment and uniquely prevents stored contaminants from scouring during intense rainfalls. The Stormceptor System is designed to account for influent and land use characteristics unique to each site, and ensures long-term stormwater quality treatment under *any* hydrologic event, including large design storms.

Footnote:
US EPA 2002. *Considerations in the Design of Treatment Best Management Practices (BMPs) to Improvement Water Quality*, National Risk Management Research Laboratory, Office of Research and Development, EPA/600/R-03/103.

Ask the Expert

Q: Why are Stormceptor units more expensive than other technologies?

Duncan L., P.Eng., Mississauga, ON

Answer:
Stormceptor's cost is determined by its design, particle size distribution (PSD) and performance.

Research by the US EPA identifies silt-sized particles in runoff as key carriers of heavy metals and other toxins. With this in mind, the Stormceptor System is designed to remove particles sizes as small as 20 microns to ensure protection of our water resources. Treating fine particle sizes requires a greater detention time to settle resulting in a larger structure with a perceived higher purchase price. In contrast, alternate technologies are designed to treat a larger particle size (i.e. sand) which is easily removed from runoff, requiring a smaller, cheaper structure that does not protect our water resources as effectively.

Investing in a Stormceptor System ensures our water resources are protected from harmful contaminants. Aside from the benefits of removing a fine particle distribution, other key design features of the Stormceptor System include scour protection, large volumes of hydrocarbons storage, specialized manufacturing processes, quality assurance, customization and independent field testing. This is why the Stormceptor System is the best investment.

Brian Lee, P. Eng., Regional Stormwater Specialist

Email questions to info@stormceptor.com

News from the Field

Expanding Team Heads New Offices

Three new Imbrium Systems' offices in Chicago, IL, Calgary, AB, and Rockville, MD have opened their doors for business! Expanding our North American presence with dynamic new team members, we're helping our business partners seek new opportunities within the stormwater marketplace.

Servicing the US Market

Rob Crossman, Country Manager for Imbrium Systems, oversees the growing stormwater treatment industry throughout the United States and manages our new US Corporate Head Office in Rockville, Maryland. Joining him is Scott Perry, the new Regional Stormwater Specialist for the mid-Atlantic region. In addition to our Rockville office, the opening of our new Chicago location will better serve the Great Lakes stormwater market.

Moving west, Joel Garbon is the Regional Stormwater Specialist for the Pacific Northwest, while Dan Nason is in the newly-created position of US Stormwater Technology Manager.

Expanding our Canadian Team

Jacque Swanepoel is Imbrium Systems' new Manager of Canadian and International Markets, based in our Canadian Corporate Head Office in Toronto. Jacque is committed to bringing innovative technologies to stormwater markets across Canada and overseas.

Serving western Canada, Justin Arnott joins Imbrium Systems as new Regional Stormwater Specialist in our new Calgary office.

While we are thrilled with these additions to the Imbrium Team, we're always seeking new talent. Visit the careers section of our web site www.stormceptor.com for current opportunities.

Upcoming Stormceptor® Trade Shows

APWA
September 10-13, 2006
Kansas City Convention Center
Kansas City, MO
Booth 1618
www.apwa.net

CCM, Annual Meeting and Tradeshow
October 3, 2006
Connecticut Convention Center
Hartford, CT
www.ccm-ct.org

WEFTEC
October 22-25, 2006
Dallas Convention Center
Dallas, TX,
Booth 1227
www.weftec.com

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IN THE USA

IN AUSTRALIA

IN NEW ZEALAND