June 2, 2010

Mr. Garrison D. Miller
E-mail Address: miller.garrison@epa.gov
Mailing Address: United States Environmental Protection Agency
Office of NPDES Permits and Enforcement (3WP41)
1650 Arch Street; Philadelphia, Pennsylvania 19103-2029

Re: Draft NPDES Permit No. DC0000221

Dear Mr. Miller:

Thank you for the opportunity to provide comments on the Draft NPDES Permit No. DC0000221 for the Municipal Separate Storm Sewer System (MS4) owned or operated by the District of Columbia. My name is Dionne N. Driscoll and I represent CONTECH Stormwater Solutions, a division of CONTECH Construction Products Inc. We are a manufacturer of a comprehensive product line of stormwater treatment, detention, and retention technologies appropriate for managing stormwater for an array of site situations and target pollutants. If necessary you may reach me at 3740 Davinci Court, Suite 450, Norcross GA, 30092; via phone at 404-561-7958; or via email at driscolld@contech-cpi.com.

Creating stormwater regulations that are fair and effective is crucial to protecting and preserving the health of waters impacted by development. This task is made difficult by variability between watersheds, pollutant sources, and competing priorities among developers, regulators, and engineers. CONTECH applauds the efforts made by the Environmental Protection Agency (EPA) and the District of Columbia (District) with the Draft NPDES Permit No. DC0000221 (permit) and would like to offer the following comments based on our review of the document and our experiences with regulations throughout the country.

1. The permit relies almost completely on two unit processes to mitigate stormwater impacts, specifically infiltration and/or onsite stormwater retention/reuse. In addition, it takes a fairly prescriptive approach in doing so, with the mandated use of Green Roofs and other "green technology practices" without regard for their appropriateness for removal of the region's target pollutants or potential site specific limitations. For instance there are a growing number of studies which indicate that green roofs may actually release nitrogen, which is a target pollutant of the permit and several regional TMDLs including the Chesapeake Bay TMDL. As a result, green roofs are not given nutrient removal credit in many of the region's stormwater programs. By mandating the use of a specific BMP rather than focusing on the goal (a reduction of nitrogen) the water quality of the region may actually suffer from the strict implementation of the prescriptive directives in the permit. Second, site specific limitations which may impede the performance of infiltration based BMPs include clay soils, high ground water tables, and shallow bedrock, some of which are likely to be encountered in the District. As currently

written there does not appear to be an allowance for BMP alternatives to the green technologies outlined in the permit by the EPA even in cases were such alternative technologies can be designed to meet the expressed goal of mimicking predevelopment hydrology. This limitation will limit the stormwater treatment options available to engineers and developers in the District and does not provide any enhanced assurance that stormwater quality will be improved. In some (potentially many) cases this may limit better site design practices in favor of the fee in lieu of treatment.

2. In the application of rain water reuse as a stormwater management control there should be formal guidance for both the treatment criteria for specific usages of harvested waters (i.e. landscaping, toilet flushing, and other interior uses) and overflow control/release requirements for these systems. Overflow or release controls are specifically important as the large volumes of rain water which will likely be captured under the outlined design criteria may exceed usage demands for specific sites. The absence of these items has the potential to cause negative health impacts and flooding problems respectively.

3. The importance of quantifiable performance measures is discussed in the permit fact sheet. However, there appear to no numeric values for pollutant removal goals in the permit. There is a provision for a "fee in lieu" for cases where the volume control design standards outlined in the permit cannot be met, but there do not appear to be any clear goals for pollutant removal in the permit. This greatly limits the Districts authority and ability to evaluate BMP pollutant removal performance. We realize the goal is to manage stormwater as close to the source as possible. However, omitting numeric values for target pollutants limits the District's authority to properly manage the impacts of future development, especially in hot spot areas such gas stations and other industries with concentrated pollution which should be treated rather than infiltrated. The proposed limit of 10% discharge of stormwater allowed to leave the site according to the permit may do so untreated as the permit is currently written.

4. We believe the fee in lieu program will be a pay to pollute program that could be avoided if stormwater controls which fall outside of the realm of green technologies where permitted for use. Many practices can be designed to achieve the goals of the permit and in some cases may be the only viable treatment and/or infiltration solution. These systems can also be designed to enhance the performance of the green technologies preferred by the permit and some can target specific pollutants of concern including coarse sediment, trash and oils which may limit the performance of many LID controls.

   Many different types of land based and manufactured structural BMPs have the potential to be viable solutions when site constraints make infiltration and onsite retention impracticle. In addition these systems are often used in treatment trains to enhance the removal efficiencies and longevity of infiltration BMPs. Removing the restriction of controls that fall outside the realm of green technologies would provide developers with more viable cost effect options for meeting their stormwater control requirements and increase their ability to utilize better site design techniques. It would also give the District greater control of the fee in lieu program by providing more options for treatment.

   Note, that we do not endorse a blanket approval of proprietary structures based on manufacturers' claims, but encourage the adoption of a formalized approval protocol.

CONTECH recommends the use of existing evaluation programs as references, as these programs have well-defined stormwater treatment standards and have thoroughly reviewed comprehensive performance information and specified an approval designation.

Washington State Department of Ecology at:
www.ecy.wa.gov/programs/wq/stormwater/newtech/index.html
New Jersey Department of Environmental Protection at:
www.state.nj.us/dep/dsr/bscit/CertifiedMain.htm

In many instances we have seen municipalities and other regulating agencies adopt theses programs in part or in full, or simply defer to their approval list rather than develop a new approval process or protocol. Regardless of how the process is adopted and/or managed there should be a means for appropriately evaluating the performance claims of manufactured BMPs.

5. Green technologies are a useful tool in stormwater management. However, they are not a silver bullet and the District should not be limited to only green technologies for the management of stormwater quality and quantity concerns. One of the reasons cited for limiting the use of detention practices was the difficulty and cost associated with maintenance of these practices. We agree that maintenance must be performed and has an associated cost. However, maintenance concerns and costs also exist for green technologies, and sometimes require a great level of expertise to manage. If left unmaintained or improperly installed (a very common problem with LID practices) green technologies may lead to poor performance, flooding and other problems similar to first generation stormwater BMPs. It is naive and misleading to imply that green technologies have any less of a maintenance burden than their more traditional counter parts. All BMPs must be maintained properly to ensure performance and prevent failure, flooding, and other problems.

6. Green technologies are not well suited for all target pollutants, specifically coarse sediment, oils and trash which is of particular concern in at least one regional TMDL. As stated above there should be an allowance for the use the most appropriate stormwater control measures for a site even if they fall outside the realm of green technologies. Any limitation of the most appropriate control limits the owner/developer's ability to meet the MEP.

7. We applaud the inclusion of a retrofit program. However, the goal appears to be related to the amount of green roofs and other controls installed rather than focusing on a performance target. Again this criterion is prescriptive in nature without a clear performance goal. It also appears that the retro fit program is intended to be solely based on the use of green technologies. Retrofitting solely with green technology BMPs may not be the most effective and appropriate solution for the targeted pollutants, as discussed above. In addition, the use of green solutions for retrofit applications may be more costly from both a capital improvement and maintenance budget perspective than using other controls which can be designed to meet the goals of the permit. This could create an undo financial burden on the District while at the same time limiting their ability to achieve the removal of pollutants of concern to the MEP.

In the last fifteen years a variety of proprietary stormwater BMPs have been introduced, including hydrodynamic separators, catch basin inserts, filter devices, and other BMPs. Sorting through a long list of competing products, and deciding which of these technologies are viable stormwater solutions can admittedly be a daunting task. This is especially true considering that not all manufacturers are able to provide quality data to document performance claims, so there is some skepticism regarding their use. However, that does not justify the dismissal or devaluation of these products as a whole, many of which have been properly tested and have the data (both 1st and 3rd party) to substantiate their claims.

In the '70s and '80s when stormwater was beginning to be recognized as a threat to water quality, engineers turned to land based best management practices (BMPs) like ponds, swales, and vegetated buffers. We applaud the effort to move forward to the next generation of stormwater controls. However, the limitation of solely allowing green technologies may actually limit the ability for designers, developers and owners to create and maintain their controls to the MEP. This type of prescriptive approach to BMP selection also discourages innovation and will limit the availability of even more effective solutions in the future. Stormwater controls should be selected based on their ability to meet the water quality performance goals of the region. With new treatment technologies continually emerging and our knowledge of stormwater science improving, it is crucial that stormwater regulations reflect these changes.

Thank you for the opportunity to provide comments on this document. We look forward to working with both the EPA and the District in establishing clear, equitable stormwater regulations. Please let us know if you have any questions or need any additional information.

Respectfully,

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