DISTRICT OF COLUMBIA BUILDING INDUSTRY ASSOCIATION

July 8, 2013

Mr. Brian Van Wye
Ms. Rebecca Stack
Natural Resources Administration
District Department of the Environment
1200 First Street NE, 5th Floor
Washington, DC 20002

Attention: Second Proposed Stormwater Rule and Guidebook Comments

Submitted electronically via email to Brian.VanWye@dc.gov and Rebecca.Stack@dc.gov

Dear Mr. Van Wye and Ms. Stack:

On behalf of the District of Columbia Building Industry Association (DCBIA) and its members, I provide the following comments upon the Proposed Rulemaking on Stormwater Management, and Soil Erosion and Sediment Control (Second Proposed Rules), as well as upon the Proposed Stormwater Management Guidebook (Second Proposed Guidebook), both of which were issued by the District Department of the Environment (DDOE) on June 7, 2013.

These comments are submitted in the context of DCBIA's previous comments on this rulemaking. In particular, DCBIA submitted comments on November 8, 2012 (Initial Comments) in response to the Rules and Guidebook issued on August 10, 2012 (Initially Proposed Rules and Initially Proposed Guidebook, respectively), as well as on April 30, 2013 (Comments on the Revised Rules) in response to DDOE's informal Request for Input on Revisions to the Proposed Rulemaking and Guidebook, issued on March 31, 2013 (Revised Rules and Revised Guidebook, respectively). DCBIA welcomes the opportunity to submit this third set of comments for DDOE's consideration.

Throughout the course of this rulemaking, DDOE has made substantial efforts to actively solicit stakeholder input, and DCBIA has greatly appreciated such proactive engagement. At every stage of this rulemaking, DCBIA has sought to provide meaningful feedback in response, and it is in this spirit that we submit these comments. Although a number of our previously-submitted comments remain outstanding and we still have a number of concerns about certain aspects of the Second Proposed Rules and Second Proposed Guidebook, we have greatly enjoyed the effective and constructive working relationship that we have developed with the primary authors of these Rules, and we look forward to building on that foundation in the future as these Rules are finalized and implemented in the months ahead.

By way of background, DCBIA is a professional association that represents both commercial and residential real estate industries in Washington, DC. Our membership includes nearly 500 organizations, including developers, general contractors, architects and engineers, lenders, attorneys, and other industry members, all of whom care greatly about environmental issues associated with development activities in the District. In particular, DCBIA's Committee on the Environment convenes up to 40 members on a monthly basis to discuss noteworthy environmental matters, including stormwater management and soil

erosion and sediment control practices. Indeed, because this Rulemaking is of such central concern to its members, DCBIA has convened a Stormwater Task Force, comprising more than 20 practitioners in the areas of civil engineering, development management, general contracting, permitting and approvals, law, and sustainable development. The Stormwater Task Force has diligently reviewed the Second Proposed Rules and Second Proposed Guidebook, and our comments represent our best effort to help DDOE promulgate regulations that are as effective and practical as possible and further the District's sustainability goals.

PRELIMINARY COMMENTS

In our specific comments below, we itemize the issues contained in the Second Proposed Rules that are of most concern or confusion to us. DCBIA has raised many of these issues in its previous comments, and we reiterate them in these comments to emphasize both their importance to us and DDOE's continued failure to address them sufficiently, if at all.

In particular, we insist that DDOE give particular attention to the following general concerns, all of which are discussed in greater detail in our specific comments:

Definition of Contamination--In the Second Proposed Rules, DDOE has sought to define "contaminated" by reference to the Brownfield Revitalization Act of 2000, as amended, and the Underground Storage Tank regulations, as appropriate. Importantly, these references establish that the existence of contamination depends on the occurrence of a release or discharge and clarify that the mere presence of naturally occurring hazardous substances does not constitute contamination. However, these references to not indicate the specific concentration limits that regulated sites will be required to attain. Therefore, DDOE must further hone this definition to provide greater specificity.

Application of Surface Water Quality Standards--We are extremely alarmed to note that the Second Proposed Rules require that groundwater discharges to the MS4 system must adhere to surface water quality standards, and we demand that this requirement be removed completely in the finalized Stormwater Rules. Substantively, these standards are far more stringent than anything that DDOE has proposed as part of this rulemaking and are contradictory to its proposed definition of "contaminated," as it would effectively require costly treatment of background concentrations of naturally occurring substances in unpolluted areas of the District. Procedurally, this revision significantly undermines over two years of work between DDOE and regulated parties on this precise issue. We have engaged in this dialogue in hopes of transparently and cooperatively developing sustainable guidance regarding groundwater discharges into the MS4 system. However, we are distressed by this eleventh-hour revision, which we consider to have been included in bad faith by DDOE, and which we fear will derail our progress on this issue. Therefore, we emphatically insist that all references to surface water quality standards be removed from the Stormwater Rules.

Approval of Responsible Personnel Certification Programs--DDOE has substantively revised the proposed regulations of Responsible Personnel in the Second Proposed Rules; however, to date, it still has not approved a single Responsible Personnel certification program. We note that multiple such programs already exist in the local area, but until DDOE provides approval, regulated sites will necessarily be unable to comply with these regulations. DDOE must suspend the Responsible Personnel requirements indefinitely until at least thirty days after it has approved at least two local Responsible Personnel certification programs.

Major Substantial Improvement Activities--We remain deeply concerned that DDOE still does not fully appreciate the significant difficulties that Major Substantial Improvement Activities will

face in trying to comply with the Stormwater Rules. These activities are subject to particularly restrictive space, access, and load bearing capacity limitations, and we fear that overly burdensome regulations of such activities will deter building owners from making necessary improvements to improve their buildings' operational efficiency, interior environmental conditions, and overall market value.

Success of the Stormwater Retention Credit Trading Program--Without doubt, the Stormwater Retention Credit Trading Program is the most innovative aspect of the Stormwater Rules, but with innovation comes substantial uncertainty. DDOE has addressed many of our questions regarding the structure and operation of this Program, and we urge DDOE to carefully consider our remaining recommendations to further improve the Program's size, liquidity, and overall success.

Selection of Approved BMPs and Examples of Their Use in Typical Regulated Sites--DDOE has approved thirteen Best Management Practices (BMPs) with which regulated sites can achieve their required on-site stormwater retention capacities. However, in practice, any given regulated site will likely have to select from just a few limited options. Many regulated sites, particularly those featuring lot line to lot line developments or containing Major Substantial Improvement Activities, will be physically unable to accommodate many BMPs, and will be highly reluctant to utilize others that remain relatively untested as to their functionality, durability, and maintenance requirements. Therefore, DDOE should approve additional BMPs and provide more flexibility for regulated sites to customize trusted BMPs to unique site conditions. DDOE should also provide additional design examples in the Stormwater Guidebook to demonstrate how regulated sites subject to severe limitations can reasonably achieve the required stormwater retention capacities.

SPECIFIC COMMENTS

Consistent with our Initial Comments and our Comments on the Revised Rules, these comments are organized in five general categories: (1) procedural issues and interagency coordination, (2) sediment and erosion control, (3) general contracting and cost estimation, and (4) in-lieu fees, stormwater retention credits, and the credit trading market, and (5) technical issues and comments on the Second Proposed Guidebook. All comments on the Second Proposed Guidebook are contained in this final part. However, we note that our comments on both documents are submitted as a whole and should be reviewed as such.

Procedural Issues and Interagency Coordination

Phased Transition to the New Stormwater Management Rules

As DCBIA has previously commented, and as DDOE acknowledges in the preamble to the Second Proposed Rules, "requiring regulated projects to meet the new requirements immediately or very soon after finalizing the rule may impose significant costs and time delays on these projects."[1] Throughout this rulemaking process, DCBIA has sought to provide objective insights into the planning and development process in order to help DDOE develop a manageable transition plan, and we consider the phased transition detailed in the Second Proposed Rules to be a significant improvement over DDOE's initial proposal. With that in mind, we believe that certain aspects of the proposed transition can be further improved and, with that goal in mind, we request that DDOE consider the following revisions:

First, we appreciate DDOE's recognition that "some approvals by certain other reviewing bodies may limit the ability of a major regulated project to comply with the full on-site retention requirement on site," and the four regulatory approvals that DDOE has proposed to accommodate will significantly ease the development process for many regulated projects. To those four, however, we would recommend adding large tract reviews by the District Office of Planning. We note that DDOE has recognized that installation

[1] DDOE, Preamble to the Second Proposed Rules, at 6.

of BMPs could conflict with such reviews in its proposed regulations for seeking relief from extraordinarily difficult site conditions,[2] and for consistency, we believe that regulated sites subject to these reviews should be accommodated in the transition plan. Additionally, we note that, unlike the exceptions for Advanced Designs and multi-phased projects, the exception for these regulatory approvals is not included in Part 552 of the Second Proposed Rules and we request that it be added accordingly.[3]

Second, under the Second Proposed Rules, multi-phased projects may be exempted from the stormwater management regulations if they install BMPs sufficient for all phases of the development as part of the initial phase of development during the transition period. As we have previously commented, we do not believe that multi-phased projects should be required to install BMPs sufficient for the entire project solely during the initial phase in order to qualify for this exception. Most notably, it may not physically be possible to install sufficient stormwater retention capacity during the initial phase. For example, a high-density project that will rely on green roofs throughout will be excluded from this exception, since there is no way to build a roof in the first phase with sufficient retention capacity to account for all subsequent phases. The result of this requirement will be to make the initial phase of development so complex, costly, and lengthy as to risk the viability of the entire project. Moreover, in many cases, the stormwater retention capacity attributable to subsequent phases would not be utilized until those phases are actually built, meaning that the additional costs incurred during the initial phase would likely provide little environmental benefit, if any. DCBIA therefore again urges DDOE to apply this exception to all multi-phased projects in which stormwater retention infrastructure for at least the initial phase of development is installed in compliance with a DDOE-approved SWMP. While we understand the motivation behind DDOE's proposed limitation to this exception, the provision as proposed does little more than impose additional costs without any accompanying environmental benefit.

Third, we request that DDOE implement the transition based on a regulated site's submission of a preliminary SWMP, separate from its completed building permit application. Often, the SWMP can be finalized much earlier in the planning process than other components of the building application, and the requirement as currently proposed serves only to impose significant and unnecessary additional costs and time delays. DCBIA therefore again encourages DDOE to decouple the stormwater management regulations from the overall building permit process and instead trigger application of the Rules based on submission of the SWMP directly to DDOE. We acknowledge that this practice would represent a departure from the permit review process and sequencing in place now. Such a departure is warranted and necessary given the substantial nature of the upcoming shift in the regulatory environment.

Definition of Contamination

In our Comments on the Revised Rules, we noted significant concern that, although the Rules refer to "contaminated runoff" or "contaminated groundwater or soil" on multiple occasions, neither term was clearly defined. As we stated, the term "can be construed in many different ways and an inappropriate interpretation could have severe consequences for regulated sites."[4] In response, DDOE has incorporated by reference the definition of "contamination" as stated in the Brownfield Revitalization Act of 2000, as amended, and the Underground Storage Tank (UST) regulations, as appropriate.[5]

First, we note that the Brownfields Revitalization Act defines "contamination" to mean "a release, discharge, or threatened release of a hazardous substance."[6] Importantly, this definition firmly establishes that the threshold consideration in determining whether contamination exists is whether a release or

[2] DDOE, Second Proposed Rules, § 526.3(b)(5).
[3] DDOE, Second Proposed Rules, § 552.2.
[4] DCBIA, Comments on Revised Rules, at 11.
[5] DDOE, Second Proposed Rules, §§ 500.9, 542.13.
[6] *See* DC Code § 8-631.02(3).

discharge of a hazardous substance has occurred. This definition thus makes clear that the *mere presence* of hazardous substances in the environment (such as naturally occurring metals in soils), which does not constitute a release or discharge, cannot constitute "contamination." However, DDOE needs to clarify this important distinction in the text of the finalized Stormwater Rules.

Second, the Act does not provide specific standards by which an actual release or discharge might be evaluated. It is our understanding that DDOE intends "contaminated runoff" to mean stormwater containing hazardous substances in concentrations that exceed applicable risk-based corrective action standards promulgated pursuant to the Brownfields Revitalization Act. If this understanding is correct, DDOE needs to clarify its intent in greater detail, so that regulated sites know what standards will apply to groundwater dewatering pollution reduction plans.

Third, we note that the UST regulations do not define "contamination" in any way.[7] Therefore, we suggest that these regulations need not be referenced at all in the definition of "contamination." However, to the extent that any references to the UST regulations are retained, DDOE must clarify that the standards promulgated pursuant to the Brownfields Revitalization Act control in the event that the standards under the two programs are inconsistent in any way. Further, we note that in the Second Proposed Rules, the UST regulations are not included in every reference to "contamination," and we request that DDOE correct this inconsistency in the finalized Rules.[8]

Reference to Surface Water Quality Standards

In revising the Stormwater Rules to provide greater clarity as to the meaning of "contaminated groundwater or soil," DDOE has included a new requirement that dewatering pollution reduction plans, when required, must include a "description of control measures to reduce contamination sufficient to prevent discharge in excess of the District's surface water quality standards."[9] This revision, which was not contained in either the Initially Proposed Rules or the Revised Rules and has not been mentioned in any of the multiple presentations that DDOE has given regarding the Stormwater Rules, is alarming in multiple respects, and we insist that DDOE remove this requirement in the finalized rules.

As DDOE is aware, the District's surface water quality standards are extremely stringent and their application to dewatering activities would impose a significant and frequently unachievable burden on regulated sites. Any other approach would be contrary to the existing definition of "contamination" in the Brownfield Revitalization Act and the proposed definition of "contaminated" contained elsewhere in the Stormwater Rules. To characterize naturally occurring background concentrations as "contaminated" is to stretch the meaning of the term beyond its commonly accepted meaning under federal and state law. Therefore, DDOE must clarify that any standards to be applied in dewatering pollution reduction plans will pertain only to *releases or discharges* of hazardous substances in excess of applicable concentration limits, and not to naturally occurring substances in the environment. If the term "contaminated" is interpreted in any other manner, regulated sites in areas of the District without any history of industrial or polluting activities will be required to install extensive treatment operations, rendering infeasible the redevelopment of sites with no history of releases or discharges of hazardous substances.

Moreover, we are alarmed at the "back-door approach" that DDOE has taken in seeking to impose the surface water quality standards. As DDOE is aware, the application of surface water quality standards to groundwater discharges into the MS4 system has been an issue of intense discussion for more than two years. Throughout this time, DDOE has had numerous meetings with regulated parties and other

[7] *See* 20 DCMR Chapter 62.
[8] *Compare* § 542.13 of the Second Proposed Rules, which does not reference the UST regulations, *with* § 500.9, which does not reference the UST regulations.
[9] DDOE, Second Proposed Rules, § 542.13(c)(3).

interested stakeholders regarding the proper water quality standards that should be applied to such dewatering operations, and DCBIA and its members have been active and constructive participants in those discussions. We had anticipated - and still expect - that this ongoing dialogue would proceed transparently toward appropriate guidance or rules. Imposing surface water quality standards on the discharges now as part of the Stormwater Rules, however, would eviscerate any semblance of transparency and will only serve to frustrate, if not completely derail, the promulgation of economically feasible and environmentally sustainable guidance or rules.

Therefore, in the spirit of transparency, economic practicality and environmental sustainability, we demand that DDOE remove all references to surface water quality standards from the Stormwater Rules and instead refocus its attention on promulgating separate guidance or rules regarding groundwater discharges into the MS4 system. DCBIA supports the promulgation of clear, consistent, and sustainable standards for such discharges, and we stand by ready to participate in this discussion constructively and productively, just as we have throughout this rulemaking. We cannot, however, accept the bad faith approach that DDOE has attempted in the Second Proposed Rules, which can only be rectified by complete removal of all reference to surface water quality standards in the finalized Stormwater Rules.

Coordination with Well Regulations

We note that DDOE is also in the process of developing regulations for groundwater wells, which are not expected to be introduced until after the Stormwater Rules are finalized. We remain frustrated by DDOE's continued lack of transparency with regard to the well regulations and hope that DDOE will engage interested stakeholders in that rulemaking as it has in this one. However, in the meantime, we remind DDOE that the well regulations and the Stormwater Rules focus on entirely separate issues and we therefore again urge DDOE to provide express assurance that the Stormwater Rules will not conflict with the well regulations upon their promulgation.

Field Inspection Capacity

In our previous comments, we repeatedly cautioned DDOE that its existing inspection capacity would likely be insufficient to meet the demand for field inspections as a result of the Stormwater Rules.[10] In particular, we suggested that DDOE hire additional inspectors, train existing inspectors for their new responsibilities, and provide the option for third-party inspections should DDOE inspectors prove unable to keep up with demand.[11] We are highly encouraged by DDOE's indication that it has already begun hiring additional inspectors and plan review engineers, and other administrative staff. We also support DDOE's grant agreement with the Center for Watershed Protection (CWP) to provide review, inspection, and related services on an as-needed basis and its willingness to consider other alternatives, including contracting with private companies, if necessary.[12] As the recipient of inspection requests, DDOE is in the best position to track its own performance on this matter. In order to ensure that these third-party resources are utilized effectively and efficiently, we encourage DDOE to track its responsiveness closely and to actively solicit feedback from regulated sites to know if their activities are being impeded by having to wait for an inspector or plan review. And if DDOE does receive indication of delays, it must be ready to activate the CWP and other third party assistance right away. DCBIA looks forward to reviewing DDOE's performance self-assessments, along with any corrective actions planned.

Inspection of Underground BMPs

In our previous comments, we have sought to make DDOE aware of the potential danger caused by leaving underground BMPs open for inspection for excessive periods of time. As we stated in our Comments on the Revised Rules, "we are concerned that leaving certain underground BMPs exposed for

[10] DCBIA, Initial Comments, at 8; Comments on Revised Rules, at 11-12.
[11] DCBIA, Comments on Revised Rules, at 12.
[12] DDOE, Preamble to Second Proposed Rules, at 10.

extended periods could present serious worker-safety issues and could mitigate the BMPs environmental benefit, given the potential for sediment-laden water to enter the facility and significantly hinder its performance."[13] Because this issue has not been addressed in the Second Proposed Rules, we again request guidance as to how regulated sites should prepare underground retention facilities for inspection without creating safety issues or hindering their performance. We consider this to be a substantial issue of worksite safety, and we do not believe that regulated sites should be forced to risk the safety and wellbeing of their workers in any way simply to comply with the Stormwater Rules.

As with other issues that we have raised but that have remained unaddressed or unexplained by DDOE throughout multiple comment rounds, DCBIA remains unclear as to DDOE's reaction to this comment. Absent an explanation or change to the proposed regulations, the development community has become increasingly frustrated by having to repeatedly re-state the same points in the hopes that DDOE will eventually turn its attention to its pressing concerns. We reiterate these comments not as a formality, but because we urgently need DDOE to respond to our comments and requests for clarification if our members are to have any chance of complying with these new regulations.

Sediment and Erosion Control

Responsible Personnel

DCBIA appreciates the revisions that DDOE has incorporated into its proposed regulations on Responsible Personnel and generally supports these regulations as they appear in the Second Proposed Rules.[14] However, we note that to date, DDOE still has not approved any training programs through which individuals can be certified as Responsible Personnel.[15] As it thus stands, DDOE is effectively imposing a requirement and simultaneously preventing regulated sites from complying with it. DCBIA therefore insists that DDOE formally approve at least two certification programs *before* the Soil Erosion and Sediment Control rules become effective.

To facilitate this effort, we suggest two responsible personnel certification programs for DDOE's consideration and approval:

- The Maryland Department of the Environment (MDE) has approved over ten responsible personnel training programs, including those offered in Montgomery and Prince George's Counties, as well as other nearby jurisdictions.[16] Based on our review of applicable MDE regulations, the criteria for its approved programs appear to satisfy all of the criteria listed in the Second Proposed Rules.[17]
- The Virginia Department of Environmental Quality (VADEQ) administers the Responsible Land Disturber (RLD) Certificate of Competence program.[18] The initial certification appears to cover all of the criteria listed in the Second Proposed Rules.[19]

We believe that completion of either of these programs would provide the requisite training for participants to serve as Responsible Personnel in the District. We acknowledge that these

[13] DCBIA, Comments on Revised Rules, at 12.
[14] DDOE, Second Proposed Rules, Part 547.
[15] DDOE, Second Proposed Rules, § 547.3(b).
[16] A full listing of jurisdictions providing MDE-Approved training is available at http://www.mtbma.org/wp-content/themes/Essence-Silver/documents/trainingcontacts.pdf.
[17] *Compare* COMAR § 26.17.01.06(C) *with* DDOE, Second Proposed Rules, § 547.5.
[18] General information regarding VADEQ's RLD program is available at http://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/RLDGeneralInformation.aspx.
[19] The RLD Application Packet, which contains the criteria required to obtain certification, is available at http://www.deq.virginia.gov/Portals/0/DEQ/ConnectwithDEQ/Training/ESC/RLD_Applicant_Package.pdf.

recommendations are not based on an exhaustive survey of responsible personnel training programs in the DC metropolitan area, and other programs may exist that are worthy of DDOE's consideration.

However, aside from the merits of any particular certification program, we insist that DDOE suspend the Responsible Personnel regulations indefinitely until no less than thirty days after it has approved at least two Responsible Personnel certification programs. To impose these requirements on regulated sites and simultaneously prevent them from ever achieving compliance would effectively force regulated sites into non-compliance from day one, which would be unfair and wholly inappropriate for DDOE to do. It is entirely within DDOE's power to avoid such an unfortunate situation, and we insist that DDOE approve at least two local Responsible Personnel certification programs as soon as possible and suspend Part 547 of the Rules for at least thirty days thereafter, to allow regulated sites time to obtain proper certification.

Time Limit for Reviews of SESCPs

As we have commented multiple times before, DDOE must commit to reviewing soil erosion and sediment control plans within a reasonable but definite timeframe. We believe that 30 days remains a sufficient period in which to fully review a proposed plan, but even if DDOE feels that it needs additional time, we urge DDOE to at least provide the clarity of a defined timeframe in the finalized rules. The Second Proposed Rules hold applicants to multiple deadline requirements. Accordingly, DDOE must hold itself to defined time limits, if only to enable regulated sites to meet their own critical milestones.

Additionally, we also encourage DDOE to consider offering regulated sites the option of an expedited review, whereby, upon request, plans would be reviewed in no more than 10 days in exchange for a premium fee sufficient to cover DDOE's additional costs.

Sediment Controls During Demolition Activities

We continue to seek clarification as to which control measures DDOE may require at demolition projects that result in debris, dust, or sediment leaving the site.[20] We understand that the specific control measures most appropriate at any given site necessarily depend on specific site conditions. However, we request that DDOE at least provide a menu of possible options and a brief description of the circumstances in which each might be required to provide demolition sites with some certainty as to the exact requirements that they can expect to apply before commencing with demolition activities. Without such guidance, the regulations by default provide an open license to on-site inspectors or permit reviewers to require whatever control measures they feel are warranted with no limitation.

General Contracting and Cost Estimation Comments

Non-Compaction Requirements and the Use of Underground BMPs

Because DDOE has not responded to either of DCBIA's requests for clarification on this issue, we again request guidance on how final compaction should be completed in areas around a building perimeter that contains BMP facilities, such as stormwater disconnection areas or permeable pavement. Failure to provide such guidance will only further constrain the already-limited BMP options available to any particular site. We again urge DDOE to expressly exempt such areas from final compaction requirements.

Calculating the Costs of a Major Substantial Improvement Activity

In the Second Proposed Rules, DDOE has indicated its recognition that certain projects undergoing significant renovations and refurbishments may be physically unable to incorporate the BMPs necessary to meet the applicable on-site stormwater retention requirements. In particular, DDOE classifies a given improvement as a Major Substantial Improvement Activities only if the costs of the improvement exceed 50% of the market value of the structure prior to the improvement,[21] and provides relief from

[20] DDOE, Second Proposed Rules, § 540.2.
[21] DDOE, Second Proposed Rules, § 599.1.

extraordinarily difficult site conditions for Major Substantial Improvement Activities that "cannot accommodate a BMP without significant alteration, because of a lack of available interior or exterior space or limited load-bearing capacity."[22] Together, these provisions will significantly alleviate the excessive burdens on existing buildings that are in need of renovation but are unable to accommodate sufficient on-site stormwater retention capacity.

To further ensure the sustainable incorporation of stormwater retention into renovated buildings, we again request that DDOE exclude from the calculation of the cost of a possible Major Substantial Improvement Activity the costs of HVAC systems and associated components. As we stated in our Comments on the Revised Rules, HVAC and associated systems account for a large portion of any given building's total energy consumption and can be very costly to improve or replace.[23] Given these two considerations, including the costs of such systems in the calculation of a Major Substantial Improvement Activity will likely deter building owners from initiating renovations that could lead to more efficient building operations and substantial energy savings. As a result, the Second Proposed Rules therefore potentially undermine the Mayor's Sustainability Initiative, which seeks to cut District-wide energy use by 50% and retrofit 100% of existing commercial and multi-family buildings to achieve net-zero energy standards.[24] Given this conflict, we believe that the greater environmental good lies in incentivizing buildings to save more energy, rather than to decline to undertake any renovations at all.

Additionally, we suggest that the costs of tenant improvements should also be excluded from the calculation to determine whether a renovation constitutes a Major Substantial Improvement Activity. Building owners have little control, if any, over the costs of these improvements, and may not be able to coordinate the construction schedules of multiple tenants for the purposes of incorporating stormwater retention infrastructure throughout the building. Because these improvements could significantly contribute to the overall cost of a building renovation but would not facilitate the incorporation of BMPs into the building's existing structure, they should not be included in the calculation to determine the cost of a Major Substantial Improvement Activity.

Ultimately, DCBIA continues to believe that the Stormwater Management Rules should be imposed only on existing structures that incur a complete redevelopment, including replacement of all interior finishes, utilities, roofing covers, and building skin materials. Only in such extensive redevelopment projects can BMPs be feasibly installed to provide additional stormwater retention capacity.

In the alternative, DCBIA requests express confirmation that existing structures undergoing Major Substantial Improvement Activities will only be required to install BMPs to the Maximum Extent Practicable within the scope of their planned renovations. For example, a building undergoing Major Substantial Improvement Activities focused exclusively on the building's interior and foundation should not be required to install a green roof as a result. Doing so would wastefully require removal of the perfectly well-functioning existing roof, and would only deter the building owner from engaging in the renovations in the first place.

In sum, DCBIA supports the incorporation of stormwater retention capacity in existing structures wherever feasible, but we caution DDOE against establishing rules that would deter building owners from taking steps to improve the quality, value, and efficiency of the District's existing residential and commercial stock.

---

[22] DDOE, Second Proposed Rules, § 526.3(b)(7).
[23] DCBIA, Comments on Revised Rules, at 14.
[24] *See* DC Sustainability Initiative, *Sustainability Plan*, 52 (Feb. 20, 2013), *available at* http://sustainable.dc.gov/finalplan.

Assessing the Value of Properties Owned by Non-Profit Organizations Undergoing Major Substantial Improvement Activities

We are also concerned about how non-profit organizations that perform extensive renovations will be treated under the regulations for Major Substantial Improvement Activities. Many such organizations may have difficulty determining whether certain improvements constitute a Major Substantial Improvement Activity because the assessed values as recorded in the District's real property assessment database may not reflect the proper market value for their properties. Although such properties receive a tax assessment, many owners of these properties do not carefully audit these assessments, as they are of little consequence. Further, assessors are naturally likely to focus less time and attention on these properties for the same reason.

Moreover, it is unclear how non-profit organizations that operate throughout multi-building campuses, such as the District's many universities and hospitals, should apply the cost calculation. Is the total assessed value applicable to the Major Substantial Improvement Activity calculation that of the entire campus, or just the single building undergoing the renovation? If the latter, we note that District tax assessments may not itemize the value of every individual building and structure within an integrated campus. However DDOE chooses to address these uncertainties, it must not require non-profit organizations to incur the significant expense of a private formal appraisal. Rather, we suggest that DDOE work with applicable organizations to determine a mutually agreed-upon value per square foot, as compared to similar facilities in the District. Though perhaps not as precise as a formal assessment, this approach would provide sufficient information for DDOE's purposes quickly and efficiently.

Off-Site Retention, Credits, and In-Lieu Fees

Among the various measures contained in the Stormwater Rules, the proposed creation of Stormwater Retention Credits and establishment of an associated Credit Trading Program is one of the most innovative. However, with innovation comes uncertainty, and DCBIA has struggled over the past year to fully understand basic characteristics of the Credits, as well as the structure and operation of the Credit Trading Program. We appreciate the efforts that DDOE has taken to respond to our questions and provide the information that it has, but to ensure the Credit Trading Program's success, we urge DDOE to carefully consider and adopt the following recommendations:

Initial Availability of Credits

In the preamble to the Second Proposed Rules, DDOE explains that it "has compiled a list of properties with existing retention BMPs installed that may be eligible for SRC certification and plans to conduct outreach to these property owners to provide them with information and encourage them to apply for certification of SRCs and Stormwater Fee discounts once the regulations are finalized."[25]

First, we urge DDOE not to wait until the Stormwater Rules are finalized, but to engage potential Stormwater Retention Credit generators immediately. Moreover, to the extent that DDOE has identified prospective Credit-generating properties, we encourage DDOE to share that information to the greatest extent possible. We anticipate that many of the properties on DDOE's list have been developed or are currently owned or managed by DCBIA member organizations, and we could greatly facilitate DDOE's outreach efforts if given the opportunity - and information - necessary to do so.

Second, we take no issue with DDOE's estimate that "if all the owners of [existing] retention capacity apply for certification of three (3) years' worth of Stormwater Retention Credits (SRCs) in the summer of 2013 after these regulations are finalized, approximately 4 million SRCs would be available."[26] However, we are concerned that even DDOE's estimate of 50% participation (resulting in an initial supply of 2

[25] DDOE, Preamble to Second Proposed Rules, at 12.
[26] DDOE, Preamble to Second Proposed Rules, at 18.

million Credits) is overly optimistic. We still do not believe that DDOE fully understands the novelty of the Credit Trading Program and the degree to which many property owners will likely take a wait-and-see approach, particularly given the lack of incentives for blazing the trail as an early adopter. Without a detailed justification for the expected 50% participation rate, we feel that a more realistic participation rate could be as little as 10-20%, resulting in an initial supply of less than 1 million Credits - a fraction of the expected demand, by DDOE's own estimates.[27] Because the single most effective strategy to surmount these hurdles will be extensive outreach and engagement, we again urge DDOE to utilize DCBIA and other interested stakeholders as active partners in this aspect of implementation.

Certification of Credits and Approval of Credit Transactions

The success of the Credit Trading Program will substantially depend on the size and liquidity of the Credit market, or, in other words, the supply of Credits introduced into the market and the ease with which those Credits can be transacted. Under the Second Proposed Rules, DDOE has authority to certify Credits before they enter the market,[28] as well as to review and approve of every subsequent transaction involving those Credits.[29] As DDOE is hopefully aware, any uncertainty and delay that DDOE injects into the market as a result of these approval processes necessarily represent transaction costs that can only serve to inhibit the Credit Trading Program's success. Therefore, we recommend that DDOE adopt the following practices to minimize its potentially harmful intrusion into the Credit market.

First, DDOE should commit itself to completing the certification process within a definite time period that is as short as possible. We believe that a maximum 21-day review period would provide DDOE with sufficient time to thoroughly conduct all necessary review and inspections.

Second, DDOE should provide greater clarity as to the purpose of its review of proposed Credit transactions, including a detailed and exclusive list of the exact criteria by which transactions will be evaluated. We understand that the validity of these transactions is essential to the Program's integrity; however, we do not yet understand what actual review is necessary on a transaction-by-transaction basis. If the purpose of these reviews is simply to collect information about transactions, then we request DDOE turn this approval process into a reporting requirement, which could be satisfied within a short period after the transaction is completed.

Third, to the extent that transactions will require substantive review and approval, DDOE must provide a definite timeframe in which transactions will be approved. Based on its description of periodic meetings that it intends to host between prospective buyers and sellers, in which it anticipates approving transactions on the spot, DDOE appears able to approve proposed transactions very quickly. If this is accurate, it should commit to reviewing and approving any transaction within no more than 24 hours.

Together, these three steps will instill a degree of clarity and efficiency in the Credit Trading Program that we believe will be vital to its long-term success.

Stormwater Credit Sales Contracts

DDOE can also substantially improve the liquidity of the Credit Trading Program by facilitating the use of standard sales contracts. We are greatly encouraged by DDOE's discussion of this issue in the preamble to the Second Proposed Rules, and we are keenly interested in contributing our insight and expertise toward the development of a set of standard model contracts. Although we understand DDOE's expectation that the development of these contracts "will be an ongoing effort," we believe that the development of even a basic sales contract immediately upon finalization of the Rules could help

[27] DDOE, Preamble to Second Proposed Rules, at 17-18.
[28] DDOE, Second Proposed Rules, § 531.1.
[29] DDOE, Second Proposed Rules, § 533.3.

encourage owners of buildings with existing retention capacity to seek Credit certification, further boosting the initial supply of Credits.

Development of the Credit Database

Most of all, we expect that the ultimate success of the Credit Trading Program will depend on the accessibility and usability of DDOE's Credit database. As we have previously commented, this database must be able to provide detailed information regarding sales transactions publicly and in real time.[30] Regulated parties, interested stakeholders, and other market participants must be able to access key metrics of the Credit market, including price and volume data, as easily and quickly as possible. Toward that end, DDOE's description of a web-based registry that will include "updated information on available SRCs, contact information for SRC owners, requested price, and final sales price," among other data, is encouraging.[31] As DDOE moves towards implementation, we request that DDOE provide opportunities for public input regarding the registry's design and operation to ensure that it will be as useful and user-friendly as possible once it is eventually deployed. We also suggest that DDOE consider hiring additional personnel to oversee the development and ongoing administration of the database, as well as other administrative, policy, and legal aspects of the Credit Trading Program, to ensure its smooth functioning.

Coordination of Credit Program with Public Subsidy Programs

As we have stated before, DCBIA optimistically hopes that the Stormwater Credit Trading Program proves to be a resounding success that attracts widespread participation among regulated parties and others. At the same time, this success should not come at the expense of other public programs aimed at improving the District's overall stormwater retention capacity. To encourage the construction of as much stormwater retention capacity as possible, DDOE should allow and encourage site owners to also take advantage of related incentive programs and tax credits, to the extent that they are eligible.

Additionally, we are generally concerned by the restriction that Credits cannot be certified based on underlying stormwater retention capacity used to comply with another statutory, regulatory, or court-ordered stormwater management requirement, including those intended to reduce combined sewer overflows or to comply with a Watershed Implementation Plan established under a TMDL for the Chesapeake Bay.[32] This restriction would severely impair the Credit Trading Program, as it would prevent substantial quantities of otherwise eligible stormwater retention capacity from generating certified Credits. Moreover, this restriction appears to be environmentally unnecessary. Reducing CSOs and improving the water quality of the Bay are both laudable goals, but we fail to see how either objective would be compromised by the certification of the same retention capacity as part of DDOE's Credit Trading Program. A given gallon of retained stormwater can simultaneously count as one gallon of stormwater that is (1) eliminated from the District's stormwater runoff, (2) diverted from the District's combined sewer system, and (3) kept from entering the Chesapeake Bay or its contributing waterways. In the event that Stormwater Credits become eligible for trading on other stormwater trading markets within the Chesapeake Bay watershed, then such mutual exclusivity might be justified, lest a given gallon of retention capacity be the basis for multiple interchangeable retention credits.[33] Ensuring that ‘double counting’ does not occur is important in many government programs to ensure the integrity of compliance and accuracy of data within a specific regulatory regime. However, as long as Stormwater Retention

[30] DCBIA, Comments on Revised Rules, at 20-21.
[31] DDOE, Preamble to Second Proposed Rules, at 11-12.
[32] DDOE, Second Proposed Rules, § 531.3(a).
[33] Both Maryland and Virginia, among other states, administer nutrient credit trading programs to limit runoff into the Chesapeake Bay. Information regarding Maryland's program is available at mdnutrienttrading.org. Information regarding Virginia's program is available at http://www.deq.virginia.gov/Programs/Water/PermittingCompliance/PollutionDischargeElimination/NutrientTrading/NutrientnbspCreditExchangeStudynbsp.aspx.

Credits remain redeemable solely within DDOE's Stormwater Credit Trading Program, we do not see how the certification of credits for the purposes of stormwater regulation compliance detracts from compliance with other related mandated initiatives. In sum, these restrictions do not appear to be justified, economically or environmentally.

Technical Issues and Comments on the Second Proposed Guidebook

Selection of Approved BMPs

Under the Second Proposed Rules, regulated sites must achieve at least 50% of their stormwater retention volume (SWRv) through the on-site use of one or more approved Best Management Practices (BMPs). The Second Proposed Guidebook identifies the same thirteen approved BMPs that were initially proposed, including green roofs, permeable pavers, bioretention facilities, wetlands, ponds, and tree planting, among others. DCBIA has already commented extensively on the selection of these BMPs and the criteria for their design and operation, and we request that DDOE again consider the following observations, which are particularly crucial to the sustainable retention of stormwater by regulated sites in the District. In particular, and as we have stated before, not all BMPs are created equal, and despite the wide variety of BMP technologies that DDOE has approved, we expect that the options available to any given site will be quite limited.

First, many regulated sites will be technically unable to accommodate certain BMPs. For example, BMPs that require significant open space, such as wetlands, ponding, and bioretention, will be completely unavailable to regulated sites located in more densely-developed portions of the District. Other regulated sites, particularly older structures undergoing Major Substantial Improvements, will lack the structural capacity to support a green roof or rainwater harvesting system. As a result, of the thirteen BMPs that are approved for use District-wide, any given regulated site will likely be forced to select from just a few limited options.

Second, the options available to regulated sites are further limited because, although some BMPs utilize mature technologies with which planners, architects, and builders are very familiar, others remain relatively untested and untrusted. As a matter of good trade practice, planners and builders should not have to rely on technologies of unknown functionality, durability, and maintenance requirements. Therefore, of the limited options available to a given regulated site, only a very few are effectively feasible.

We note, however, that DDOE can increase the number and variety of options available in multiple ways. First, DDOE should allow for more extensive use of mature retention technologies, such as green roofs and rainwater harvesting. Second, DDOE should relax the strict design and construction parameters that it has established for many BMPs to allow regulated sites the flexibility to maximize their retention performance. Although some of these criteria ensure high-quality construction, others serve only to stifle efforts to customize core retention technologies to a site's unique parameters. Third, DDOE should provide incentives for the adoption of more experimental BMPs, at least until they become more commonplace in the District, perhaps through assigning greater retention values to innovative technologies. Fourth, DDOE should provide a clear pathway for the approval of additional BMPs to ensure that there are multiple BMPs available to any given type of development in the District.

Ultimately, if regulated sites are free to experiment with new retention technologies while only being required to utilize proven technologies, they can be expected to retain more stormwater more easily and at a lower cost than if they are restricted to a limited number of unfamiliar BMPs. The success of the Stormwater Management Program thus relies on DDOE's adoption of these recommendations. We remain concerned that, despite multiple rounds of comments that have included these suggestions, the Second Proposed Rules leave these recommendations insufficiently addressed.

Calculation of Retention Capacities of Approved BMPs

In our previous comments, we have urged DDOE to revise stormwater retention values for certain BMPs, which we believed are undervalued. In particular, we noted in our Comments on the Revised Rules that "ponds, wetlands, and open channels are all surface features that would include some retention via evaporation and evapotranspiration, which is not accounted for in the 0% retention value assigned to them."[34] We note that in the Second Proposed Rules, DDOE has revised the retention values for wet swales, ponds, and wetlands from 0% to 10%, which we agree more accurately reflects their true retention capabilities.

However, in revising the stormwater retention calculations for green roofs, we note that DDOE has introduced a small but crucial inconsistency that significantly affects how storage volume should be calculated. Specifically, according to the Second Proposed Guidebook, "in the absence of ASTM test results, a maximum water retention of 0.25 must be used."[35] However, the immediately following storage volume calculation indicates that, in the absence of verification data, 0.15 should be used as the default maximum water retention.[36] Considering that DDOE has provided no explanation for this downward adjustment, we believe that the calculation should be revised to include a 0.25 default maximum water retention, and we request that DDOE correct this inconsistency in the final rules.

Guidebook Design Examples

As we have previously commented, regulated sites in high-density areas that seek to develop the entire site from lot line to lot line face unique space constraints that effectively prevent utilization of BMPs that require significant open areas. Many such sites may be forced to choose from one or two BMPs. Given this extreme lack of flexibility, regulated sites covered entirely by impervious surface need as much guidance on how to achieve their required on-site SWRv as possible. In light of the critical nature of these comments, DCBIA recommends that DDOE attempt to demonstrate which BMPs will be feasible (and at what cost) for a wider variety of regulated projects than those presented thus far. We believe that this exercise will demonstrate that a meaningful percentage of regulated projects will not be able to come close to achieving applicable on-site retention requirements, and that adjustments to acceptable BMP standards are necessary.

For example, although Design Example 2 provided in the Second Proposed Guidebook exhibits 100% impervious rooftop cover, we note that this is an example of a Major Substantial Improvement, which is required to retain stormwater resulting from a smaller 0.8" rainfall event. This example is therefore not particularly helpful for regulated sites to be developed from lot line to lot line that will be subject to the full 1.2" retention requirement for Major Land Disturbing Activities.

For example, DDOE should provide an analysis of feasible BMPs for Major Substantial Improvements to existing buildings with lot line to lot line footprints and existing below-grade parking facilities. In the next 10 years, dozens of regulated projects will fall within this category. If below grade space is used to

DCBIA therefore requests that DDOE include in the final Guidebook an additional design example of a Major Land Disturbing activity featuring 100% impervious surfaces, in which below-grade areas are unavailable for retention BMPs. To facilitate this effort, DCBIA submits the following example for DDOE's consideration:

[34] DCBIA, Comments on the Revised Rules, at 5.
[35] DDOE, Second Proposed Guidebook, Ch. 3.2.4, at 34.
[36] DDOE, Second Proposed Guidebook, Eq. 3.1 at 34.

Site Description	1.6 Acre High-Density Multi-Use Development
Total Site Area	71,217 sf
Natural Cover Area	0 sf
Compacted Cover	0 sf
Impervious Cover (Rooftop)	71,217 sf
Located in the AWDZ?	No
Located in the MS4?	No
Type of Activity	Major Land Disturbing Activity
Existing Soils	Urban
Existing CN	71

Based on our calculations, this hypothetical development would be subject to a required SWRv of 50,607 gallons, which could be retained only through use of a green roof, rain water harvesting, or a combination of the two. We expect that the other eleven approved BMPs could not be utilized to any extent in this type of development.

As summarized in Table 1 below, this example demonstrates the following issues:

- Achieving the required SWRv and associated detention requirements exclusively using a green roof would require an 18.5" BMP facility covering over 70% of the roof area. This depth would have a significant impact on the development's useable height and structural design. Further, the extensive rooftop coverage would inevitably interfere with building equipment and access requirements. Moreover, use of the rooftop as a tenant amenity would be completely eliminated, substantially suppressing the development's potential market value.
- Exclusive use of rainwater harvesting would not achieve the required detention volume, even assuming that the tank would takes up the entire rooftop.
- Using a combination of green roof and rainwater harvesting would provide little benefit, as a sufficient combination would still require a green roof facility of at least 18" depth and 50% coverage.

Option		% roof to be Green roof	Additional Roof CDA	Green Roof Media Depth	Rain Wat Harvesting Tank (gal)	RWH SWR efficiency (%)	SWRv Provided (gal)	SWRv Surplus (gal)	In-Lieu Fee	2-YR CN	Additional Storage Reqd for 2-yr Storm (gal)	100% SWRv met?	2-yr Storm Control Met?	Notes
Green Roof Only	1	55%	25%	6"	-	-	25,636	-24,971	$87,397	92	36,080	No	No	Min extensive green roof area for min onsite SWRv. Previous sites were able to get approx 40-50% roof
	2	71%	-	10"	-	-	50,902	295	-	85	23,130	Yes	No	Considerable level of SWM, without attaining 2-yr detention requirements
	3	71%	-	18.5"	-	-	50,902	295	-	71	-	Yes	Yes	Can the additional detention volume incorporated into the GR be credited towards potential SRC credits?
RW Harvesting Only assume 100% roof goes to RWH tank	4	-	-	-	76000	71%	50,808	201	-	86	23,470	Yes	No	
	5	-	-	-	100,000	94%	67,212	16,605	-	81	16,780	Yes	No	Why does a 24k gal increase (from option 6), only result in a 7k decrease in detention requirement?
	6	-	-	-	200,000	94%	67,212	16,605	-	81	16,780	Yes	No	No matter how big we make the tank, can't meet detention requirements. How do we design for tank design 2?
Green Roof overflow* & remaining roof area to RW Harvesting	7	40%	25%	6 in	76000	91%	67,007	16,400	-	81	16,830	Yes	No	Very little benefit to incorporating green roof to rainwater harvesting. Owner more likely to go with option #5.
	8	50%	25%	19 in	76,000	94%	70,013	19,406	-	71	-	Yes	Yes	

* unclear how to incorporate overflow from green roof into the CDA of the rainwater harvesting tank spread sheet

Table 1: Calculated Capacities of Green Roof and Rainwater Harvesting BMPs Deployed in a Major Land Disturbing Site Featuring 100% Impervious Cover.

This example, which is based on parameters from actual developments in the District, demonstrates the significant constraints to which such high-density major Land Disturbing activities will be subjected. Put simply, the development community does not believe that the standards as proposed can be achieved on-site for a large number of regulated sites similar to those in the design example above. However, we believe that DDOE does not agree with this assessment. We are therefore asking DDOE to provide

documentation to back up its assertion that the standards can be reasonably achieved on-site for these types of sites. Absent this sort of evidence or a decision to alter acceptable BMPs and retention values in the ways proposed above, DCBIA continues to believe that the new regulations will be onerous, impracticable, and largely unachievable for a substantial percentage of regulated site—an outcome which would clearly be unacceptable.

Anacostia Waterfront Development Zone

We note that in the Second Proposed Rules, DDOE has incorporated a number of our previous comments regarding the regulation of sites located in the Anacostia Waterfront Development Zone (AWDZ). However, we note that certain outstanding uncertainties could significantly impair AWDZ Sites' compliance with these regulations. Therefore, we request that DDOE reconsider the following comments.

First, it is unclear whether AWDZ Sites can utilize offsite retention capacity to achieve any portion of their applicable SWRv. The Second Proposed Rules state that AWDZ Sites may utilize offsite retention capacity to achieve their Water Quality Treatment Volume (WQTv) only upon DDOE's granting of relief from extraordinarily difficult site conditions;[37] however, the Rules should be revised to clarify that AWDZ Sites may achieve 50% of their SWRv using offsite retention without having to demonstrate extraordinarily difficult site conditions, like all other Major Regulated Projects.

Second, we urge DDOE to clarify what it would consider to constitute extraordinarily difficult site conditions in the AWDZ. The AWDZ is uniquely characterized by poor soil quality and a high water table that will inevitably impede, if not prevent, any significant on-site retention. It is not clear, however, that DDOE would consider these conditions to be "extraordinarily difficult" by District-wide standards. As we have previously commented, we believe that AWDZ Sites should ideally be required to achieve on-site retention only to the Maximum Extent Practicable.[38] However, in the alternative, DDOE should specify the types of conditions that would "make compliance technically infeasible, environmentally harmful, or of limited appropriateness" or that would constitute extraordinarily difficult site conditions,[39] so that AWDZ Sites can reasonably anticipate and plan for the applicable on-site retention requirements. As always, DCBIA's highest concern and priority is ensuring regulatory predictability and clarity.

Third, we again urge DDOE to clarify how it will administer the requirement that AWDZ Sites must obtain 1.25 Stormwater Retentions Credits (SRCs, or Credits) for every gallon of offsite retention when that retention is located outside the AWDZ.[40] Specifically, the Rules must specify how AWDZ Sites are to comply with obligations to submit fractions of Credits. For example, for every 50 gallons of offsite retention located outside of the AWDZ, an AWDZ Site will be required to obtain 62.5 Credits. DDOE must address how these fractions of Credits will be handled, and we again suggest that for simplicity of administration, DDOE simply round Credit obligations down to the nearest whole number. We do not believe that further increasing compliance obligations by rounding up is equitable and we expect that permitting the trading of Credits in .25 increments will be administratively infeasible. Thus, rounding down is the only fair and feasible alternative.

Applying for Relief Under the "Maximum Extent Practicable" and "Extraordinarily Difficult Site Conditions" Standards

We expect that many regulated sites utilizing the Public Right of Way (PROW) will apply the MEP standard and that numerous other sites will seek relief from extraordinarily difficult site conditions. Both options will provide necessary relief from otherwise onerous on-site retention requirements, and DCBIA

[37] DDOE, Second Proposed Rules, § 524.7.
[38] DCBIA, Comments on Revised Rules, at 6.
[39] DDOE, Second Proposed Rules, § 524.7.
[40] DDOE, Second Proposed Rules, § 524.8.

fully supports their inclusion in the Second Proposed Rules. However, we note that the Second Proposed Rules do not specify when in the planning process regulated sites may apply for relief under either standard.

This timing is very important, as this approval will substantially affect regulated sites' overall designs. Regulated site applicants will need to gain clarity on their exact on-site retention obligations early in the planning and design process, lest they prepare detailed designs with no certainty as to their applicable obligations. In particular, we note that under the Second Proposed Rules, relief from extraordinarily difficult site conditions will only be granted upon submission of a complete Stormwater Management Plan (SWMP). This creates an inevitable "Catch-22" for regulated site applicants, who will inevitably have to revise their SWMPs to incorporate the relief granted. We believe that this process is inefficient and unnecessarily burdensome. Therefore, to alleviate this potential uncertainty, DDOE should clarify in the final rules that it will either permit on-site retention to the Maximum Extent Practicable or grant relief from extraordinarily difficult site conditions, as applicable, during the initial planning stages based on initial surveys of site conditions.

Missing Documentation

In the Second Proposed Guidebook, DDOE has included much of the documentation that we had noted was missing from the Revised Guidebook. This additional information, which includes a sample integrated pest management plan,[41] as well as a sample minimum Stormwater Pollution Prevention Plan (SWPPmin), will greatly facilitate regulated sites' compliance with the Rules. DCBIA appreciates DDOE's responsiveness in this regard. Additionally, we request that DDOE consider including in the finalized Guidebook the following documentation that remains missing.

First, the Second Proposed Guidebook is still missing the discussion of the Stormwater Fee Discount Program that had been included in the Proposed Guidebook but that was inexplicably removed from the Revised Guidebook.[42] This information was very helpful, particularly considering the Discount Program's substantial overlap with the applicability of the Stormwater Management Rules, and we again request that this information be restored in the finalized Guidebook.

Second, the guidance regarding approval of proprietary stormwater retention BMPs remains vague. Given the limited BMP options that will be effectively available to many regulated sites (as discussed above), we expect that proprietary practices could be an attractive alternative in many circumstances. Therefore, the Guidebook's discussion of this approval process must be as clear and detailed as possible. However, we note that in the Second Proposed Guidebook, many common questions are not addressed. For example, how does a vendor submit an application? Which criteria will DDOE use to review an application and approve a given proposed practice? Can DDOE estimate how long this review process will take? Will approval of a proprietary practice apply only to a single regulated site, or will other regulated sites be able to utilize the same practice under the same approval?

As we have noted before, stormwater retention technologies are subject to continuous development, and as new innovations gain a foothold in the market, the proprietary practices approval process should facilitate the use of previously untested, but potentially pioneering retention practices. DCBIA therefore recommends restoring the detailed guidance regarding proprietary practices from the Proposed Guidebook in the finalized Guidebook. In particular, we note that the Proposed Guidebook included a proprietary practices application form, which we anticipated will be very helpful when working with

[41] DDOE, Second Proposed Rules, App. S.
[42] DDOE, Initially Proposed Guidebook, App. S.

stormwater retention facility manufacturers, but this form has been inexplicably removed from the Second Proposed Guidebook.[43]

Additional Technical Comments

In our review of the Second Proposed Guidebook, we have noted a number of additional technical issues that we call to DDOE's attention for resolution:

First, we thank DDOE for correcting the labeling in Figure 3.16.[44] However, we request that DDOE further revise this figure and accompanying text to clearly indicate the recommended width between vertical flow barriers. If no single fixed width is recommended, please indicate which factors should be considered in determining the proper width for a given facility. Additionally, we request that DDOE provide some indication of how an underdrain might be installed below the vertical flow barriers.

Second, we again request that DDOE clarify whether its recommendation that "any area of the site intended ultimately to be an infiltration practice should generally not be used as the site of a temporary sediment basin" also applies to soil erosion control traps.[45]

Third, the requirements for hydraulic grade lines flowing into the combined sewer system are not feasible and should be corrected.[46] Specifically, the requirement to plan for 100-year flows is highly infeasible, particularly considering that there is no reliable data available as to what a 100-year flow will actually be. Therefore, this requirement should be eliminated, such that hydraulic grade lines will only be required to plan for 15-year flows.

Fourth, the Second Proposed Guidebook states that "where two or more pipes enter a structure, a minimum of two feet horizontal clearance must be maintained between pipes connected to the structure at the same elevation."[47] Can DDOE clarify whether this horizontal clearance requirement applies to existing manholes? We seek clarification on this issue because we are aware that DC Water has approved of certain pre-cast manhole designs featuring just one foot of horizontal clearance. Although new manholes can be designed to comply with this two foot requirement, we anticipate that reconfiguring existing manholes will be difficult and unnecessary. Further, we request that DDOE clarify its rationale for the two foot horizontal clearance requirement.

Fifth, we note that the 45-degree clearance requirement between storm drains and utility crossings may not be possible for existing utilities.[48] We acknowledge that this requirement is not an issue for drains and utility crossings that are installed contemporaneously. However, this requirement may fully prevent the installation of a necessary storm drain in areas where utility crossings have already been laid, particularly in densely developed areas, where the spaghetti-like maze of existing utilities could effectively prevent installation of storm drains throughout large portions of the District. We do not believe that this requirement is necessary to protect utilities from nearby storm drains, and we request that it be revised to better accommodate the installation of storm drains around exiting utilities.

Finally, DCBIA appreciates the revisions that DDOE has made in the Second Proposed Guidebook with regard to the protection of areas for future on-site BMP facilities, which have effectively removed unnecessary burdens on regulated sites without any compromise in their potential stormwater retention

[43] DDOE, Initially Proposed Guidebook, Table T.1, at T-5.
[44] DDOE, Second Proposed Guidebook, Fig. 3.16, at 79.
[45] DDOE, Second Proposed Guidebook, Chs. 3.5.6, at 86, and 3.8.6, at 152.
[46] DDOE, Second Proposed Guidebook, App. F, at F-6.
[47] DDOE, Second Proposed Guidebook, App. F, at F-7.
[48] DDOE, Second Proposed Guidebook, App. F at F-9.

capacities. In that spirit, we again request that DDOE remove the restriction that "where [soil compaction] is infeasible, the impacted area cannot be excavated below 2 feet above the final design elevation of the bottom of the bioretention until further compaction by heavy equipment can be avoided," even though the compacted area must be tilled once the area is excavated to grade.[49] We fail to understand the purpose of this restriction, particularly given that the soil would be tilled prior to installation of the BMP facility anyway. Therefore, in the spirit of eliminating unnecessary burdens that have no impact on environmental protection, we request that this restriction be eliminated in the finalized Guidebook.

CONCLUSION

Over the entire course of this year-long rulemaking, DCBIA has sought to provide objective insights into the realities of the planning and development process and constructive comments on the Stormwater Rules at every stage. In turn, DDOE has reviewed our written comments, and in many respects has responded to our concerns. In other cases, we have not yet received responses or explanations .We fully expect that DDOE will be responsive to the comments that we provide today and urge DDOE to address those which remain unanswered. Many of the issues in these comments which we have previously raised are of substantial importance. Without resolution on these issues, we will be unable to support their full implementation.

In addition, as we transition toward finalization and implementation of the Stormwater Rules, many new and previously unforeseen issues will inevitably arise beyond those articulated in this set of comments. DCBIA looks forward to serving as an active and engaged partner with DDOE to address these upcoming issues, and we sincerely hope that DDOE will support the level of proactive engagement that it has fostered so far.

Thank you once again for the opportunity to submit these comments, and we appreciate your consideration.

Sincerely,

David Tuchmann
Chair, Stormwater Task Force
District of Columbia Building Industry Association

Cc: City Administrator Allen Lew
Deputy Mayor Victor Hoskins
Councilmember Mary Cheh
DDOE Director Keith Anderson
Mr. Jeffrey Seltzer
Mr. Jeff Miller
Mr. Ernest D. Jarvis
Ms. Amy L. Edwards

[49] DDOE, Second Proposed Guidebook, Chs. 3.5.6, at 86; 3.6.6, at 117; and 3.8.6, at 152.