

**DCBIA Stormwater Taskforce**  
**Preliminary Top Issues of Concern and Requests for Clarification**  
**October 5, 2012**

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**I. Technical**

1. Analysis of the 13 ‘allowable’ devices in the new regulations reveals very limited utilization possible for the majority of the devices. Please confirm that our understanding and interpretation below is accurate and represents the regulatory intent. For reference, please see attached draft Table 1.
  - a. Only seven devices potentially provide 50% or more stormwater retention value. (highlighted in green on Table 1). Of these seven:
    - i. Only three have the potential to assist in meeting detention requirements. These are: (1) enhanced pavers, (2) enhanced bioretention, and (3) infiltration. All three of these options require:
      - Appropriate infiltration of in-situ soils (which is rare in DC)
      - Adequate area to allow for BMP and provide adequate building setback
    - ii. Only three are independent of in-situ soils. These are: (1) green roof, (2) rainwater harvesting, and (3) standard bioretention. For these three options:
      - No additional detention credit is provided, and as such an additional BMP must be provided.
      - Green roof and rainwater harvesting are not recommended for residential use
  - b. Four of the 13 BMPs provide no retention credit at all

The continued inclusion of the detention treatment requirement creates additional storage requirements, even for projects that could provide most but not all of the SWRv volume. The requirement for an additional facility means additional design requirements, cost, and opportunity cost for square footage, for a relatively low environmental benefit.

In sum, for a majority of developments, multiple SWM facilities appear to be required to meet the requirements set forth in these new regulations, and the regulations promote the realistic use of very few types of devices.

2. The volume credit for the allowable treatment devices is greatly reduced from those under calculations from the current regulations. The same green roof area, bioretention facility or other device under the new regulations provides less storage volume credit than that same device under the current regulations. Did DDOE intend to make this reduction in setting the new regulations? If so, what motivated this change? While incentivizing and encouraging green roofs (for example), the lower volume credit appears to be in contradiction with this goal.
3. In the Guidebook's Appendix A, we are unclear on how detention was attained or computed. Please provide more details. For examples, what is the CN for "good meadow?"
4. Please provide a diagram for each Design Example. It is difficult to understand the areas and volumes without the context of a specific site with specific dimensions.
5. What are the requirements if a project design area includes both private space and public right of way (PROW)? For example, how much of the site's retention volume can be routed to the PROW? Can the PROW area be excluded as stated in the regulations? Will DDOT and DC Water be working with DDOE and support the use of PROW as defined by the new regulations?
6. In subsequent comments, we will provide detailed text corrections and questions related to the Guidebook.

## **II. Processing and Interagency Coordination**

1. Please provide clarification in regard to the grandfathering issue. Please indicate the specific permit application (or a list of acceptable applications) that must accompany the ESC and SWM plans and the level of completeness that is required. As background, throughout 2011 and 2012, the development community has been under the impression that the submission of these plans, whether accompanied or not by a specific permit application would vest a project under the current regulations.
2. The 25' buffer requirement adjacent to a waterbody needs clarification and flexibility. Has DDOE done an inventory of developable lands (both in public and private control) which would be impacted by the imposition of such a rule? Has this proposed rule been coordinated with the US Army Corps of Engineers?
3. Have fee schedules and definitions related to dewatering activities been harmonized for construction activities and/or permanent conditions? Have DDOE groundwater

regulations and DC Water requirements for discharges been coordinated with the new stormwater regulations?

4. Is there a discrepancy between the SWPPP requirements for the EPA under the Construction General Permit and what is requested by DDOE (one acre threshold for EPA and 5,000 sf of disturbance for DDOE)? There is a very large discrepancy between 5,000 sf and an acre. The lower threshold would greatly increase the number of SWPPP's and related review time.
5. Currently, SWM facilities in public space (mostly in the way of planters or small rain gardens) are handled with a Declaration of Covenants for Maintenance with DDOT and DDOE. Further, DC Water is a stakeholder in design for conveyance systems. What will DDOE do to improve this coordination-intensive process and promote solutions in Public Space? Will these regulations promote better and more streamlined coordination or more complicated and time-consuming discussions amongst DDOE, DDOT, DC Water and applicants?
6. The review, construction inspection, and ongoing inspection of SWM Facilities will take tremendous staffing. How is DDOE preparing for this increase in demand for field inspections? Can you provide assurances to the development and ownership community that such staffing will be available? What if there are not enough internal staff members available to provide inspections in a timely manner? Would DDOE consider third party inspections and issuing qualifications in the regulations directly so certification processes can start in advance of the effective date of the rules? If third party inspection will not be allowed, what recourse does a developer have if a construction inspection is delayed and a project is delayed?
7. Please provide the fee comparison data DDOE obtained from other jurisdictions which informed the setting of the fees in these regulations.
8. How will these fees be collected? Currently, fees are paid following review and prior to the release of permits. Will fees be added to the building permit fee due at plan submission or be collected following review? Are the fees calculated by the DDOE desk at DCRA or by another party? Is DCRA aware of the answers to these questions and committed to implementing them?

### **III. Sediment and Erosion Control**

1. Section 543.13 limits the maximum disturbed area during construction to 2.5 acres. This limit would severely impact (if not make impossible) large-scale projects such as McMillan Reservoir, Skyland, Hill East, Walter Reed, SW Waterfront, St. Elizabeths and many privately held, but not as high-profile sites. What is DDOE's intention in setting this limit? Would DDOE propose that these sites be built in phases based on sediment and erosion concerns alone? If waivers will be granted instead, what basis would be used

for the granting of such waivers and which types of projects would likely receive a waiver?

2. Section 541.11/12 specifies additional requirements when groundwater and soil contamination is encountered. Are DDOE's groundwater and soil contamination regulations not sufficient to address these matters? If not, can they be coordinated, so that the regulations pertaining to soil and groundwater contamination only appear in one location?
3. Section 547 requires a "Responsible Person." What is the purpose of this new position? Specifically, what deficiencies currently exist within the construction and reporting process which gave rise to the introduction of this position? Has a certification program been created? Are there any pre-requisites to become certified (i.e. P.E.)? Can the Responsible Person be the design engineer, owner or contractor, or will a "non-biased" third party have to be retained? How often will this person have to be on site? As this role will add cost and overhead for developers and DDOE alike, including the administration of the training or certification program, it is important to understand the motivation behind the establishment of this role before getting into great detail.
4. 542.9.n.1- "provisions to preserve topsoil and limit disturbance"- What does 'preserve topsoil' mean? Please define with more specificity.
5. 542.9.n.2 - "Details of Grading practices"- What does this mean? Please define with more specificity.
6. 542.14 - "In support of a plan which it submits for approval, the applicant shall provide additional information that the Department considers necessary." Please define the items which may be required with more specificity. If the submission requirements are open-ended, applicants have no assurances on costs, timing or review standards.
7. 543.4 (and other sections) - The phrase "rebuttal presumption" is too legalistic and technical. Please re-phrase so non-lawyers reading the regulations can understand the meaning.
8. Section 543.17 states that cut and fill slopes shall be protected in 5' vertical increments. Why is this specific measure called for with such specificity rather than allowing site conditions to dictate? Does this standard also apply to basement excavations where the excavation is laid back? Generally the water at the bottom of the excavation will be pumped and filtered, thus this protection would seem unnecessary.

#### **IV. General Contracting and Cost Estimation**

1. Protection of future Stormwater BMP areas on site (i.e. infiltration trenches, bio-retention areas, disconnection areas, etc.) will prove problematic as it will:

- a. further constrain already tight site conditions
  - b. may significantly impact cost and schedule if near the building footprint as contractors will have to sheet and shore where lay back excavation would have previously been sufficient. Was it DDOE's intention for this measure to have such a significant impact on construction means and methods?
2. It is unclear what stages of construction require an inspection by a representative of DDOE. Is it just for pre-construction, final stormwater BMP approval and to verify final stabilization, or is it required at all inspection stages of BMP installation (each BMP has a "Construction Inspection" section that lists multiple recommended inspections)? During busy construction months, it may prove difficult to schedule inspectors if all active construction sites in DC require these inspections and construction schedules may be adversely impacted. Would third party inspections be acceptable?
3. During final stormwater BMP inspection, if the BMP is an underground facility, what needs to be visible? For example, for an underground detention basin comprised of stone and perforated pipe, must the contractor keep the trench open until the inspection can occur? More specificity is required here to ensure schedule delays do not occur.
4. Section 540.2 mentions that controls shall be required during demolition activities if debris, dust or sediment is leaving the site; what sort of measures are required to control this, and what is the standard for when such measures would be required?
5. Section 543.18 seems to have conflicting information regarding the stabilization of stockpiles. Section C is a fairly typical requirement for temporary stabilization. What is the purpose of the Section A and B requirements?
6. Why is it required that plantings for green roofs be ordered 6 to 12 months prior to installation?
7. Final compaction must occur during the final backfill around the perimeter of a building. With this said, if these areas are to be used as stormwater disconnection areas, pervious pavement or a similar BMP, it will be impossible to meet the non-compaction requirements. Has DDOE considered this potential conflict?
8. Why is it a requirement to cover pervious concrete pavement with plastic sheeting for seven (7) days after it is placed? Depending on the site, the pervious pavement may be located in the primary entrance to the site and would have significant impacts on site logistics and the construction schedule. Would it not be preferable to simply rely on the specifications and standards called for by the product manufacturer?
9. What constitutes an approved supplier for bio-retention area soil media? How does a supplier become approved? Can an excavation/landscaping contractor mix their own sand/soil materials and submit a material slip describing the mixture?
10. Who is required to fill out the construction inspection check lists? Is this to be filled out by a DDOE inspector for official inspections, by the "responsible person" to be submitted

to DDOE or is it merely for internal QA/QC purposes to ensure all the proper steps are taken to install the BMPs?

## V. Retention Credit program

1. Please explain with an example, how the fee in lieu amount is calculated and how and when it is paid. How often can the fee rate per gallon be altered? Do the regulations limit the extent of any increases?
2. Will SRCs be available on Day 1 of the effective date of the new regulations? How can this be guaranteed, and how has DDOE calculated the likely market price of these credits? If SRCs are not available, does DDOE have any plans to address this situation?
3. Once a site purchases SRCs from another site, can that purchasing site then resell them to a third site? The regulations do not make it clear how transferable the SRCs are and if they may be indefinitely transferred.
4. Can SRCs be banked by the purchaser without being used or must a specific receiving site be identified upon purchase? If the SRCs are to have real value, then they should be able to be bought and sold freely without such restriction. The regulations should be clear that a *purchaser* of SRCs can bank them indefinitely. The regulations suggest that it is only the originating site that can bank them indefinitely.
5. Section 531.9(f) – What does “Other documentation” required by DDOE for SRC certification refer to? Criteria for certification should be explicit and set forth in the regulations in order to establish certainty.
6. There are many unanswered questions and issues about administration of the SRCs transferring between sites.
  - a. Who will track the SRCs, and how will the tracking be done? Will there be a publically available inventory on a website? If so, who will administer this inventory and ensure that it is up to date? In order for there to be confidence in the program, these elements must be established in advance, preferably in the regulations.
  - b. How will SRCs vest in a site? Will there be a separate SRC document recorded against the property? Or, will it be part of the general SWMP (Section 529)?
  - c. At what point will demonstrating sufficiency of vested SRCs be required in the building or occupancy process?
  - d. Section 533.3 – What is the nature of “Department’s approval?” Only DDOE (or another explicitly stated agency) should be involved in the transfer of SRCs. The approval process for transfer should be streamlined and clear. This regulation needs a

lot more specificity. If DDOE anticipates that any other agency is to be involved in this process, has there been collaboration between those agencies yet?

7. Section 531.10 – What are the criteria for determining life span of an SRC? Why is three years the maximum amount of time, and why would it ever be as low as one year? The regulations should address these issues.
8. Section 532.1 – A banked SRC should not be able to be retired as long as the generating site complies with all other pertinent regulations. This regulation should be clearer that indefinite bankability means a SRC cannot be retired when not being used. Is the only reason that DDOE would force the retirement of a SRC because of noncompliance by a generating site? If this is the case, the regulations should more clearly state that.
9. What is the maximum amount of time DDOE may take to certify SRCs at a generating site or to approve a transfer? Without a stipulated timeframe, transactions, and thereby developments, could be held up indefinitely.
10. What happens to the recipient site when the generating SRC site can no longer retain the water that generated the SRC in the first place? The recipient site relied on that SRC for the SRC's lifespan, so it should not be penalized for the generating site's error. We believe the regulations conform with this assumption. However, it would be better to explicitly state in the regulatory language that as soon as the SRCs have been sold, the purchaser can use, bank or sell those credits with no regard at all for what occurs at the generating site.
11. Does DDOE anticipate the approval of credits for 3 years at a time to be the norm? What would cause DDOE to issue a credit for less than the full 3 years? Owners choosing to voluntarily retrofit their properties would be much more inclined to put a device in place if they were confident that three years of credits would be approved at a time.
12. If an improvement on a credit generating site was installed in May, 2009, for example, would DDOE today approve credits in July, 2012 for the next three years in addition to the previous three years when the BMP was already functioning? What if ownership changed hands during the previous three years? Which entity is entitled to the value of BMP's?
13. At the Sept. 19 presentation, DDOE staff seemed unclear on how to approach issuing credits where DDOE or some other governmental body had already provided subsidies such as a green roof rebate or some other incentives. It seems impractical to omit these projects, and the incentives are far ranging in terms of their percentage of cost recovery.
14. Would DDOE favor the creation of a standard contract for credit sales in order to reduce transaction costs? If yes, collaboration would be necessary to establish such a document.

## **VI. Areas for Further Study**

The comments above represent an initial selection of a broader group of concerns, corrections and questions. However, this document includes what we feel are the most pressing matters in

the stated categories. For example, we are not including detailed Guidebook comments and corrections, nor suggested line by line regulation edits.

We have not yet begun to explore the feasibility or cost implications (hard, soft, capital, maintenance and opportunity) of these regulations—a major area of study in and of itself. We do know that the Industrial Economics Study is deeply flawed, in that it omits major cost categories and does not provide representative projects for enough development types. In order to study feasibility and cost implications, we will need further clarity on many of the questions included in this document as well as adequate time.

We also have not begun to engage the ownership community (lenders, equity owners, title experts and others) to define the many challenges presented in the regulations.

Last, we have not begun to explore the Guidebook section related to maintenance of SWM devices, which will require the expertise and evaluation of building managers and engineers.