GOVERNMENT OF THE DISTRICT OF COLUMBIA

District Department of the Environment



To: Ms. Amy Edwards, Chair - DCBIA Committee on the Environment Mr. David Tuchman, Vice-Chair - DCBIA Committee on the Environment

From: Jeffrey Seltzer, PE, Associate Director, DDOE Stormwater Management Division

Date: October 26, 2012

Subject: DDOE response to DCBIA Stormwater Taskforce Clarifying Questions

In an October 12, 2012 memorandum to DCBIA, DDOE provided initial responses to a list of clarifying questions from the DCBIA Stormwater Taskforce. Below are responses to the questions that were not addressed in the October 12, 2012 memo.

DDOE is looking forward to the focused sessions that DCBIA has requested. These sessions should allow DDOE to further clarify the issues that DCBIA has raised, as well as providing an opportunity for DDOE to explain its rationale and to better understand the reasons for the questions and concerns that DCBIA has raised.

Question I.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?"

Response: DDOE suggests this as a topic for the workgroup focused on technical issues related to stormwater management.

<u>Question I.4</u>: 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.

Response: DDOE understands this and plans to clarify, including at the workgroup session.

Question II.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?

Response: A requirement for a 25' buffer is less than required by some other jurisdictions. Though DDOE generally views this as a reasonable requirement, DDOE recognizes that there may be some instances where an exception is warranted, including to provide opportunities for



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waterfront access such as boat ramps, docks, and pedestrian/biking trails. DDOE welcomes comments that specifically identify examples where an exception may be justified.

Question II. 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?

Response: DDOE's primary objective with the dewatering requirements in § 542.12 is to protect waterbodies from receiving contaminated discharge directly or through the Municipal Separate Storm Sewer System (MS4). DDOE recognizes that the language of the proposed rule does not convey that and plans to clarify those provisions, with the result that DC Water's pre-treatment requirements would apply to dewatering in the Combined Sewer System (CSS) and DDOE's requirement for a dewatering pollution reduction plan would apply for projects draining directly to District waterbodies or into the MS4.

Separate from the Proposed Rulemaking on Stormwater Management and Soil Erosion and Sediment Control, DDOE has begun drafting well regulations and DDOE assumes this is what is meant by the reference to groundwater regulations. The process for developing the well regulations is significantly behind the timeline for the Proposed Rulemaking, so the provisions related to dewatering were included in the stormwater Proposed Rule. DDOE's intent is to avoid duplication between the well regulations and the stormwater Proposed Rule, probably by sunsetting the duplicative requirement in the stormwater Proposed Rule, as part of the process of finalizing the well regulations.

Question II. 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?

Response: DDOE recognizes that this is a challenge and is working with DDOT and DC Water to help clarify the use of stormwater practices in public space. To ensure consistency with DDOE's Draft Stormwater Management Guidebook and to help clarify the issues around use of public space, DDOE is providing input to DDOT as it develops standard specifications for Low Impact Development (LID) stormwater practices in the Public Right of Way (PROW). DC Water is also providing input in that process. DDOE hopes that these standard specifications will alleviate many of DC Water's concerns related to potential impacts on sewer infrastructure and potential replacement costs, as well as other utilities' similar concerns about their infrastructure. DDOE will continue to work to overcome these concerns in a productive manner.

In addition, DDOE is working with DDOT to clarify the circumstances under which the PROW can be used for stormwater management, including stormwater from private parcels and stormwater from the PROW. For example, DDOE believes there is significant public benefit in allowing the PROW to be retrofitted with stormwater retention practices to retain stormwater from the PROW and generate Stormwater Retention Credits (SRCs). Theoretically, this could be

done by an adjacent property owner or an SRC aggregator. Such projects would reduce stormwater runoff into District waterbodies, increase flexibility for sites triggering the stormwater management regulations, and help the District to comply with the requirement in its MS4 permit to retrofit the PROW.

Question II. 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?

Response: In addition to its existing plan review and inspection staff, DDOE has begun adding staff to respond to increased demand for plan review and inspection. DDOE is committed to providing plan review and inspections in a timely manner, and if the demand exceeds DDOE's staff capacity, then DDOE is willing to consider allowing third party inspections.

Question II. 7: Please provide the fee comparison data DDOE obtained from other jurisdictions which informed the setting of the fees in these regulations.

Response: An apples-to-apples comparison of fees from different jurisdictions is challenging. Typically, multiple factors go into determining the fee for a project in a jurisdiction, and the factors included vary from jurisdiction to jurisdiction. Also, the thresholds for triggering those factors vary among jurisdictions.

DDOE has based its fees on its average costs and has tried to make the structure relatively straightforward to understand and calculate, while also recognizing differences among various types of projects, including projects of varying size.

In addition, DDOE's fees for review of a stormwater management plan are in the same ballpark as those for many other urban jurisdictions. For example, a hypothetical project with an 8,000 square foot area of disturbance would pay \$4,800 in the District. In Montgomery County, the same project would pay somewhat higher fees (roughly \$5,500, see http://permittingservices.montgomerycountymd.gov/DPS/pdf/FY2012ExecutiveRegulation6-11.pdf). In Philadelphia and Seattle, the fees would be approximately the same (\$4,525 for Philadelphia and \$4,648 in Seattle), while they would be lower in Chicago (\$1,000) (see report by Industrial Economics, Inc.). To provide additional context, DC Water charges \$7,500 for large project permit basic review (http://www.dcwater.com/business/permits/fees_charges.cfm).

Question II. 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?

Response: Initial fees are due upon filing for a building permit, and only require calculation of the area of land disturbance. These fees would typically be collected at DCRA by DCRA cashiers, though DDOE has the capacity to receive payments at its office.

Before receiving a final permit, the applicant would pay remaining plan review fees, which may require calculations of area cleared, volume excavated, and volume filled. As part of that final payment, the applicant would also pay additional site-specific fees, only some of which may apply to a given project. DDOE plan reviewers will calculate the fees owed by an applicant.

Question III. 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?

Response: DDOE's intent is that no more than 2.5 acres should be exposed and unstabilized at any one time. In other words, areas should be stabilized as work proceeds so that no more than 2.5 acres is unstabilized. This requirement is based on DDOE's experience inspecting sites where larger areas are exposed and unstabilized, with the result that the perimeter controls (e.g. silt fences, hay bales, and dykes) are overwhelmed and fail, causing erosion and off-site transport of sediment. Even when initial installation of perimeter controls is properly done, inadequate maintenance can result in such failure. Reducing the area that is unstabilized translates into less burden on perimeter controls, which helps to reduce the risk of failure, and it also limits the environmental impact when a failure does occur.

Question III. 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?

Response: DDOE does not have separate groundwater regulations at this point. Separate from the Proposed Rulemaking on Stormwater Management and Soil Erosion and Sediment Control, DDOE has begun drafting these regulations ("well regulations"). The process for developing the well regulations is significantly behind the timeline for the Proposed Rulemaking, so the provisions related to dewatering were included in the Proposed Rule. DDOE's intent is to avoid duplication between the well regulations and the Proposed Rule, probably by sunsetting the duplicative requirement in the stormwater Proposed Rule.

Section 542.11 requires notification to the Department when contaminated groundwater or soil is encountered both because of the need for a dewatering pollution reduction plan (§ 542.12) and because such contamination would limit the use of infiltration.

DDOE's primary objective with the dewatering requirements in § 542.12 is to protect waterbodies from receiving contaminated discharge directly or through the Municipal Separate Storm Sewer System (MS4). DDOE recognizes that the language of the proposed rule does not

convey that and plans to clarify those provisions, with the result that DC Water's pre-treatment requirements would apply to dewatering in the Combined Sewer System (CSS) and DDOE's requirement for a dewatering pollution reduction plan would apply for projects draining directly to District waterbodies or into the MS4.

Question III. 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.

Response: DDOE's intent is that there be a qualified person available to the site during land disturbance in order to ensure that erosion and sediment controls are installed and maintained properly and to respond to minor problems early on before they become major problems. DDOE's intent is not that the Responsible Person must be on site at all times during land disturbance, but rather that he/she conduct routine inspections and inspections after a storm, in addition to being available to respond to problems that arise, including those identified by on-site personnel and DDOE Inspectors. DDOE intends to clarify this language in the Rule and Guidebook.

A Responsible Person would have passed a course on erosion control from a state with such a program (e.g. State of Maryland's Green Card program) or a professional association such as the International Erosion and Sediment Control Association (IECA) or the American Society of Civil Engineers (ASCE).

Question III. 4: 542.9.n.1- "provisions to preserve topsoil and limit disturbance"- What does 'preserve topsoil' mean? Please define with more specificity.

Response: DDOE's concern with the preservation of topsoil has to do with having that topsoil available to use when re-seeding; however, DDOE recognizes that it may make more sense on some sites to remove topsoil initially and bring additional topsoil back to the site when reseeding. This requirement to use topsoil is a standard detail for reseeding, and so is not necessary in this subsection.

Section 542.9.1 requires that a Soil Erosion and Sediment Control Plan identify areas of land disturbance, and § 542.9.n is meant to require that any specific provisions to limit disturbance to that area be identified on the plan, so that site construction managers and personnel, as well as DDOE inspectors, will be aware of them.

Question III. 5: 542.9.n.2 - "Details of Grading practices"- What does this mean? Please define with more specificity.

Response: These are the details of how grading will be conducted on the site (e.g. following contours and using dykes). These types of practices are identified in DDOE's *Standards and Specifications for Soil Erosion and Sediment Control*, and the details that are applicable to a site would typically be stamped on the plan, so that site construction managers and personnel, as well as DDOE inspectors, will be aware of them.

Question III. 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 openended, applicants have no assurances on costs, timing or review standards.

Response: The intent was to account for site-specific differences that require information not already listed in the preceding sections to be included in a Soil Erosion and Sediment Control Plan. However, as written, the language sounds like an open-ended requirement, rather than being limited to requiring information necessary to show compliance with the applicable requirements for erosion and sediment control. DDOE intends to clarify this language.

Question III. 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.

Response: DDOE intends to clarify this language.

Question III. 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.

Response: This language is very similar to the language in the existing regulations (§ 539.10). DDOE's intent is to prevent sediment from running off onto adjacent property or into a waterbody. DDOE does not intend for this to apply to basement excavations where runoff is going into a construction pit. DDOE plans to clarify this. DDOE is also doing further research on the basis of the 5' vertical increments.

Question IV. 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.

Response: As with the existing regulations, underground facilities need to be visible for inspections, so the trench must be open if sufficient access is not otherwise provided. Chapter 3 of the Draft Stormwater Management Guidebook contains more specific requirements for each BMP.

Question IV. 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?

Response: This subsection is included for projects that don't trigger the requirement for a Soil Erosion and Sediment Control Plan (SESCP). For those projects, the requirement would only become relevant when debris, dust, or sediment are leaving the site and after DDOE gives instructions to use specific control measures.

For a site that triggers the requirement for a SESCP, these measures are typically specified on the SESCP (see Section K of the existing (2003) *Standards and Specifications for Soil Erosion and Sediment Control.*)

Question IV. 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?

Response: Section "a" and "b" give specific requirements for stabilizing stockpiles by covering them at the end of each work day and keeping them covered after working hours. Section "c" is meant to provide flexibility to use additional options to achieve stabilization, when a stockpile will not be used or added to for 15 days. DDOE plans to revise to clarify.

Question IV. 6: Why is it required that plantings for green roofs be ordered 6 to 12 months prior to installation?

Response: This is meant as a suggestion, to ensure that the nursery being used can provide the necessary quantity. DDOE plans to revise to clarify that this is a suggestion.

Question IV. 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?

Response: DDOE's intent is not to prevent final compaction that is required for an area where a BMP will be located. However, the area may need to be decompacted when the BMP is constructed. Consult Appendix K of the Draft Stormwater Management Guidebook for guidance on restoring hydrological function to soils.

Question IV. 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?

Response: DDOE plans to clarify its intent that curing be achieved using the manufacturer's specifications, but if there are no specifications, porous concrete should be covered with plastic for seven days, based on recommendations from the American Concrete Institute.

Question IV. 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?

Response: DDOE's intent is both to ensure that the media will perform properly (e.g. percolation) and to prevent off-site transport of pollutants such as nutrients. DDOE plans to clarify this and/or provide a reference to approved suppliers.

Question IV. 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?

Response: Ultimately a DDOE inspector will complete the checklists, but DDOE recommends that the site use the checklists for QA/QC purposes prior to inspection.

If there are additional clarifying questions on the proposed rulemaking, please contact Brian VanWye at 202-741-2121 or <u>Brian.VanWye@dc.gov</u>. DDOE looks forward to continuing our constructive discussions and receiving DCBIA's formal comments.