DISTRICT DEPARTMENT OF THE ENVIRONMENT

NOTICE OF PROPOSED RULEMAKING

Stormwater Management, and Soil Erosion and Sediment Control

The Director of the District Department of the Environment (Department or DDOE), under the authority identified below, hereby gives notice of the intent to amend Chapter 5 (Water Quality and Pollution) of Title 21 (Water and Sanitation) of the District of Columbia Municipal Regulations (DCMR), comprehensively amending the stormwater regulations and the soil erosion and sediment control regulations. Specifically, these amendments would repeal and replace §§ 500 to 545 and 599, and add §§ 546, 547, and 552. This notice refers to this rulemaking as the "second proposed rule."

DDOE also gives notice of its intent to adopt a revised Stormwater Management Guidebook (SWMG). The SWMG provides guidance on compliance with the rule. This includes design specifications for stormwater management practices that can be used to achieve compliance. The revised SWMG is approximately six hundred (600) pages long and, therefore, is not published in this *D.C. Register*. It is available at ddoe.dc.gov/proposedstormwaterrule. This notice refers to the current version of the SWMG as the "second proposed SWMG."

Final rulemaking action shall be taken in not less than thirty (30) days from the date of publication of this notice in the *D.C. Register*. DDOE will accept comments from the public on both the rulemaking and the SWMG throughout the thirty (30) day period.

The second proposed rule and second proposed SWMG reflect comments received during comment periods on earlier versions of the rule. DDOE conducted a first formal public comment period, which lasted ninety (90) days, beginning with the publication of the proposed rule in the August 10, 2012 issue of the *D.C. Register* (59 DCR 009486). This document refers to the August 10, 2012 version of the rule as "the proposed rule" and the accompanying version of the SWMG as "the proposed SWMG." Based on comments received during the first formal public comment period and its internal deliberations, DDOE revised the proposed rule and proposed SWMG and released the "revised rule" and the "revised SWMG" for a thirty (30) day informal comment period that ended on April 30, 2013. DDOE maintains an email notification list of members of the public who are interested in this rulemaking. As noted at ddoe.dc.gov/proposedstormwaterrule, members of the public will be added to this email list upon request. DDOE distributed the revised rule to that email list and also posted the revised rule and revised SWMG at ddoe.dc.gov/proposedstormwaterrule. To facilitate public review, DDOE posted a version of each document in tracked changes and another with changes accepted.

DDOE greatly appreciates the many comments that the public submitted during both the first formal comment period and the informal comment period. DDOE has thoroughly considered these comments and made changes accordingly. DDOE will post a document responding to comments on the proposed rule and a separate document responding to comments on the proposed SWMG at ddoe.dc.gov/proposedstormwaterrule. DDOE does not plan to post a response document for each of the comments received during the informal comment period.

However, this preamble to the second proposed rule will summarize key changes that have been made based on public comments received during the informal comment period, and the second proposed SWMG will be accompanied by a similar summary.

DDOE has gone to great lengths to engage stakeholders and get their input during the rulemaking process. This input has improved the effectiveness and practicality of the rule. However, the federal deadline in the Municipal Separate Storm Sewer System (MS4) Permit issued to the District by Region III of the United States Environmental Protection Agency (available at www.epa.gov/reg3wapd/npdes/dcpermits.htm) imposes some constraints on the extent to which DDOE can address stakeholder concerns while still meeting the July 22, 2013 MS4 permit deadline. For example, while DDOE recognizes the advantages of providing a comprehensive document responding to each of the comments received during the informal comment period, it is not doing so, as mentioned above. Also, many stakeholders have asked about aspects of DDOE's planned implementation of the new regulatory framework and associated programs, especially the Stormwater Retention Credit (SRC) trading program. Though DDOE has carefully considered all of the comments it has received and is actively preparing for implementation, this preamble only summarizes these efforts.

For additional background, DDOE suggests that members of the public also review the preamble to the proposed rule, the preamble to the revised rule, and DDOE responses to clarifying questions (all available via ddoe.dc.gov/proposedstormwaterrule). In reviewing stakeholder comments, DDOE noted that some of the questions posed have been answered previously. DDOE will keep these questions, especially those being asked on a recurring basis, in mind as it develops outreach materials, such as Frequently Asked Questions (FAQs), to assist with program implementation. In the meantime, stakeholders may find that the documents listed above, as well as related resources such as training presentations, are helpful.

To make this preamble easier to read, the Department has organized it into sections with headings, as follows:

- **Authority**
- **Background**
- **Summary**
- **Proposed Transition to Full Effectiveness of Stormwater Management Performance Requirements**
- **Key Steps toward Implementation**
- **Basis for Administrative Fees**
- **Stormwater Retention Credit Trading Program**
- **Stormwater Retention Credit Trading: Ongoing Maintenance of Retrofits**
- **Stormwater Retention Credit Trading: Hybrid of Exchange and Over the Counter Models**
- **Stormwater Retention Credit Trading: SRCs for Existing Retention Capacity**
- **Stormwater Retention Credit Trading: Potential Initial Demand for SRCs**
- **Stormwater Retention Credit Trading: Potential Initial Supply of SRCs**
- **Stormwater Retention Credit Trading: SRC Price Required to Recoup Costs**
- **Stormwater Retention Credit Trading: Financial Return from SRCs and Discount**

- **Clarification of Anacostia Waterfront Development Zone Provisions**
- **Major Substantial Improvement: Structural and Space Limitations**
- **Clarification of Provisions Related to Contamination**
- **MEP in Public Right of Way for Parcel-Based Projects**
- **Submitting Comments on the Revised Rule and Stormwater Management Guidebook**

Authority

The authority for the proposed adoption of final rules is set forth below:

- Department of Consumer and Regulatory Affairs Civil Infractions Act of 1985, effective October 5, 1985, as amended (D.C. Law 6-42; D.C. Official Code §§ 2-1801.01 *et seq*. (2007 Repl. & 2012 Supp.));

- District Department of the Environment Establishment Act of 2005, §§ 101 *et seq.*, effective February 15, 2006, as amended (D.C. Law 16-51; D.C. Official Code §§ 8-151.01 *et seq*. (2008 Repl. & 2012 Supp.));

- National Capital Revitalization Corporation and Anacostia Waterfront Corporation Reorganization Act of 2008, effective March 26, 2008 (D.C. Law 17-138; 55 DCR 1689), as amended by the Anacostia Waterfront Environmental Standards Amendment Act of 2012, effective October 23, 2012 (D.C. Law 19-192; D.C. Official Code §§ 2-1226.31 *et seq.*) (2012 Supp.));

- The Soil Erosion and Sedimentation Control Act of 1977, effective Sept. 28, 1977 (D.C. Law 2-23; 24 DCR 792), as amended by the Soil Erosion and Sedimentation Control Amendment Act of 1994, effective August 26, 1994, (D.C. Law 10-166; 41 DCR 4892; 21 DCMR §§ 500-15);

- Uniform Environmental Covenants Act of 2005, effective May 12, 2006, as amended (D.C. Law 16-95; D.C. Official Code §§ 8-671.01 *et seq.* (2008 Repl.));

- Water Pollution Control Act of 1984, effective March 16, 1985, as amended (D.C. Law 5-188; D.C. Official Code §§ 8-103.01 *et seq.* (2008 Repl. & 2012 Supp.)); and

- Mayor's Order 2006-61, dated June 14, 2006, and its delegations of authority.

Background

These amendments update Chapter 5 of Title 21 of the District of Columbia Municipal Regulations (DCMR) to reflect the current scientific, engineering, and practical understanding in the fields of stormwater management and soil erosion and sediment control. Knowledge and technology in these fields have changed considerably since 1977, when the majority of the soil erosion and sediment control requirements were put into place, and since 1988, when the District's existing stormwater management requirements were established.

In several decades of implementing the stormwater management and soil erosion and sediment control regulations of the District and undertaking numerous restoration projects, the Department has acquired substantial firsthand knowledge and experience of the damage to District waterbodies from impervious development and inadequately managed stormwater. Stormwater impacts District waterbodies with its powerfully erosive volume and the pollution it contains. *See* ddoe.dc.gov/proposedstormwaterrule for a presentation with photographs that illustrate these impacts.

These amendments satisfy the requirements of the District's Municipal Separate Storm Sewer System (MS4) Permit, issued by the United States Environmental Protection Agency under the Clean Water Act (Permit No. DC0000221, available at www.epa.gov/reg3wapd/npdes/dcpermits.htm). The MS4 permit requires the District to implement a 1.2 inch stormwater retention standard for land-disturbing activities, a lesser retention standard for substantial improvement projects, and provisions for regulated sites to satisfy these standards off site.

DDOE has also designed these amendments to work in concert with other sustainability initiatives in the District, including the Office of Planning's development of Green Area Ratio requirements under the zoning code and Mayor Gray's Sustainable DC Plan (sustainable.dc.gov/).

In developing these amendments, DDOE drew on various sources of information. This included a review of the science, engineering, and practice of stormwater management and soil erosion and sediment control, as well as its own firsthand knowledge of the impact of stormwater on District waterbodies. DDOE evaluated its experience managing the installation, operation, and maintenance of the various types of Best Management Practices (BMPs) that can satisfy the requirements in these amendments. DDOE also considered the regulatory approaches taken in other urban jurisdictions.

Finally, DDOE appreciates the valuable input it has received from residents, engineers, scientists, land developers, environmentalists, and other governmental entities regarding the impacts of these amendments. This includes feedback from approximately two dozen training sessions and clarifying meetings with stakeholders during the first formal comment period, as well as the comments submitted on the proposed rule and Stormwater Management Guidebook (SWMG) and comments received on the revised rule and SWMG. (Training presentations, DDOE responses to clarifying questions, and public comments submitted during the first formal comment period are available at ddoe.dc.gov/proposedstormwaterrule). DDOE recognizes that these amendments are significant for the regulated community, for environmental stakeholders, and for the public to whom the District's waterbodies ultimately belong. Accordingly, DDOE gave careful consideration to this input, which is reflected in the second proposed rule SWMG.

Summary

These amendments will provide greater protection for the Anacostia and Potomac Rivers, Rock Creek, and their tributaries. They will improve equity in the allocation of the burden of stormwater management, and they will promote sustainable development within the District.

The amendments will significantly improve protection for District waterbodies by effectuating a fundamental shift in the management of stormwater runoff within the District. Unlike the existing approach in which the fundamental goal of stormwater management is simply to manage the timing and quality of stormwater conveyed into the public sewer infrastructure, these amendments require the retention of stormwater volume on site with a menu of stormwater management practices through which stormwater is absorbed by the soil, infiltrated into the ground, evapotranspired by plants, or stored ("harvested") for use on site. This more closely approximates the "sponginess" of the natural environment, where rainwater is captured by foliage, absorbed into the soil, and infiltrated into groundwater reserves.

These amendments improve equity in how the impacts of stormwater runoff and the burden of stormwater management are distributed in the District. Over the years, inadequate stormwater management has become a leading cause of the severe degradation of District waterbodies such as the Anacostia and Potomac Rivers and Rock Creek. This degradation diminishes the value of these public resources for residents, visitors, and businesses in the District of Columbia and necessitates the use of public resources to pay the costs of managing stormwater and remedying its impacts. These amendments would more equitably allocate the costs of stormwater management by requiring properties undergoing major development or redevelopment to do more to reduce the stormwater runoff from their property. The idea that these costs should be reflected in the costs of developing properties is in keeping with the established principle of environmental policy and economics that external environmental costs should be internalized into the costs of a transaction. By making the shift to the retention-based approach in these amendments, regulated development will become a major driver behind the long-term effort to retrofit impervious surfaces in the District and, ultimately, to restore health to the District's waterbodies.

Enhancing sustainability in the District is another important objective, and Mayor Vincent C. Gray has released a sustainability plan that will help the District achieve this vision (sustainable.dc.gov/). These amendments are designed to support that vision not only by improving protection for District waterbodies, but also by providing that protection while maximizing flexibility and cost-savings for regulated sites. Notably, these amendments allow regulated sites the option of achieving a portion of their stormwater retention requirement off site, but still within the District, without having to first prove that on-site retention is infeasible. Such sites would have two (2) off-site options: use of Stormwater Retention Credits (SRCs), which can be purchased from the private market, or payment of an in-lieu fee to DDOE.

In addition to the flexibility and cost-savings that these off-site provisions allow, they also enhance sustainability's triple bottom line of social, economic, and environmental impacts via the installation of more retention BMPs in more parts of the District than would otherwise be achieved under a strict on-site retention approach. The preamble to the proposed rule provided an overview of the benefits to District waterbodies that may result from the increase in retention BMPs (available at ddoe.dc.gov/proposedstormwaterrule). To summarize, this increase has the potential to significantly reduce the volume of stormwater runoff into District waterbodies and to capture a greater share of the dirtiest "first flush" volume carrying pollutants to our waterbodies. By shifting the installation of retention BMPs from areas draining into the tidal Anacostia and

Potomac Rivers to areas draining into the District's relatively vulnerable tributary waterbodies, these off-site retention provisions are also likely to result in more protection for the District's most vulnerable waterbodies. Socioeconomically, an increase in retention BMPs should increase the number of green jobs in the District, including low-skill and moderately skilled installation, operation, and maintenance jobs, as well as relatively high-skilled design and engineering jobs. The increase in retention BMPs also provides aesthetic, health, and ancillary environmental benefits to the District. Finally, it is worth pointing out that DDOE sees the off-site provisions in these regulations as having the potential to result in a relatively large amount of retention BMPs being installed in less affluent parts of the District, meaning that they also have the potential to improve environmental justice outcomes in the District.

These amendments also contain other provisions to provide flexibility to regulated sites and promote sustainable development in the District. To facilitate retention on site, the amendments allow a regulated site to exceed the retention requirement in one area ("over-control") in order to compensate for retention that falls short in another area on the site. Additionally, on-site retention can also be achieved via direct drainage to a Shared Best Management Practice (S-BMP) that may serve multiple sites. Finally, though sites draining into the combined sewer system must retain a minimum volume of stormwater from the entire site, they have the flexibility to over-control without having to meet minimum requirements for retention or treatment in individual drainage areas on the site.

Proposed Transition to Full Effectiveness of Stormwater Management Performance Requirements

Numerous stakeholders have commented on the importance of when the new stormwater management performance requirements take effect. On the one hand, the new requirements are essential for the restoration of the District's waterbodies, and without these new requirements, or something very similar, it is difficult to envision how the full use of District waterbodies can be restored to its residents, visitors, and businesses. On the other hand, 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. As noted above, the new regulations represent a significant shift from the existing regulations. The types of projects that trigger the District's stormwater management regulations may go through months or even years of design work prior to beginning the permitting process that triggers the regulations, and it is difficult for those projects to design to the new requirements in advance of finalizing the rulemaking, since the regulatory requirements and technical guidance supporting them in the SWMG have not yet been finalized.

In developing a proposed transition plan, included in the preamble to the revised rule, DDOE carefully considered these issues, as well as the requirements of the Municipal Separate Storm Sewer System (MS4) permit. Based on comments received on the revised rule, DDOE has further refined the proposed transition period (detailed in Figure 1 and below) and inserted the corresponding regulatory language in Section 552 of the second proposed rule, with related language added to Section 526. Refinements include the following:

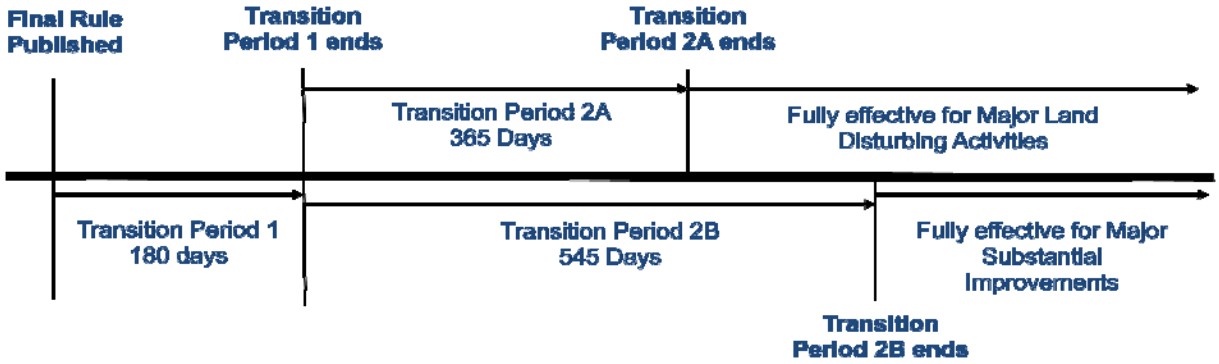
- The second proposed rule extends Transition Period 2 for major substantial improvement activities. Transition Period Two A (TP2A) refers to the one (1) year time period during which the minimum on-site retention requirement is waived for a major land-disturbing activity. Transition Period Two B (TP2B) refers to the eighteen (18) month time period during which the minimum on-site retention requirement is waived for a major substantial improvement activity. DDOE has provided a longer time period for major substantial improvement activities to transition to achieving the minimum amount of retention on site in recognition of the fact that this category of projects has not triggered the District's stormwater management regulations in the past and faces additional constraints in achieving retention on site, relative to major land-disturbing activities.

- The second proposed rule uses the term Advanced Design (AD) to refer to detailed design for an area that has been submitted in an application for approval to the appropriate reviewing body and adds two categories of projects to be treated the same way as the revised rule treated Stage Two (2) Planned Unit Development (PUD) applications to the Zoning Commission. DDOE expects that these ADs, once approved, are likely to constrain opportunities to achieve the new stormwater management performance requirements. Accordingly, DDOE expects the project areas covered under these ADs to comply with the stormwater management requirements that are in place at the time the application for review is submitted to the appropriate reviewing body. In addition to a Stage Two (2) PUD application to the Zoning Commission, the second proposed rule identifies as an AD an application for design review under the Capitol Gateway Overlay District to the Zoning Commission and a final design submission to the National Capital Planning Commission (NCPC). Though not referred to as an AD per se, the second proposed rule includes the same exception described in the revised rule for an area of a multi-phased project for which all stormwater infrastructure and Best Management Practices (BMPs) required in a DDOE-approved Stormwater Management Plan (SWMP) were approved during an earlier phase of construction.

- The second proposed rule recognizes 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. Accordingly, the second proposed rule specifies that, in an application for relief from the minimum on-site retention requirement, the applicant can use evidence that certain unexpired approvals limit the opportunity to install a BMP on site. These approvals must be applied for before the end of TP2A for a major land-disturbing activity or before the end of TP2B for a major substantial improvement activity. Specifically, these approvals are of the following: concept review by the Historic Preservation Review Board; concept review by the Commission on Fine Arts; preliminary or final design submission by the NCPC; or a variance or special exception by the Board of Zoning Adjustment (BZA).

Please note that DDOE's transition plan only applies to the stormwater management performance requirements, while provisions related to erosion and sediment control, Stormwater Retention Credit certification and trading, and the new administrative fee structure would take effect immediately upon finalization of the rule.

In reviewing Figure 1, it is important to understand that, with a few exceptions, the timing of each phase is relative to a major regulated project's submittal of a first SWMP as part of the building permit application process. If a major regulated project must re-start the building permit application process because the permit has expired (see Section 105.5 of DCMR 12A) or the permit application has been abandoned (see Section 105.3.2 of DCMR 12A), then the major regulated project would have to meet the stormwater management requirements that are in place at the time it submits its SWMP as part of the re-started permit application process. For example, a major land-disturbing activity submitting a SWMP prior to the end of Transition Period One (TP1) would meet the requirements that are now in place in the District's existing stormwater management regulations; however, if the building permit expires, the project applies anew for a building permit, and it submits its SWMP for the new building permit application after TP2A, then it would be subject to the new requirements.



Transition Period One (TP1)

- Major regulated projects comply with existing regulations.

Transition Period Two A (TP2A) for Major Land-Disturbing Activities and
Transition Period Two B (TP2B) for Major Substantial Improvement Activities

- Minimum on-site retention requirement waived. Entire retention volume may be achieved off site.
- Minimum on-site treatment required per the new regulations, as applicable.

Exceptions:

- Areas of projects for which an Advanced Design (AD) has been submitted and for which approval has not expired shall comply with the stormwater management requirements in place at the time of submittal.
- Areas of multi-phased projects for which all stormwater infrastructure and BMPs are installed in compliance with a DDOE-approved SWMP during an earlier phase of construction shall be deemed to have met the stormwater management requirements.
- Projects for which an unexpired approval listed below conflicts with the installation of a retention BMP can use evidence of that conflict in applying for relief from the minimum on-site retention requirement, provided that the project applied for the unexpired approval before the end of TP2A for a major regulated project or the end of TP2B for a major substantial improvement activity:
  - Concept review by the Historic Preservation Review Board;
  - Concept review by the Commission on Fine Arts;
  - Preliminary or final design submission by the National Capital Planning Commission; or
  - Variance or special exception from the Board of Zoning Adjustment.

Figure 1: DDOE Transition Plan for Stormwater Management Performance Requirements

DDOE recognizes the need for some exceptions to the general rule that the timing of each phase is relative to a major regulated project's submittal of a SWMP. Specifically, Figure 1 indicates three (3) exceptions, which are meant to avoid imposing significant re-design costs, delays, the need to re-apply for approval, or the need to go through the construction of stormwater infrastructure multiple times for the same site or portion of a site.

The first exception is for projects that have submitted the detailed design work required for an AD. For example, if a major land-disturbing activity submits a Stage 2 PUD application before the end of TP1, it would be required to meet the requirements that are now in place. If that project instead submits its PUD application after the end of TP2A, then it would be subject to the fully effective stormwater management performance requirements. If the Zoning Commission's approval of a PUD application expires and the project must re-apply, then it would have to meet the stormwater management requirements that are in place when it submits its new application. If a Consolidated PUD application includes Stage 2 requirements for an initial phase of the site and Stage 1 requirements for a subsequent phase(s), then the exception would apply only to the Stage 2 area of the site.

The second exception is for a multi-phased project that achieves the stormwater management requirements for the remaining areas of a site during an initial phase of construction. In other words, if, during an initial phase of construction, a multi-phased project installs all the stormwater infrastructure and BMPs required by a DDOE-approved SWMP for areas that will be developed in later phases, then those areas will have satisfied the stormwater management requirements, even though they will not be fully developed until a subsequent phase of construction. For example, if a multi-phased project installed a stormwater detention pond and related infrastructure during the first phase of the project in compliance with a DDOE-approved SWMP satisfying the existing requirements for the entire area that will be part of the multi-phased project, then subsequent phases would not be required to meet new stormwater management requirements that are in place when those subsequent phases go through construction. By contrast, if a multi-phased project simply installed the stormwater infrastructure and BMPs for the area being developed under the first phase but was not simultaneously going through permitting for remaining phases, it would not be eligible for the exception, even if it had an overall conceptual SWMP for areas being developed in subsequent phases. In that case, each area being developed in a subsequent phase would comply with the requirements in place at the time it is going through the permitting process.

The third exception recognizes 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. Accordingly, the second proposed rule specifies that, in an application for relief from the minimum on-site retention requirement, the applicant can use evidence that certain unexpired approvals limit the opportunity to install a BMP on site. For example, a major land-disturbing activity project applies to the BZA for a variance before the end of TP2A, and that variance, which the BZA approves, conflicts with the installation of retention capacity on site. The project applies for a building permit and submits its SWMP to DDOE after the end of TP2A. At that point, the project can use evidence that the unexpired approved variance conflicts with the installation of retention capacity in requesting to achieve less than fifty percent (50%) of its

required retention volume one site via an application for relief from extraordinarily difficult site conditions.

Key Steps toward Implementation

DDOE understands that a smooth transition to the new regulatory framework depends in large part on its own preparation. This is critical both to avoid unnecessary delays of regulated projects and to ensure that waterbodies receive the protection that comes with regulated projects' achieving the new stormwater management performance requirements. Recognizing this, DDOE is taking numerous steps to prepare for implementation. This includes increasing its own capacity as an agency, planning compliance assistance training for the regulated community and other stakeholders, and developing related programmatic materials and initiatives.

DDOE is increasing its internal capacity by hiring staff, establishing other mechanisms to achieve staff functions, conducting internal training, and developing other implementation tools. First, over the last year, DDOE has hired an additional inspector and has announced an opening for a plan review engineer. DDOE has also hired staff to implement the Stormwater Retention Credit (SRC) trading program and its Stormwater Fee discount program. The Stormwater Fee discount program is related in that it provides an additional incentive for property owners to voluntarily retrofit their property with stormwater BMPs. Currently, DDOE is working to announce two additional positions for stormwater inspectors and plans to announce an additional position for a plan review engineer in the first quarter of Fiscal Year (FY) 2014. DDOE plans to continue assessing the need to hire additional staff and take necessary steps to support the implementation of the new regulatory framework. Second, to provide additional capacity if necessary, especially for certification of SRCs, DDOE is finalizing a grant agreement with the Center for Watershed Protection (CWP) to provide plan review, inspection, and related services on an as-needed basis. CWP did much of the work to revise the District's Stormwater Management Guidebook (SWMG) and train stakeholders, has done similar work in the Chesapeake Bay watershed, and is well-suited to provide the additional plan review and inspection services that may be required. If this is not adequate to meet the need for additional plan reviews and inspections, DDOE will consider other alternatives, including contracting with a private company for these services. Third, over the past year, DDOE has been conducting training for its engineers and inspectors and plans to continue these trainings over the coming months and on an ongoing basis as necessary. Fourth, DDOE has been working over the last several months to revamp its plan review and Best Management Practice (BMP) database, through a grant provided by the Environmental Protection Agency. In addition to being structured to reflect the new regulatory framework, the revamped database will provide greater functionality, including integration with Geographic Information Systems (GIS) and the ability to provide a public interface for selected data. As a second phase, which DDOE expects to get underway in the beginning of June, this project will integrate SRC tracking and registry functions, as well as tracking for the Stormwater Fee discount, into this database. Since that version of the database may not be ready by the expected finalization date for these regulations (July 22, 2013), DDOE has also been developing an in-house database that it expects to be ready for the finalization of these regulations.

Before these regulations are final, DDOE plans to announce an initial schedule for another round of trainings tailored to the regulated community and other stakeholders, such as those who may be interested in generating or trading SRCs. These trainings will take place after finalization of the regulations and reflect the final requirements in the regulations. DDOE already has a grant agreement in place with CWP to assist DDOE with these trainings and expects to offer sessions on the following topics:

- General site and BMP design to achieve regulatory compliance;
- Maximum Extent Practicable (MEP) process for reconstruction of existing Public Right of Way (PROW);
- MEP process for land disturbance in PROW by parcel-based projects;
- Use of off-site retention by regulated sites; and
- Generation and certification of SRCs.

After an initial post-finalization round of trainings, DDOE plans to conduct periodic trainings as necessary to assist with compliance. DDOE will distribute the schedule for these trainings through its email notification list and also post it on line at ddoe.dc.gov/proposedstormwaterrule.

In addition to the database and registry projects that are underway, DDOE is also developing programmatic materials and planning other initiatives to support the implementation of the new regulatory framework, especially the SRC trading program and the related Stormwater Fee discount program. Though much of what DDOE is working on in this regard does not belong in the regulations themselves or the SWMG, DDOE understands that many stakeholders are very interested and provides a brief summary below. DDOE plans to provide additional information in the coming months.

- DDOE is developing webpages and other outreach materials to convey eligibility requirements and other key information on both programs to potential participants. The final rulemaking for the Stormwater Fee discount program is currently being reviewed by the Council of the District of Columbia. DDOE expects that the discount program rule, like the stormwater management and soil erosion and sediment control rule, will be published as final in the *D.C. Register* in July of 2013. DDOE is planning to launch these programs' webpages, which will include many resources for potential participants, upon or soon before final publication. Recognizing that DDOE has received numerous questions from stakeholders that were previously answered in other materials, including the regulations themselves or the SWMG, the SRC trading webpages will include a consolidated list of Frequently Asked Questions, which will provide a more user-friendly alternative to the regulations and the SWMG.

- The SRC database that DDOE is developing will include the ability to select information for a public-facing SRC registry on DDOE's website. The registry will include updated

information on available SRCs, contact information for SRC owners, requested price, and the final sale price. DDOE's SRC webpages will also show:

- Retention capacity for which DDOE has approved a Stormwater Management Plan and expects to certify SRCs once construction is complete and inspected;
- Off-Site Retention Volume (Offv) for regulated projects that have completed construction and are currently required to use off-site retention;
- Expected Offv for regulated projects, as identified in a DDOE-approved SWMP for which construction has not yet been completed; and
- Average SRC price for multiple transactions over a given time period, which may include a monthly, quarterly, or yearly average.

- DDOE 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. In conveying the potential for SRC demand to these property owners, it would be helpful for DDOE to be able to provide them with a list of members of the regulated community who are interested in buying SRCs, including the number of SRCs they are interested in purchasing and contact information. Though this list would not be binding in any way, it, and subsequent conversations between property owners and interested buyers, may be very compelling for the owner of a property with existing eligible retention capacity who is considering whether or not to go to the effort of applying for certification of SRCs. DDOE requests that members of the regulated community who are interested in being on this list contact Evan Branosky at Evan.Branosky@dc.gov.

- DDOE plans to convene a legal working group of stakeholders to draft template SRC trading contracts. These would only be optional templates, and SRC buyers and sellers would be free to develop their own contracts. Also, DDOE recognizes that there are potentially many different scenarios under which SRCs could be traded. DDOE does not expect to develop a template for each possible scenario. In addition, though DDOE expects to convene this working group before the regulations are published as final, this will be an ongoing effort to develop a portfolio of potential templates. Initially, DDOE expects this effort to result in a template for the relatively simple scenario in which a buyer purchases SRCs that have already been certified. Early on, DDOE would also like to explore the possibility of a template contract(s) for more complicated scenarios involving the purchase of prospective SRCs. For example, this could include, for eligible retention capacity that has already been constructed and already been inspected by DDOE, a contract with terms for purchase of an initial batch of SRCs certified for the first three (3) year time period and terms for purchase of the SRCs that are expected to be generated by that retention capacity in the future.

- DDOE is planning to host an informal meeting of potential SRC buyers and sellers, who are considering participating in the SRC market and are interested in discussing challenges and related issues with others. If these meetings are helpful to participants, DDOE may hold a series of them.

- Once SRCs have been certified, DDOE is planning to host periodic meetings to bring together interested SRC buyers and sellers to discuss potential trades. This meeting would begin with each participant being introduced and identified as an interested buyer or an interested seller. DDOE would use color-coded nametags or similar means to help SRC buyers and SRC sellers identify each other. This meeting could also include time during which DDOE collects offers to buy and offers to sell and arranges them in a table or on a graph to facilitate price discovery and determine if there is any intersection between offers to buy and offers to sell. For any resulting transactions that occur, DDOE would be able to approve transfers of ownership at the conclusion of the meeting.

- DDOE plans to identify a portfolio of potential SRC-generating retrofit projects on public property, which would be available for private developers to carry out through a public-private partnership. DDOE would work with other District agencies to identify potential projects, and some could be prioritized to support other important objectives, such as restoration efforts in a specific watershed or improved environmental justice outcomes in a particular part of the District. DDOE may further incentivize some of these projects by undertaking preliminary design to ensure that the project is viable.

- DDOE is exploring purchasing and retiring SRCs for newly installed retention capacity to help establish demand certainty and meet various water quality objectives, including the MS4 permit requirement to retrofit impervious surface through the installation of retention BMPs. DDOE already works through its grant-making process to install stormwater retrofits on private property in the District, and DDOE's purchase of SRCs would be very similar, with two beneficial distinctions: 1) purchasing SRCs allows DDOE to pay the significant capital costs for stormwater retrofits over time, rather than entirely up front and 2) DDOE may be able to take advantage of private market efficiencies and leverage its limited funding by installing retrofits more cost-effectively. If DDOE proceeds with this, it expects to do so through a grant to a nonprofit intermediary, and DDOE will announce additional details through a public Request For Applications (RFA) via its grant-making process. Though it would be a positive outcome and good use of stormwater funding to incentivize new retrofit installations by actually purchasing SRCs, DDOE does not intend to compete with regulated sites who are interested in buying SRCs, especially before it is clear that there will be sufficient SRC supply. Instead, DDOE's primary objective would be to help establish some demand certainty for property owners considering installing new retention capacity to generate SRCs. By setting its maximum price on the low end of the range of SRC prices that might be required to cover the cost to generate an SRC with newly installed retention capacity, DDOE would establish a minimum price for these property owners to include in their analysis of whether it is worth their investment to install retention capacity; however, they would be free to sell those SRCs to a higher bidder if DDOE's price is less than the market price. DDOE's RFA would identify the period of time and total dollar

amount of SRCs that DDOE will purchase under that RFA, effectively creating a price floor for SRCs for that time period and funding level. After the initial RFA, DDOE may decide to issue an additional RFA(s).

- After the SRC market is established, DDOE plans to explore the adaptation of the Property Assessed Clean Energy (PACE) program to the installation of stormwater retrofits in the District. The District's PACE legislation also addresses stormwater retrofits. In the meantime, DDOE is exploring other ways that it can help connect private property owners and SRC aggregators with financing to pay for stormwater retrofits.

Basis for Administrative Fees

Some stakeholders inquired in their comments about the basis for the various administrative fees listed in Section 501 of the rule. Generally, these fees are based on DDOE's analysis of the costs to DDOE to provide these services, though two exceptions to that are the policy decision by DDOE to incentivize Stormwater Retention Credit (SRC) retrofit projects and Stormwater Fee discount projects by charging a lower fee for Stormwater Management Plan (SWMP) review for SRC-generating retrofit projects and no fee for SWMP review for a project conducted solely to earn a Stormwater Fee discount. DDOE also reviewed fees charged by other agencies and jurisdictions to determine whether they are comparable to DDOE's proposed fees.

Taking plan review fees as an example, DDOE calculated the staff time it devoted to plan review and inspection in recent years for the number of plans that it reviewed. DDOE identified broad project categories and the percentage of time devoted to each of those project categories, based on the experience of DDOE engineers and inspectors, to reflect how staff time is typically spent, including large, relatively complicated projects, which tend to require a relatively large proportion of time for review and inspection, and small, relatively straightforward projects, which tend to require less staff time. DDOE calculated its costs for this staff time, including salary, fringe (benefits), and indirect costs, and allocated those costs to the project categories. For Stormwater Management Plan Review, DDOE categorized projects with greater than ten thousand square feet (10,000 ft^2) of land disturbance separately from projects with less land disturbance, as shown in Section 501. For Soil Erosion and Sediment Control Plan reviews, the distinctions among categories are slightly different and there is some nuance to capture the variable staff time associated with different types of site work and the amount of that work being conducted (also see Section 501).

As noted in a DDOE response to a clarifying question from a stakeholder (response dated October 26, 2012 and available via ddoe.dc.gov/proposedstormwaterrule), DDOE's fees for review of a stormwater management plan are similar to 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 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., available at

ddoe.dc.gov/proposedstormwaterrule). To provide additional context, DC Water charges $7,500 for large project permit basic review (www.dcwater.com/business/permits/ fees_charges.cfm).

Stormwater Retention Credit Trading Program

DDOE received numerous questions on the provisions and administration of the Stormwater Retention Credit (SRC) trading program. Many of those questions are answered in the response document for comments received during the first formal comment period. DDOE also noted that it had previously answered many questions that were posed during the informal comment period (including in the documents mentioned in the next paragraph), which is understandable, both because of the length and complexity of the regulatory framework and the novelty of the SRC trading program. This further underscores the importance, noted by stakeholders, of a major outreach, communication, and training effort related to the generation and certification of SRCs, and DDOE plans to redouble its efforts as it implements the SRC trading program.

DDOE is currently ramping up its outreach, communication, and training related to the SRC trading program. This will build on the significant groundwork DDOE has laid throughout the process of developing the new regulatory framework, including developing focused sections of the Stormwater Management Guidebook that address the use of off-site retention (Chapter 6) and the Certification of SRCs (Chapter 7), conducting training sessions on these topics, and responding to clarifying questions submitted during the first formal comment period (related materials available via ddoe.dc.gov/proposedstormwaterrule), as well as repeatedly briefing stakeholders. In addition to the actions described under "Key Steps toward Implementation," DDOE presents information below that is intended to respond to some of the key comments and concerns that have been raised.

Stormwater Retention Credit Trading: Ongoing Maintenance of Retrofits

Stakeholders expressed several concerns about ongoing maintenance of SRC-generating Best Management Practices (BMPs) and land covers.

One of these concerns is about ongoing maintenance for a BMP or land cover on property that is sold during the period of time for which DDOE has certified SRCs. DDOE has incorporated the language that was suggested. Specifically, in Sections 531.9 and 534.3, DDOE added language requiring a person applying for certification of Stormwater Retention Credits (SRCs) to include in the application a signed promise from the land owner to notify the Department if the person sells or otherwise transfers ownership of the property. This notification to DDOE will help the agency to ensure maintenance is occurring and, if not, to follow up with the original SRC owner accordingly.

Stakeholders have also raised general concerns about ensuring that maintenance occurs for SRC-generating BMPs and land covers. The second proposed rule keeps previous provisions by which DDOE will not certify additional SRCs for BMPs and land covers that are not maintained and by which DDOE can take enforcement action against such an SRC owner to compensate for the volume of retention failure that has occurred. In addition, Section 532 clarifies how an original SRC owner can free him or herself from the maintenance obligation for a period of time

for which DDOE has certified an SRC by compensating with a replacement SRC or in-lieu fee for the retention that is not maintained. Section 531 also allows the Department not to certify an SRC for retention capacity on a particular property if that person is either 1) an original SRC owner for other retention capacity that is not being maintained as he/she promised or 2) a person with an Off-Site Retention Volume obligation who is currently not meeting that obligation.

Stormwater Retention Credit Trading: Hybrid of Exchange and Over-the-Counter Models

Regarding the stakeholder question about whether the market will be structured as an exchange or Over-the-Counter (OTC) model, DDOE views its approach as a hybrid of the two. As an OTC market, potential Stormwater Retention Credit (SRC) buyers will be able to identify SRC sellers through DDOE's SRC registry and negotiate the terms of a trade themselves. The details of their negotiation will not be public, but the final sales price will be. Indeed, the SRC buyer and seller will presumably draw on public information from the SRC registry about the price at which other SRCs have been sold.

Though DDOE does not plan to host a formal exchange, DDOE plans to host a recurring meeting of SRC buyers and sellers that can be thought of as an informal exchange (also see comments under "Key Steps toward Implementation") that will provide another alternative to OTC transactions. The meeting would include an opportunity for SRC buyers and sellers to submit bids that DDOE will organize and present in a simple table or graph to help facilitate price discovery and determine if there is a mutually agreeable market equilibrium price at which buyers and sellers wish to trade. This process could be repeated multiple times during a meeting if the participants would like to submit new bids. DDOE does not plan to pre-qualify participants, and whether or not SRC buyers and sellers wish to execute transactions at that point will be up to them. For those who choose to execute transactions at the meeting, DDOE can approve transfers of ownership at the conclusion of the meeting. DDOE believes that these informal auctions will more effectively aid price discovery if numerous buyers and sellers are participating. Holding these meetings too frequently could result in only one or two participants attending. DDOE's current thinking is that bi-monthly or quarterly meetings would be an appropriate frequency, but DDOE would appreciate input on this from stakeholders who are considering either buying or selling SRCs.

Stormwater Retention Credit Trading: SRCs for Existing Retention Capacity

Some stakeholders mistakenly asserted that DDOE will certify Stormwater Retention Credits (SRCs) retroactively for existing retention capacity. As stated in Section 531, though DDOE will not certify SRCs retroactively for existing retention capacity, it will certify SRCs for existing eligible retention capacity going forward, as of the date, after final publication of these regulations, that a complete application for certification of SRCs is submitted to DDOE. Section 532 specifies that this existing retention capacity must have been installed after May 1, 2009.

The only SRC certification that might be considered retroactive will be the certification of SRCs back to the date, after final publication of these regulations, that a complete application for certification of SRCs is submitted to DDOE, which provides a safeguard against an applicant's being penalized by a delay by DDOE in certifying SRCs.

Though some stakeholders have objected to DDOE's certification of SRCs for existing retention capacity, DDOE believes this provides an important incentive for property owners to properly maintain BMPs and land covers, which is critical for maintaining performance.

Though DDOE will not certify SRCs retroactively, DDOE notes that, for the separate Stormwater Fee discount program, DDOE does plan to provide retroactive discounts back to May 1, 2009.

Stormwater Retention Credit Trading: Potential Initial Demand for SRCs

DDOE has not conducted a comprehensive analysis of supply, demand, and pricing for Stormwater Retention Credits (SRCs). Given the many assumptions that would go into such an analysis and the inherent uncertainty and limitations to its accuracy, DDOE is not convinced that it would be worth the effort and resources required. However, DDOE presents analysis below to help establish some parameters around what supply, demand, and SRC price might be.

In the context of assessing potential initial demand, it is important to point out, as stated in Section 527 of the proposed rule (and the revised rule), that the obligation to use off-site retention to achieve an Off-Site Retention Volume (Offv) begins on the date of successful completion of the Department's final construction inspection. The rule specifies that four (4) weeks before the proposed date for using off-site retention, a regulated property should identify the SRCs that it will use (through an application to use SRCs) or submit a check or other proof of payment of the In-Lieu Fee (ILF). Initially the proposed usage date for a regulated property will correspond to the planned date of the final construction inspection, and subsequently the proposed usage date would correspond to the date when there would otherwise be a lapse in the obligation to achieve an Offv obligation. The requirement for use of off-site retention to begin as of DDOE's final construction inspection is parallel to the requirement that the site have its on-site retention capacity fully operational at the time of the same inspection.

In addition to the fact that a major regulated project does not need to identify exactly how it will meet its Offv until four (4) weeks before DDOE's final construction inspection, it is also true that a major regulated project does not need to identify this information, or even specify whether it will use SRCs, as opposed to ILF, in the Stormwater Management Plan (SWMP) submitted to DDOE for approval as part of the permitting process.

Because there may be a year or more of construction time between DDOE's approval of a SWMP and DDOE's final construction inspection, there is a corresponding lag between when the Offv is initially determined and when there is a demand for either SRCs or ILF, though DDOE expects that some members of the regulated community will be interested in purchasing SRCs well in advance of their final construction inspection.

DDOE's estimates of potential initial demand start with the year 2015, based on the idea that, under DDOE's proposed transition plan, the earliest a regulated project that is going through permitting would have to comply with the new regulations is January of 2014, but that project

would not have to actually own the SRCs (or pay the ILF) it would use to achieve an Offv until construction is nearly complete, which could be a year or more later.

Based on a range of possible assumptions about the amount of retention that regulated sites will actually choose to achieve off site, as compared to the maximum amount of retention that they theoretically could choose to achieve off site (without applying for relief from extraordinarily difficult site conditions), DDOE estimates a potential demand for SRCs of between 0.5 million and 10.4 million in 2015, 1million and 15.6 million in 2016, and 1.5 million and 21 million in 2017, as shown in Table 1.

Stormwater Retention Credit Trading: Potential Initial Supply of SRCs

DDOE estimates that there is roughly 1.35 million gallons of existing eligible retention capacity in the District, as shown in Table 2. If all the owners of that 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. Three (3) years later, assuming all eligibility requirements are still being met, those property owners could request the certification of three (3) more years of SRCs, for a rough total of 8 million SRCs in 2016. If the owners of fifty percent (50%) of the eligible retention capacity participate, then approximately 2 million SRCs would be available in 2013, and a total of 4 million would be available in 2016.

Although DDOE does not expect full participation by property owners, DDOE does expect significant participation. For these property owners, the capital investment in the stormwater retrofit is a sunk cost. Though they may incur some costs for an as-built Stormwater Management Plan (for those who do not already have one) and costs to improve maintenance to pass DDOE inspection, these are relatively small costs compared to the capital cost that has already been incurred. If these property owners are confident that there will be demand for SRCs from the regulated community, it is likely that many will be interested in having SRCs certified (please see the bullet under "Key Steps toward Implementation" about contacting DDOE to be on a list of interested SRC buyers).

Table 1: Potential Demand (Offv)[1] Under a 1.2" Retention Standard[*]								
Year of Offv Obligation[2]	Demand Scenario (million gallons)							
	Full Use[4]		Half Use[4]		Quarter Use[4]		Ward-Specific[5]	
	Annual increase	Running total	Annual increase	Running total	Annual increase	Running total	Annual increase	Running total
2015[3]	10.37	10.37	5.18	5.18	2.59	2.59	0.50	0.50
2016	5.18	15.55	2.60	7.77	1.30	3.89	0.50	1.00
2017	5.18	20.73	2.60	10.37	1.30	5.18	0.50	1.50

*Note: Totals may not sum due to rounding.

[1]Demand estimates are based on assumptions (explained in footnotes 4 and 5) about the amount of required retention volume that major land-disturbing activities would choose to achieve offsite. In other words, the demand estimates are the estimates of Off-Site Retention Volume (Offv) for those regulated sites as would be recorded on their DDOE-approved Stormwater Management Plans. Offv is calculated as a volume based on the average land disturbance of projects that exceeded 5,000 ft^2 between FY2007 and FY2011. Because the FY2007 to FY2011 data is only based on the existing regulatory trigger of 5,000 ft^2 of land disturbance, the demand estimates only represent major land-disturbing activities.

[2]Year of Offv obligation, when the regulated site would have to be actually using SRCs or In-Lieu Fee to achieve the Offv, is assumed to be one year after the major regulated project went through permitting.

[3]2015 is assumed to be the year of Offv obligation for a regulated site that went through permitting in 2014, when DDOE's proposed transition period 2A for major land-disturbing activities allows regulated sites to achieve 100% of their required retention volume offsite.

[4]Scenarios vary based on the assumed use of the maximum offsite retention that is allowable (without requesting relief for extraordinarily difficult site conditions). Under full use, sites that went through permitting in 2014 seek 100% of their required retention volume offsite in 2015 and 50% in both 2016 and 2017. Each additional year of demand adds to demand from the prior year. Under half use, regulated sites choose to use 50% of the maximum. Under quarter use, regulated sites choose to use 25% of the maximum.

[5]Assumes that 25% of eligible regulated sites in Wards 2 and 5, and 10% in Wards 1, 3, and 6, seek 50% of their necessary retention volume offsite. Regulated sites in Wards 4, 7, and 8 do not participate in the program. Each additional year of demand adds to demand from the prior year.

It is also important to point out that Table 2 does not include an estimate of SRCs being generated by installation of new retention capacity in 2013 and thereafter. This could include retention capacity installed by major regulated projects that are complying with Transition Period 1 of DDOE's transition plan and that install retention capacity in excess of the water quality treatment requirements.

Stormwater Retention Credit Trading: SRC Price Required to Recoup Costs

As mentioned above, DDOE has not conducted a comprehensive market analysis to predict the price of an SRC; however, DDOE has projected the Stormwater Retention Credit (SRC) price that would be required to recoup the cost to a property owner of installing a stormwater retrofit to generate SRCs. DDOE made variable assumptions about payback period, capital costs, and the Return on Investment (ROI) that motivates investment. In conducting this analysis, DDOE assumed that the private SRC market would seek out the lowest cost opportunities to generate SRCs, so based its projections on cost data from some of its most cost-effective bioretention installations. In addition, DDOE assumed that the bioretention would be installed in Ward 7 of the District where, given the relatively low land value and the availability of open space, the opportunity cost of using land for installation of bioretention is presumed to be relatively low.

The results, as shown in Table 3, indicate a range of SRC prices of between $0.94 and $2.42 that, based on the data and assumptions used, would be adequate to cover costs.

Table 2: Potential Stormwater Retention Credit (SRC) Supply[1]		
Year	**Supply Scenario (million gallons)[2]**	
	Full Participation[3]	**Half Participation[3]**
Existing retention	1.35	0.68
2013	4.06	2.03
2014	4.06	2.03
2015	4.06	2.03
2016	8.12	4.06

[1]Supply is based on the excess retention from projects implemented between May 1, 2009 and January 1, 2012. Sources include submitted stormwater management plans and DDOE capital cost data. Note that DDOE will begin to certify SRCs upon final publication of the final rule in the *DC Register*, so this estimate refers to the first year of SRC certification as 2013, referring to the one year period starting from finalization of the rule in July of 2013. DDOE will not certify SRCs retroactively for the period of time prior to final publication.

[2]Since DDOE certifies three years of SRCs at a time, three times the existing eligible retention capacity is potentially certified as SRCs in 2013. The number of SRCs based on this existing retention capacity remains constant in 2014 and 2015. Though DDOE expects other eligible property owners to install eligible retention capacity in that time, those SRCs are not included here. This estimate assumes that the available SRCs are not retired or used to satisfy an Offv requirement. If DDOE receives an application for recertification in 2016, assuming all eligibility requirements are still met, it will certify an additional three years of SRCs. Those SRCs would add to the cumulative total.

[3]The full participation scenario assumes 100% participation from all owners of eligible existing retention capacity. Though DDOE will be doing targeted outreach to these property owners to encourage them to apply for SRC certification, DDOE does not expect 100% participation. The half participation scenario assumes 50% participation from all owners of eligible existing retention capacity.

This analysis does not reflect other variables that will affect the price at which SRCs will sell, including the amount of SRCs that are demanded (which will reflect additional factors such as the opportunity costs for regulated sites to achieve retention on site) and the amount of SRCs that are certified (which will reflect additional factors such as the ancillary benefits that property owners recognize for installing retention capacity and which may offset some of the costs reflected in Table 3.

Table 3: Estimate of SRC Price Required to Cover Cost to Generate							
(SRC = 1 gallon of retention capacity for 1 year)							
					Cost-Covering SRC Price		
	Capital cost per gallon of retention (Pv)[1]	Land cost per gallon (PV)[2]	Maint. Cost over Payback Period (Pv)[3]	Sum of Pv Costs (cap. cost + land value + maint. cost)	5% ROI[4]	7.16% ROI[4]	12.61 % ROI[4]
10-year payback	$4.00	$4.85	$1.67	$10.52	**$1.36**	**$1.51**	**$1.91**
20-year payback	$4.00	$4.85	$2.87	$11.72	**$0.94**	**$1.12**	**$1.63**
10-year payback	$6.00	$4.85	$2.51	$13.36	**$1.73**	**$1.92**	**$2.42**
20-year payback	$6.00	$4.85	$4.31	$15.16	**$1.22**	**$1.45**	**$2.11**

[1]Based on DDOE cost data from the most cost-effective of its bioretention installations.

[2]Based on bioretention requiring 0.15 ft^2 of land per gallon of retention at 25th percentile residential and vacant land value for Ward 7 for 2011 ($32.35).

[3]Based on annual maintenance cost equal to 5% of capital cost, calculated as a present value over the payback period with an inflation rate of 3.38% based on the 80-year average through 2010 of the urban CPI.

[4]5% Return on Investment (ROI) is used as relatively low rate of return. 7.16% is the inflation-adjusted, compound annual growth rate for the S&P 500 from 1920-2010, which is used as a more moderate ROI. 12.61% is the one-year, inflation-adjusted return on the S&P 500 in 2010.

Stormwater Retention Credit Trading: Financial Return from SRCs and Discount

Some stakeholders have asked about the potential financial returns from voluntarily installing stormwater retention capacity that is eligible for certification of SRCs and for a discount on the two stormwater impervious fees that are charged to property owners in the District through the water bill from DC Water. One of the stormwater impervious fees is the Impervious Area Charge (IAC) that DC Water uses to fund the implementation of the Long Term Control Plan to address Combined Sewer Overflows (CSOs) in the District. The other is the DDOE Stormwater Fee that is used to support the administration and implementation of the Municipal Separate Storm Sewer System (MS4) permit. Both fees are assessed on the basis of the number of Equivalent Residential Units (ERUs) on a property. An ERU is equal to one thousand square feet (1,000 ft^2) of impervious surface.

As noted above, in July of 2013 DDOE expects to publish as final in the *D.C. Register* the DDOE Stormwater Fee discount rule, with a maximum discount of fifty-five percent (55%). DC Water is conducting a separate rulemaking for the IAC discount program. DC Water's proposed rule was published in the May 3, 2013 issue of the *D.C. Register* (60 DCR 00651), and it specified a maximum discount of four percent (4%). Under both discount programs, the maximum discount corresponds to the installation of retention capacity that can hold the 1.2" storm. For less retention capacity, the discount is reduced proportionally.

Table 4 shows the maximum discount that can be earned for the installation of 1.2" of retention capacity for one (1) ERU over the next ten (10) years. Based on an SRC value of $1.25 per SRC, Table 4 also shows the potential return from sale of SRCs over that time. As noted above,

DDOE has not conducted a comprehensive market analysis to predict what the price of an SRC will be, and DDOE is not predicting that the price of an SRC will be $1.25. Table 4 is only included to provide a simple illustration of how one might conceive of the potential financial benefits of a stormwater retrofit.

Table 4: Projection of Potential 10-Year Financial Return on Retention BMP from SRC Revenue and Discount on Impervious Fees

Assuming installation of BMP to retain 1.2" of stormwater from 1 Equivalent Residential Unit (1,000 ft^2 of impervious surface)

	Rate	2013	2014	2015[1]	2016	2017	2018	2019[1]	2020	2021	2022[2]	**10-Year Total**
DC Water Impervious Area Charge (IAC) (Annualized)		$115	$153	$201	$248	$277	$294	$313	$340	$368	$368	
Maximum Discount - IAC	4%	$5	$6	$8	$10	$11	$12	$13	$14	$15	$15	**$107**
DDOE Stormwater Fee (Annualized)		$32	$32	$48	$48	$48	$48	$60	$60	$60	$60	
Maximum Discount - SW Fee	55%	$18	$18	$26	$26	$26	$26	$33	$33	$33	$33	**$273**
Projected Value of SRCs (inflation-adjusted)[3]	$1.25	$888	$917	$949	$981	$1,014	$1,048	$1,083	$1,120	$1,158	$1,197	**$10,354**
Annual Total		$910	$941	$983	$1,017	$1,051	$1,086	$1,129	$1,167	$1,206	$1,245	**$10,734**

[1]Though DDOE has not proposed an increase to its Stormwater Fee, this analysis assume some increase will be necessary to comply with the requirments of the current 5-year MS4 permit and the next permit. This analysis assumes an increase from $2.67 per ERU per month to $4.00 per ERU per month in 2015 and an increase from $4.00 per ERU per month to $5.00 per ERU per month in 2019.

[2]Assuming IAC increase does not increase past 2021, the IAC for 2022 is given as the same as in 2021.

[3]A voluntary retention BMP capturing 1.2" of storm runoff from 1,000 ft^2 of impervious surface would have 710 gallons of SRC-eligible retention capacity. If the property owner voluntarily installed a BMP capturing the 1.7" storm volume (i.e. the SRC ceiling), that would equate to 1,007 gallons of SRC-eligible retention capacity. 1,007 SRCs per year, sold at $1.25 per SRC, inflation-adjusted, would result in $14,685. Inflation rate used is 3.38%, the 80-year average through 2010 of the urban CPI. Note that the IAC and SW Fee discounts are maxed out at the 1.2" storm, so no additional discount would be earned from the retention of the 1.7" storm.

Clarification of Anacostia Waterfront Development Zone Provisions

The revised rule included, in Section 524, the stormwater management requirements specified in the Anacostia Waterfront Environmental Standards Amendment Act of 2012 (A19-0447), which became effective on October 23, 2012. These provisions only apply to publicly owned or publicly financed projects in the Anacostia Waterfront Development Zone (AWDZ). Some stakeholders expressed concern that some of the provisions of Section 524 are unclear. In response, DDOE has made some clarifying changes, although, given the provisions of the statute, there were some changes DDOE was not able to make.

One stakeholder commented that it would be easier to understand exactly which projects are covered under the term AWDZ site if the definition were included in the body of Section 524.

DDOE made this change. Whereas the revised rule only includes the definition of an AWDZ site in Section 599 (Definitions), the second proposed rule also includes that definition in Section 524. In addition, as one stakeholder pointed out, the SWMG should include a map of the AWDZ, which was DDOE's intention. DDOE will add a map delineating the AWDZ to the Stormwater Management Guidebook.

Another stakeholder commented that it would be clearer if Section 524 explicitly stated that a major land-disturbing activity must achieve the 1.2 inch retention standard, in addition to providing treatment (80% removal of Total Suspended Solids) for the difference between the 1.7 inch storm volume and the 1.2 inch storm volume. Though DDOE's intent is for a major land-disturbing activity to comply with the 1.2 inch retention standard, DDOE does not believe it is necessary to restate that requirement from Section 520 (Stormwater Management: Performance Requirements for Major Land-Disturbing Activity) in Section 524. This is because Section 524 includes language specifying that "…if a provision of this section conflicts with any other provision of this Chapter, an AWDZ site shall be subject to the more stringent provision."

Regarding the stakeholder comment that the rule should specify that an AWDZ site, like other major regulated projects, is free to use off-site retention after achieving fifty percent (50%) of the required Stormwater Retention Volume (SWRv) on site, DDOE is limited by the statute. On the one hand, DDOE's understanding of the statute is that DDOE is required to consider the individual site conditions for a project before allowing the use of off-site retention, so it cannot allow an AWDZ site the same flexibility to use off-site retention without applying for relief (see D.C. Official Code §§ 2-1226.36(c)(1)). On the other hand, the statute directs DDOE to consider additional factors as evidence that an AWDZ site's on-site options are limited. In addition to considering technical infeasibility and environmental harm, the statute directs DDOE to consider limited "appropriateness." Though the statute does not elaborate on the definition of appropriateness, DDOE views this as reasonably including the overall benefit to District waterbodies and impact on surrounding landowners. As DDOE has presented previously, DDOE's evaluation has concluded that achieving stormwater management requirements off site can provide improved benefits for District waterbodies, as compared to strictly requiring compliance on site. Consequently, though DDOE will review specific site conditions prior to allowing the use of off-site retention for AWDZ sites, DDOE expects that the evidence will very often demonstrate the feasibility or appropriateness of on-site stormwater management is limited.

Major Substantial Improvement: Structural and Space Limitations

A stakeholder commented during the informal comment period that a major substantial improvement activity may, in some cases, have particular difficulty complying with its performance requirements on site without undertaking significant additional alterations beyond the intended scope of the project, because of limited structural capacity or a lack of available interior or exterior space. This could include that the structural strength of an existing roof, not otherwise needing to be replaced, is not great enough to support the additional weight of a green roof. It could also include a museum, hospital, or laboratory with specialized equipment that limits available space for a retention BMP or a lot-line-to-lot-line structure with a historic designation or zoning requirement that limits available space for a retention BMP.

Though DDOE has already limited the stormwater retention requirement for major substantial improvement activities to a 0.8 inch retention standard, DDOE has concluded that it is reasonable to incorporate the recommended change. Specifically, a major substantial improvement activity, when applying for relief from extraordinarily difficult site conditions, may provide evidence of structural or space limitations to demonstrate technical infeasibility.

Clarification of Provisions Related to Contamination

A stakeholder commented on a few instances in which the revised rule refers to contamination without defining contamination or the standard by which contamination would be determined. The stakeholder noted this in Section 523.3 and Sections 542.11 and 542.12.

Section 523.3 of the revised rule states that the Department may require pollution control measures for "contaminated runoff" from a stormwater hotspot designated in the Stormwater Management Guidebook (SWMG). This allows DDOE to require an additional pollution control measure such as an oil separator for stormwater flowing from a stormwater hotspot area such as a gas station. However, since these hotspot areas are already listed in the SWMG, DDOE has determined that it is not necessary to refer to "contaminated runoff" in order to ensure that DDOE has the ability to require a pollution control measure when necessary. DDOE has revised this section accordingly in the second proposed rule.

Sections 542.11 and Section 542.12 of the revised rule, which DDOE has combined into one subsection 542.13 in the second proposed rule, refer to encountering "contaminated groundwater or soil" during land-disturbing activity. The stakeholder suggested that "contamination" be defined with reference to the existing Underground Storage Tank (UST) risk-based remediation standards. Though DDOE agrees that it is useful to refer to the UST standards, they only pertain to petroleum products, and there are other pollutants that could be contaminating groundwater or soil on the site. DDOE determined that the remaining pollutants are adequately addressed in the standards associated with the District of Columbia Brownfield Revitalization Act (DCBRA) of 2000, as amended. Consequently, DDOE refers to contamination as defined by DCBRA or the UST regulations. To clarify, these provisions do not require samples from the entire site to be submitted for laboratory analysis. Instead, if the laboratory analysis that is already being done for the project shows that there is contamination by either the UST or DCBRA standards or a person working on the project sees or smells contamination (which DDOE expects the project would follow up on with laboratory analysis), then the requirements of this subsection must be met.

As DDOE has stated previously, DDOE expects that these provisions in Section 542.13 will be superseded if the Department finalizes separate groundwater regulations. The stakeholder suggested that this be made explicit in the regulations, which DDOE has done in the second proposed rule.

MEP in PROW for Parcel-Based Projects

The proposed rule includes provisions intended for major regulated projects undertaking reconstruction of the existing Public Right of Way (PROW) whereby those projects could

achieve the 1.2 inch stormwater retention requirement to the Maximum Extent Practicable (MEP). After achieving the 1.2 inch stormwater retention volume to the MEP, these projects are not required to use off-site retention.

During the first formal comment period, stakeholders inquired whether parcel-based projects that are disturbing the PROW adjacent to the parcel could also install BMPs in the PROW to manage stormwater from the PROW under a similar MEP process. DDOE concluded that this was the appropriate approach, and the revised rule includes those provisions. Though DDOE's intention is that these projects should prioritize retention for stormwater from the roadway, DDOE realized during the comment period for the revised rule that this is not clear in the revised rule. Consequently, the second proposed rule includes that clarification. Though the 1.2 inch stormwater retention volume for the portion of land-disturbance in the PROW will strictly be based on the area of land disturbance in the PROW, DDOE's intention is that these projects should prioritize, to the MEP, the use of that retention capacity to manage stormwater from the roadway. This does not require the installation by a regulated project of more retention capacity than would otherwise be required, and it provides a greater benefit to District waterbodies, since the stormwater from the roadway is typically dirtier than the stormwater from the sidewalk area.

Submitting Comments on the Revised Rule and Stormwater Management Guidebook

A person may obtain an electronic copy of the second proposed rule or second proposed Stormwater Management Guidebook (SWMG) via ddoe.dc.gov/proposedstormwaterrule. For a paper copy of the second proposed rule, contact Brian Van Wye at Brian.VanWye@dc.gov or 202-741-2121. To arrange to review a paper copy of the second proposed SWMG, contact Rebecca Stack at Rebecca.Stack@dc.gov or 202-727-5160.

To submit comments on the second proposed rule, please ensure that the comments identify the commenter and that they are clearly marked "Second Proposed Stormwater Rule Comments." Comments may be (1) mailed or hand-delivered to Attn: Brian Van Wye, Natural Resources Administration, 1200 First Street, N.E., 5th Floor, Washington, D.C. 20002, Attention: Revised Stormwater Rule or (2) e-mailed to Brian.VanWye@dc.gov, with the subject indicated as "Second Proposed Stormwater Rule Comments".

Written comments on the second proposed SWMG should clearly identify the commenter and be marked "Second Proposed Stormwater Guidebook Comments." Comments may be (1) mailed or hand-delivered to Attn: Rebecca Stack, Natural Resources Administration, 1200 First Street, N.E., 5th Floor, Washington, D.C. 20002, Attention: Second Proposed Stormwater Guidebook Comments or (2) e-mailed to Rebecca.Stack@dc.gov, with the subject indicated as "Second Proposed Stormwater Guidebook Comments."

The Department is committed to considering the public's comments in a rulemaking process that is open and observes the privacy rights of commenters. A person desiring to comment on the second proposed rule or second proposed SWMG must file comments, in writing, not later than Monday, July 8, 2013 at midnight.

Ordinarily, the Department will look for the commenter's name and address on the comment. If a comment is sent by email, the email address will be automatically captured and included as part of the comment that is placed in the public record and made available on the Internet. If the Department cannot read a comment due to technical difficulties, and the email address contains an error, the Department may not be able to contact the commenter for clarification, and may not be able to consider the comment. Including the commenter's name and contact information in the comment will avoid this difficulty.

If a commenter considers information to be NON-PUBLIC, the commenter must advise the Department, in writing, when the comment is submitted. When the Department identifies a comment containing copyrighted material, the Department will provide a reference to that material on the website. When the Department identifies information that has been correctly described as non-public it will either (i) return the entire comment and decline to consider it; (ii) redact or otherwise conceal the non-public information and consider the rest of the comment; or (iii) communicate with the commenter to determine what part, if any, of the comment it might consider as part of the public record.

Chapter 5, Water Quality and Pollution, of Title~~title~~ 21 of the District of Columbia Municipal Regulations is amended by repealing and replacing Sections 500 to 545 and 599 and adding Sections 546, 547 and 552 ~~547~~as follows:

The Table of Contents is amended as follows:

CHAPTER 5 WATER QUALITY AND POLLUTION

500 GENERAL PROVISIONS

500.1 The provisions of this chapter shall be applicable to all sources of pollution affecting the Potomac River and its tributaries within the District of Columbia (the District) including pollution carried by stormwater runoff, discharges from barges and other vessels, and domestic and industrial waste.

500.2 An activity which this chapter regulates shall be consistent with the purposes of this Chapter.~~chapter.~~

500.3 The purposes of this chapter are:

(a) To prevent and control the pollution of the Potomac River and its tributaries, and the waters of the District;

(b) To regulate land-~~-~~disturbing activities for the protection of District waterbodies;

(c) To regulate major substantial improvement activities for the protection of District waterbodies;

(d) To prevent accelerated soil erosion and sedimentation;

(e) To prevent sediment deposit in the Potomac River and its tributaries, including the District sewer system; and

(f) To control health hazards due to pollution of the Potomac River and its tributaries.

500.4 No person may commence an activity that this chapter regulates without obtaining an approval that this chapter requires.

500.5 A person's compliance with this chapter shall not relieve a person of responsibility for damage to a person or property.

500.6 No Department action under this chapter shall impose liability upon the District of Columbia for damage to a person or property.

500.7 A person who is regulated under this chapter may authorize an agent to act for that person; however, authorizing an agent does not change or eliminate that person's duty, responsibility, or liability.

500.8 The Department may approve ~~an~~ alternative media, including electronic media, for a document that this chapter requires to be submitted in Mylar, paper, or other specific media:~~media.~~

(a) If the alternative method will likely be as reliable for the Department's use and less expensive for an applicant; or

(b) Upon good cause shown.

500.9 An infiltration test ~~conducted for the Department's approval of a stormwater management plan~~ does not require ~~separate~~ Departmental approval for groundwater quality protection provided that:

~~(a) The person conducting the test shall contact the Department to schedule a field visit during the test;~~

~~(b)~~(a) No test shall go to a depth of greater than fifteen (15) feet below the ground surface; ~~and~~

~~(c)~~(b) If ~~the Department identifies contamination or~~ a person conducting~~involved in~~ the testing smells or sees soil or groundwater contamination in the area of a test during or after the test, the boring or other hole made for the test shall be filled in accordance with best practices for wellhead protection, unless it is determined as a result of laboratory analysis that the

groundwater or soil is not contaminated, as defined in the District of Columbia Brownfield Revitalization Amendment Act of 2000, effective June 13, 2001, as amended (D.C. Law 13-312; D.C. Official Code §§ 8-631 *et seq*); and~~protection.~~

(c) A Professional Engineer licensed in the District of Columbia shall certify the infiltration rate and that the test was carried out in compliance with this section and accepted professional standards.

501 FEES

501.1 The District Department of the Environment (Department) shall adjust the fees in this section for inflation annually, using the Urban Consumer Price Index published by the United States Bureau of Labor Statistics.

501.2 An applicant shall pay a supplemental review fee for each Department review after the review for the first resubmission of a plan, and the fee shall be paid before a building permit may be issued, except that a project or portion of a project entirely in the existing public right of way shall~~is~~ not be required to pay a supplemental review fee for a review specified for a design phase under the Maximum Extent Practicable (MEP) process described in the Department's Stormwater Management Guidebook.

501.3 An applicant for Department approval of a soil erosion and sediment control plan shall pay the fees in Table 1 for Department services at the indicated time, as applicable:

Table 1. Fees for Soil Erosion and Sediment Control Plan Review

<table>
<tr><th rowspan="3">Payment~~Plan Review~~ Type</th><th rowspan="3">Payment Requirement</th><th colspan="3">Fees by Land Disturbance Type</th></tr>
<tr><th>Residential</th><th colspan="2">All Other</th></tr>
<tr><th>≥ 50 ft² and < 500 ft²</th><th>≥ 50ft² and < 5,000 ft²</th><th>≥ 5,000 ft²</th></tr>
<tr><td>Initial</td><td>Due upon filing for building permit</td><td>$50.00</td><td>$435.00</td><td>$1,070.00</td></tr>
<tr><td rowspan="4">Final
• Clearing and grading > 5,000 ft²
• Excavation base fee
• Excavation > 66 yd³
• Filling > 66 yd³</td><td rowspan="4">Due before building permit is issued</td><td colspan="2">n/a</td><td>$0.15 per 100 ft²</td></tr>
<tr><td>n/a</td><td colspan="2">$435.00</td></tr>
<tr><td colspan="3">$0.10 per yd³</td></tr>
<tr><td colspan="3">$0.10 per yd³</td></tr>
<tr><td>Supplemental</td><td>Due before building permit is issued</td><td>$100.00</td><td>$100.00</td><td>$1,000.00</td></tr>
</table>

501.4 An applicant for Department approval of a Stormwater Management Plan (SWMP) shall pay the fees in Table 2 for Department services at the indicated time, as applicable:

Table 2. Fees for Stormwater Management Plan Review

Payment~~Plan Review~~ Type	Payment Requirement	Fees by Land Disturbance Type	
		≥ 5,000 ft^2 and ≤ 10,000 ft^2	> 10,000 ft^2
Initial	Due upon filing for building permit	$3,300.00	$6,100.00
Final	Due before building permit is issued	$1,500.00	$2,400.00
Supplemental	Due before building permit is issued	$1,000.00	$2,000.00

501.5 An applicant for Department approval of a plan and any other person requesting the services in Table 3 shall pay the additional fees in Table 3 for Department services before issuance of a building permit, except:

(a) If a person is applying for relief from extraordinarily difficult site conditions, the person shall pay the fee upon applying for relief; and

(b) If a person is not applying for a building permit, the person shall pay before receipt of a service.

501.6 An applicant shall be required to pay the fee for review of a Stormwater Pollution Prevention Plan only if the site is regulated under the Construction General Permit issued by Region III of the Environmental Protection Agency.

Table 3. Additional Fees

Review or Inspection Type	Fees by Land Disturbance Type	
	≤ 10,000 ft^2	> 10,000 ft^2
~~Field visit for soil infiltration test~~	~~$300 for ≤ 10 borings; $600 for > 10 borings~~	
~~Soil infiltration test report review~~	~~$150.00~~	
Soil characteristics inquiry	$150.00	
Geotechnical report review	$70.00 per hour	
Pre-development review meeting	No charge for first hour $70.00 per additional hour	
After-hours inspection fee	$50 per hour	
Stormwater pollution plan review	$1,100.00	
Dewatering pollution reduction plan review	$1,100.00	$2,100.00
Application for relief from extraordinarily difficult site conditions	$500.00	$1,000.00

501.7~~501.6~~ An applicant for Department approval of a SWMP for a project being conducted solely to install a Best Management Practice (BMP) or land cover ~~to create retention capacity~~ for Department certification of a Stormwater Retention Credit (SRC) shall pay the fees in Table 4 for Department services at the indicated time, as applicable, except that:

(a) A person who is paying a review fee in Table 2 for a major regulated project shall not be required to pay a review fee in Table 4 for the same project; and

(b) A~~For existing retention capacity, a~~ person who has paid each applicable fee to the Department for its review of a SWMP shall not be required to pay a review fee in Table 4 for the same project:

Table 4. Fees for Review of Stormwater Management Plan to Certify Stormwater Retention Credits

Payment~~Plan Review~~ Type	Payment Requirement	Fees by Land Disturbance Type	
		≤ 10,000 ft^2	> 10,000 ft^2
Initial	Due upon filing for building permit	$575.00	$850.00
Final	Due before building permit is issued	$125.00	$200.00
Supplemental	Due before building permit is issued	$500.00	

501.8~~501.7~~ A person who requires Departmental approval of an as-built SWMP for SRC certification for a BMP or land cover~~existing retention capacity~~ for which a plan review fee has not been paid to the Department shall pay each applicable fee for initial and final SWMP review in Table 4.

501.9~~501.8~~ A person who requires the Department's review of a proposed or as-built SWMP~~Stormwater Management Plan~~ solely for the purpose of applying for a stormwater fee discount under this Chapter~~chapter~~ shall not be required to pay a plan review fee to the Department for that project, except that a person who subsequently applies for SRC certification for the same project shall pay each applicable fee for initial and final plan review before the Department will consider the application for SRC certification.

501.10~~501.9~~ An applicant for Department approval of a Green Area Ratio plan shall pay the fees in Table 5 for Department services at the indicated time:

Table 5. Fees for Review of Green Area Ratio Plan

Payment~~Plan Review~~ Type	Payment Requirement	Fees by Land Disturbance Type	
		≤ 10,000 ft^2	> 10,000 ft^2
Initial	Due upon filing for building permit	$575.00	$850.00
Final~~Additional~~	Due before building permit is issued	$125.00	$200.00
Supplemental	For reviews after first resubmission	$500.00	

501.11~~501.10~~ The in lieu fee shall be three dollars and fifty cents ($3.50) per year for each gallon of Off-Site Retention Volume (Offv).

501.12~~501.11~~ The administrative late fee for an in-lieu fee payment shall be ten percent (10%) of the late payment.

501.13~~501.12~~ A person shall pay the fees in Table 6 for the indicated resource before receipt of the resource:

Table 6. Fees for Resources

Paper Copies of Documents	Cost
District Standards and Specifications for Soil Erosion and Sediment Control	$50.00
District Stormwater Management Guidebook	$50.00
District Erosion and Sediment Control Standard Notes and Details (24 in x 36 in)	$25.00

502 DUTY TO COMPLY

502.1 A person who engages in an activity that this chapter regulates shall comply with the provisions of this chapter.

502.2 A person shall conduct all work in accordance with each submittal approved by the Department, including each plan and approved change.

502.3 Each provision of an approved plan shall be complied with as a distinct provision of this chapter.

502.4 A person shall promptly notify the Department of an actual or likely material change in the performance provided for in an approved SWMP,~~Stormwater Management Plan (SWMP),~~ including a material change in the volume of stormwater flowing into a Best Management Practice (BMP), a shared~~Shared~~ BMP, or a land cover.

502.5 A person shall undertake a reasonable inquiry to confirm that the facts stated and calculations made are true and correct for each communication with the Department under this chapter.~~Chapter.~~

502.6 No person shall negligently, recklessly, or knowingly make a false statement in a communication with the Department.

503 INSPECTIONS, NOTICES OF WORK, AND APPROVALS OF CHANGES

503.1 The Department may conduct an inspection of an activity regulated under this chapter, including emergency work that may otherwise be exempt, to ensure compliance with this chapter.

503.2 The Department may require a change to an approved plan if the Department determines that a discrepancy between site conditions and the approved plan makes the plan~~the plan is~~ inadequate to comply with the requirements of this chapter.

503.3 A person may not change an approved plan or its implementation without Department approval, as follows:

(a) If the change is substantial, the person shall resubmit the revised plan to the Department for approval in accordance with this chapter; and

(b) If the change is not substantial, the person may secure written approval from the Department in the field or at the Department's office.

503.4 For the purposes of this chapter, a substantial change in an approved plan is a change in design, specification, construction, operation, or maintenance~~,~~ that the Department determines:

(a) May result in a failure to comply with a requirement of this chapter; or

(b) Has a significant effect on the discharge of pollutants to the District's waters.

503.5 The Department may require an additional inspection at a particular stage of construction by specifying that requirement in:

(a) The approved plan;

(b) The preconstruction~~pre-construction~~ inspection report; or

(c) The Department's report of the preconstruction~~pre-construction~~ meeting.

503.6 No person may proceed with work past a stage of construction that the Department has identified as requiring an inspection unless:

(a) The Department's inspector has issued an "approved" or "passed" report;

(b) The Department has approved a plan modification that eliminates the inspection requirement; or

(c) The Department otherwise eliminates or modifies the inspection requirement in writing.

503.7 A person shall communicate with the Department:

(a) In order to schedule a preconstruction~~pre-construction~~ meeting or field visit before commencement of a land-~~ ~~~~-~~disturbing activity, contact the Department at least three (3) business days before the start of the land-disturbing activity;

(b) In order to schedule a preconstruction~~pre-construction~~ inspection before beginning construction of a Best Management Practice (BMP), contact the

Department at least three (3) business days before the start of the construction;

(c) In order to schedule an inspection required for a stage of construction or other construction event, contact the Department at least three (3) business days before the anticipated inspection;

(d) For the completion of a land-~~-~~disturbing activity, give notice to the Department within two (2) weeks of completion of the activity; and

(e) For the completion of a BMP, and to request a final construction inspection, give ~~notice to~~ the Department ~~within~~ one (1) week's notice. ~~of completion of the BMP.~~

503.8 The Department shall make reasonable efforts to accommodate a request for inspection outside of the Department's normal business hours if the request:

(a) Is made during the Department's normal business hours;

(b) Includes the information the Department requires, including the matters to be inspected, the location of the site work to be inspected, and details for site access; and

(c) Includes payment or proof of payment of the after-hours inspection fee.

503.9 The Department shall determine whether work, construction, and maintenance complies with each approved plan, including conducting a final construction inspection and ongoing maintenance inspections of each BMP, land cover, and the site.

503.10 The Department may require inspections, on a periodic or as-needed basis, of a BMP, land cover, and the site to ensure that maintenance is sufficient to achieve performance or eligibility requirements and to avoid harm to the environment or public health.

503.11 A person shall allow the Department, upon presentation of Department credentials, to:

(a) Enter premises where a practice, measure, or activity subject to this chapter is located or conducted, or where required records are kept, including locations where a retention BMP or land cover ~~capacity~~ is voluntarily installed to generate a Stormwater Retention Credit~~s~~ or receive a stormwater fee discount;

(b) Access and copy a required record;

(c) Inspect a site, practice, measure, or activity subject to this chapter, including to verify sufficient maintenance; and

(d) Conduct sampling, testing, monitoring, or analysis.

503.12 The Department may require as a precondition to its approval of an inspection that the applicant:

(a) Make available to the Department for the purposes of the inspection on site, or at the Department's offices, the professional engineer responsible for certifying the "as-built" plans; and

(b) Secure the seal and signature of this professional engineer certifying that the as-built plans comply with this chapter.

503.13 Upon notice, a person shall promptly correct work which the Department has found fails to comply with an approved plan.

503.14 The Department shall not approve the issuance of a certificate of occupancy for a building until the Department has determined that the approved stormwater management plan for the building site has been implemented for:

(a) On-site stormwater management; and

(b) Required off-site retention.

504 STOP WORK ORDERS

504.1 Upon notice from the Department that it has determined that one (1) or more of the following conditions exists, a person shall stop identified work immediately until the situation is corrected:

~~(a) Violation of a condition of an approved plan;~~

~~(b)~~(a) Noncompliance with a notice that requires corrective action;

~~(c)~~(b) Material false statement or misrepresentation of fact in an application that the Department approved for the project;

~~(d)~~(c) During the project, the license of a contractor or subcontractor is void, has expired, or has been suspended or revoked;

~~(e)~~(d) Work involving an activity regulated under this chapter is being conducted:

(1) In violation of a provision of this chapter;

(2) In an unsafe manner; or

(3) In a manner that poses a threat to the public health or the environment.~~environment; or~~

~~(f) An approval that a provision of this chapter requires has not been obtained.~~

504.2 A stop work order shall:

(a) Have immediate effect;

(b) Be issued in writing; and~~writing, except that it may be issued orally if reduced to writing within twenty-four (24) hours;~~

(c) Be provided to:

(1) The person who has received an approval under this chapter;

(2) The person doing the work; or

(3) The person on site who is responsible for the work.

504.3 The stop work order shall identify the:

(a) Address and location of the work;

(b) Corrective action~~Act~~ or cessation required;

(c) Time period required to complete corrective action;

(d) Reason for the order;

(e) Person issuing the order, including telephone contact, and, if available, email or other electronic means of address; and

(f) Steps to be taken to challenge or appeal the order.

504.4 The Department shall:

(a) Post the stop work order at the property; and

(b) Send the stop work order in a manner likely to insure receipt, including first class mail, fax with return receipt, email with return read receipt, or hand-delivery with certification of service.

504.5 No person shall remove a stop work order posted at a site without the Department's written approval.

504.6 A person who continues work stopped by an order shall be in violation of this chapter for each day on which~~of~~ work is conducted,~~,~~ except for work:

(a) Required immediately to stabilize the activity and place the property in a safe and secure condition;

(b) That the Department orders; or

(c) Required immediately to eliminate an unsafe condition or threat to the public health or the environment.

505 VIOLATIONS AND ENFORCEMENT PROCEDURES

505.1 Each instance or day of a violation of each provision of this chapter shall be a separate violation.

505.2 Each separate violation of each provision may be subject to:

(a) A criminal fine and penalty, including imprisonment, and costs; and

(b) Either:

(1) A judicial civil penalty, order for corrective action, and order for damages and related costs, expenses, and fees; or

(2) An administrative civil fine, penalty, suspension of an approval, suspension of a permit, corrective action, order to comply with this chapter, and order for related costs, expenses, and fees.

505.3 The District may seek criminal prosecution if a person violates a provision of this chapter pursuant to:

(a) The Water Pollution Control Act of 1984 (WPCA), effective March 16, 1985, as amended (D.C. Law 5-188; D.C. Official Code § 8-103.16 (2008 Repl. & 2012~~2011~~ Supp.));~~Supp.)), as amended;~~ and

(b) The Soil Erosion and Sedimentation Control Act of 1977, effective Sept. 28, 1977 (D.C. Law 2-23; 24 DCR 792),~~2-23),~~ as amended by the Soil Erosion and Sedimentation Control Amendment Act of 1994, effective August 26,~~July 8,~~ 1994, as amended (D.C. Law 10-166; 41 DCR 4892;~~10-166), *codified in* 21 DCMR §§ 500-15).500-15, as amended.~~

505.4 The District may bring a civil action in the Superior Court of the District of Columbia or any other court of competent jurisdiction, for civil penalties, damages, and injunctive or other appropriate relief pursuant to D.C. Official Code §§ 8-103.17(d) and 8-103.18.

505.5 As an alternative to a civil action, the Department may impose an administrative civil fine, penalty, fee, and order for costs and expenses by following the procedures of Titles~~titles~~ I-III of the Department of Consumer and Regulatory Affairs Civil Infractions Act of 1985, effective October 5,~~July 16,~~ 1985, as amended (D.C. Law 6-42; D.C. Official Code §§ 2-1801 *et seq*. (2007 Repl. & 2012~~2007 &~~ Supp.)) ~~2011)), as amended,~~ (Civil Infractions Act), except that each reference in the Civil Infractions Act to an administrative law judge (ALJ) shall mean an ALJ of the Office of Administrative Hearings (OAH) established pursuant to the Office of Administrative Hearings Establishment Act of 2001, effective March 6, 2002, as amended (D.C. Law 14-76; D.C. Official Code, §§ 2-1831.01 *et seq.* (2007 Repl. & 2012~~2007 &~~ Supp.)). ~~2011)), as amended.~~

505.6 Except when otherwise required by statute, an administrative civil fine shall be calculated according to the schedule of fines for violations of this chapter that has been approved pursuant to the Civil Infractions Act, D.C. Official Code § 2-1801.04.

505.7 Administrative adjudication of a civil violation of a provision of this Chapter~~chapter~~ shall be conducted by OAH, pursuant to its rules and procedures.

505.8 An administrative adjudicator of a civil violation of a provision of this Chapter~~chapter~~ shall have the same power, authority, and jurisdiction with respect to the matter before it as does the Department.

505.9 Neither a criminal prosecution nor the imposition of a civil fine or penalty shall preclude an administrative or judicial civil action for injunctive relief or damages, including an action to prevent unlawful construction or to restrain, correct, or abate a violation on or about any premises, or to recover costs, fees, or money damages, except~~damages. Except~~ that a person shall not, for the same violation of the WPCA, be assessed a civil fine and penalty through both the judicial and the administrative processes.

505.10 With respect to a violation of a provision of this chapter, the Department may also pursue and obtain an internal remedy by:

(a) Advising a person of a violation through the use of a DDOE internal Notice of Violation; ~~(NOV);~~ and

(b) Issuing and addressing a violation through the use of a DDOE internal Notice of Infraction. ~~(NOI).~~

505.11 If a term in a provision of this section conflicts with a provision in another section of this chapter, the term in the provision of this section controls.

506 ADMINISTRATIVE APPEALS AND JUDICIAL REVIEW

506.1 With respect to a matter governed by this chapter, a person adversely affected or aggrieved by an action of the Department shall exhaust administrative remedies by timely filing an administrative appeal with, and requesting a hearing before, the Office of Administrative Hearings (OAH), established pursuant to the Office of Administrative Hearings Establishment Act of 2001, effective March 6, 2002, as amended (D.C. Law 14-76; D.C. Official Code, §§ 2-1831.01 *et seq.* (2007 Repl. & 2012~~2007 &~~ Supp.)), ~~2012)), as amended,~~ or OAH's successor.

506.2 For the purposes of this chapter, an action of the Department taken with respect to a person shall include:

(a) Signed settlement of an internal Notice of Infraction (NOI);

(b) Approval;

(c) Denial;

(d) Compliance order;

(e) NOI;

(f) Determination;

(g) Cease and desist order;

(h) Stop work order;

(i)~~(h)~~ Order to show cause; or

(j)~~(i)~~ Other action of the Department which constitutes the consummation of the Department's decision-making process and is determinative of a person's rights or obligations.

506.3 For the purposes of this chapter, a DDOE internal Notice of Violation ~~(NOV)~~ or NOI:

(a) Shall not be an action of the Department that a person may appeal to OAH;

(b) Shall be responded to within fifteen (15) calendar days of service of the notice, including a written statement containing the grounds, if any, for opposition; and

(c) Shall not constitute a waiver of compliance or tolling of a period for a fine or penalty.

506.4 If a person fails to agree to or settle an internal NOI or otherwise denies a claim stated in an internal NOI:

(a) The Department may cancel the internal NOI and file an NOI for adjudication with OAH; or

(b) The person may request adjudication by OAH.

506.5 A person aggrieved by an action of the Department shall file a written appeal with OAH within the following time period:

(a) Within fifteen (15) calendar days of service of the notice of the action; or

(b) Another period of time stated specifically in the section for an identified Department action.

506.6 Notwithstanding another provision of this section, the Department may toll a period for filing an administrative appeal with OAH if it does so explicitly in writing before the period expires.

506.7 OAH shall:

(a) Resolve an appeal or an NOI by:

(1) Affirming, modifying, or setting aside the Department's action complained of, in whole or in part;

(2) Remanding for Department action or further proceedings, consistent with OAH's order; or

(3) Providing such other relief as the governing statutes, regulations and rules support;

(b) Act with the same jurisdiction, power, and authority as the Department may have for the matter currently before OAH; and

(c) By its final decision render a final agency action which will be subject to judicial review.

506.8 The filing of an administrative appeal shall not in itself stay enforcement of an action; except that a person may request a stay according to the rules of OAH.

506.9 The burden of proof in an appeal of an action of the Department shall be allocated to the person who appeals the action, except the Department shall bear the ultimate burden of proof when it denies a right.

506.10 The burden of production in an appeal of an action of the Department shall be allocated to the person who appeals the action, except that it shall be allocated:

(a) To the Department when a party challenges the Department's suspension, revocation, or termination of a:

(1) License;

(2) Permit;

(3) Continuation of an approval; or

(4) Other right;

(b) To the party who asserts an affirmative defense; and

(c) To the party who asserts an exception to the requirements or prohibitions of a statute or rule.

506.11 The final OAH decision on an administrative appeal shall thereafter constitute the final, reviewable action of the Department, and shall be subject to the applicable statutes and rules of judicial review for OAH final orders.

506.12 An action for judicial review of a final OAH decision shall not be a de novo review, but shall be a review of the administrative record alone and not duplicate agency proceedings or hear additional evidence.

506.13 Nothing in this chapter shall be interpreted to:

(a) Provide that a filing of a petition for judicial review stays enforcement of an action; or

(b) Prohibit a person from requesting a stay according to the rules of the court.

506.14 If a term in a provision of this section conflicts with a provision in another section of this chapter, the term in the provision of this section controls.

507 PUBLIC HEALTH HAZARDS

507.1 The Mayor may post notice on the shores of a District waterbody of a related hazard to public health or safety.

507.2 Upon determination that a direct or indirect contact with a waterbody of the District, including immersion, fishing, or boating, poses a hazard to the public health or safety, the Department may take action deemed necessary to protect the public health until the hazard has ended, including a prohibition of all recreational activities on the affected waters of the District.

507.3 If the Department takes action to protect the public health from a hazard, the Department shall:

(a) Notify the Council of the District of Columbia immediately of the action; and

(b) Notify the public through media most likely to effectively advise of the hazard, including:

(1) Newspapers of general circulation in the District;

(2) Radio stations serving the District; and

(3) Electronic media.

507.4 An action taken by the Department to protect public health from a hazard shall remain in effect until rescinded, or for a period of two (2) weeks, whichever is shorter.

507.5 The Department may extend the life of an action taken to protect public health from a hazard beyond a two (2) week period, only if the Council of the District of Columbia, by resolution, so approves.

507.6 From District waters designated as a public health hazard, no person shall operate any pumping device or water vessel so as to generate a spray which falls upon the adjacent shore, except as authorized by the Mayor for good cause shown.

508 PREVENTION OF POLLUTION BY WATERCRAFT

508.1 The discharge into the Potomac River or its tributaries of any waste, whether liquid or solid, treated or untreated, from any vessel berthed at a marina, dock, or basin, is prohibited.

508.2 Each marina, dock, or basin where a vessel or other watercraft is berthed, except for facilities that are owned by the United States Department of Defense and not generally open to the public, shall be provided with water closets, urinals, and lavatories which are separate for each sex, readily available, and in sufficient numbers to meet the needs of persons using the marina facilities.

508.3 Each marina, dock, or basin where vessels or other watercraft suitable for overnight accommodations are berthed shall be equipped with suitable bathing facilities.

508.4 The Department shall approve the facilities required under this section to be acceptable for the purposes set forth.

508.5 New or existing marinas within the Anacostia Waterfront Development Zone shall comply with the program elements outlined in the current version of the Clean Marina Guidebook issued by the National Park Service, ~~in 2004,~~ and the owner of the marina shall submit a copy of its Clean Marina Checklist and any supporting documentation to the Department.

509 CORRECTION OF CURRENT EROSION PROBLEMS

509.1 In instances where erosion is occurring as the result of natural forces or past land-disturbing activities, but in the absence of current land-disturbing activities, the Department shall have the authority to inspect the site and to order the property owner to correct the erosion problem.

509.2 Each order to correct existing problems shall specify the general corrective measures to be applied.

509.3 The Department shall maintain and provide to homeowners who are required to correct erosion problems information relating to possible sources of financial assistance for the project.

510-515 [RESERVED]

516 STORMWATER MANAGEMENT: APPLICABILITY

516.1 No person shall engage in a major regulated project unless the Department has issued an approved stormwater management plan (SWMP) for the project.

516.2 Application for Department approval of a SWMP for a major regulated project shall be made by at least one (1) of the following persons:

(a) The owner of a property on which a major regulated project is planned;

(b) The lessee who undertakes a major regulated project, with the owner's permission, on a property that the lessee has leased; or

(c) The agent of the owner or lessee.

516.3 In preparing and implementing a SWMP, or a part of a SWMP, a person must comply with:

(a) This chapter;

(b) The terms and conditions of the SWMP once approved; and

(c) The Department's orders and directions to achieve compliance with the approved SWMP.

516.4 A major regulated project shall comply with the requirements and procedures of this chapter unless a provision exempts compliance.

516.5 The owner of a site on which a major regulated project occurs and each person to whom the owner has designated responsibility for management of the site shall ensure that the site complies with the approved SWMP for the site until site redevelopment that follows a Department-approved SWMP occurs.

516.6 Responsibility for compliance with an approved SWMP for a site shall pass to a subsequent owner of the site and each person to whom that owner designates responsibility for the management of the site until site redevelopment that follows a Department-approved SWMP occurs.

516.7 No person shall engage in a project for the generation of a Stormwater Retention Credit ~~(SRC)~~ unless the Department has issued an approved SWMP for the project, except as otherwise provided in this chapter.

517 STORMWATER MANAGEMENT: EXEMPTIONS

517.1 If a major substantial improvement activity demonstrates that it is not part of a common plan of development with a major land-disturbing activity, then it is exempt from § 520 (Stormwater Management: Performance Requirements For Major Land-Disturbing Activity).

517.2 A land-disturbing activity shall be exempt from the requirements of Section 520 (Stormwater Management: Performance Requirements For Major Land-Disturbing Activity), Section 522 (Stormwater Management: Performance Requirements For Major Substantial Improvement Activity) and Section 529 (Stormwater Management: Covenants and Easements) if the Department determines that it is: ~~conducted solely for one or more of the following purposes:~~

(a) Conducted solely to install a best management practice or land cover that retains stormwater for one or more of the following purposes:

(1) To generate a Stormwater Retention Credit; ~~(SRC);~~

(2) To earn a stormwater fee discount under the provisions of this chapter;

~~(a)~~ To ~~voluntarily install Best Management Practices that protect, restore, or~~ provide ~~a water quality benefit for District waterbodies;~~

(3) ~~To install retention capacity that provides~~ for off-site retention through in-lieu fee payments; ~~or~~

(4) To comply with a Watershed Implementation Plan established under a Total Maximum Daily Load for the Chesapeake Bay;

~~(4)~~(5) To reduce Combined Sewer Overflows (CSOs) in compliance with a~~the~~ court-approved consent decree, including court-approved modifications, for reducing CSOs in the District of Columbia, or in compliance with a National Pollutant Discharge Elimination System permit; or ~~Columbia.:~~

(6) A utility project that is being conducted solely to protect or restore surface water quality, including projects for improving wastewater treatment and reducing CSOs.

517.3 A land-disturbing activity that consists solely of cutting a trench for utility work and related replacement of sidewalks and ramps is exempt from the stormwater management requirements of this chapter if it does not involve the reconstruction of a roadway from curb to curb or curb to centerline of roadway.

517.4 Land disturbance conducted solely to respond to an emergency need to protect life, limb, or property or conduct emergency repairs shall be exempt from the requirement to comply with the stormwater management provisions of this chapter, §§ 516-34. ~~(Section 516 through Section 534).~~

517.5 For the purposes of calculating the cost of a major substantial improvement to a building or structure, an applicant may exclude the cost of replacing manufacturing and industrial equipment, including pumps, valve chambers, and wastewater treatment facilities, but may not exclude the cost of replacing boilers, furnaces, and other equipment that is part of the heating and cooling system or other infrastructure commonly found in a building or structure.

517.6 A land-disturbing activity in the existing Public Right of Way ~~(PROW)~~ is exempt from the requirements in Section 520 (Performance Requirements for Major Land-~~–~~Disturbing Activity) for maintaining post-development peak discharge rates.

518 STORMWATER MANAGEMENT: PLAN REVIEW PROCESS

518.1 In order for the Department to approve a person's proposed stormwater management plan (SWMP), the person and the Department shall undertake the process described in this section.

518.2 The Department shall notify an applicant of each determination in the plan review process.

518.3 The owner of a site shall submit an initial application for the Department's approval of a major regulated project, including:

(a) Two (2) sets of the SWMP, certified by a professional engineer licensed in the District of Columbia; and

(b) Each supporting document specified in the Department's Stormwater Management Guidebook (SWMG).

518.4 The Department shall make an initial determination if an application is complete and:

(a) Accept the application for review;

(b) Accept the application for review, with conditions; or

(c) Reject the application for review, without prejudice to re-submission.

518.5 Upon accepting an application for review, the Department shall determine if:

(a) The application requires additional information to determine whether or not it meets the requirements for approval;

(b) The application meets the requirements for approval;

(c) The application meets the requirements for approval, with conditions; or

(d) The application does not meet the requirements for approval and shall be disapproved, without prejudice to re-submission.

518.6 If the applicant resubmits a SWMP after making changes, the re-submission shall contain a list of the changes made.

518.7 The Department may conduct one (1) or more supplemental reviews of a re-submitted application.

518.8 After receiving notification that an application meets the requirements for the Department's approval, the applicant shall submit a final preconstruction~~pre-construction~~ application including:

(a) One (1) Mylar copy of the SWMP, certified by a professional engineer licensed in the District of Columbia;

(b) Seven (7) paper copies of the SWMP, certified by a professional engineer licensed in the District of Columbia; and

(c) Each supporting document specified in the Department's SWMG.

518.9 After the applicant submits a final preconstruction~~pre-construction~~ application that meets the requirements for the Department's approval, the Department shall approve the plan, and provide the applicant with one (1) approved copy of the SWMP for the applicant to file at the Recorder of Deeds with the declaration of covenants and, if applicable, to record an easement.

518.10 The Department shall issue the remaining approved paper copies of the approved SWMP to the applicant after the applicant submits proof to the Department:

(a) That the declaration of covenants and each applicable easement has been filed at the Recorder of Deeds; and

(b) That each applicable fee for Department services has been paid.

518.11 The Department may issue the remaining approved paper copies of the approved SWMP to the applicant before the declaration of covenants is filed if:

(a) The Government of the District of Columbia has conditioned transfer of the property upon the successful acquisition of an approved SWMP or building permit; and

(b) The declaration is to be filed at closing.

518.12 Within twenty-one (21) days of the Department's final construction inspection, the applicant shall submit an as-built package, including:

(a) One (1) Mylar copy of the as-built SWMP certified by a professional engineer licensed in the District of Columbia; and

(b) Each supporting document specified in the Department's SWMG.

518.13 For a project consisting entirely of work in the public right of way, the requirement to submit an as-built SWMP can be met by the submission of a Record Drawing that:

(a) Documents the as-built construction of best management practices and related stormwater infrastructure; and

(b) Is certified by an officer of the contracting company for the project.

519 STORMWATER MANAGEMENT: PLAN

519.1 A Department-approved stormwater management plan (SWMP) shall:

(a) Govern all construction for which stormwater management is required;

(b) Govern all applicable maintenance activities; and

(c) Demonstrate compliance with this chapter.

519.2 A submitted SWMP and supporting documentation shall contain information sufficient for the Department to determine whether the SWMP complies with this chapter including:

(a) Existing site conditions, including the identification and location of each existing Best Management Practice (BMP) and whether it will remain on the site and in use or will be removed;~~,~~

(b) Proposed site design;

(c) Each land use proposed for the site;

(d) Identification and location of each proposed BMP, including geographic coordinates;~~Best Management Practice (BMP);~~

(e) Design and performance of each BMP for stormwater retention, detention, and treatment;

~~(e)~~(f) Conveyance~~Stormwater management~~ capacity of stormwater infrastructure;~~,~~

~~(f)~~(g) Environmental characteristics of the site;~~site,~~

~~(g)~~(h) Pre- and post-development hydrologic computations, including:

(1) Calculation of required stormwater management volume for:

(A) The entire site; and

(B) Each individual drainage area; and

(2) On-site and off-site retention volumes;

~~(h) Design and performance of each proposed BMP;~~

(i) Maintenance plan and schedule for each proposed BMP;

(j) Monitoring plan for each BMP that captures stormwater for use;

(k) For each proposed BMP not included in the Department's Stormwater Management Guidebook (SWMG):

(1) Separate identification and description; and

(2) Documentation of performance and effectiveness;

~~(l) Each potential impact of the proposed development on:~~

~~(1) The District's waterbodies; and~~

~~(2) Groundwater;~~

~~(m)~~(l) Construction sequence~~schedule~~ for:

(1) Each BMP; and

(2) The related development or improvement project, if any.~~any; and~~

~~(n)~~(m) A list of the construction and waste material to be stored on site and a description of the material and each pollution control measure that will be implemented to minimize exposure to stormwater discharge, including:

(1) Each storage practice;

(2) A spill prevention response; ~~and~~

(3) ~~(3)~~ The United States Environmental Protection Agency (EPA) identification number, or copy of application to EPA for identification number, for each hazardous waste that will be stored on site; and~~site.~~

(4) Proof of payment of each applicable fee.

519.3 The retention capacity of each BMP in a SWMP shall be calculated using the applicable equations for calculating retention value in Chapterchapter three (3) of the Department's Stormwater Management Guidebook. (SWMG).

519.4 The pollutant removal efficiency of each BMP in a SWMP shall be calculated using the applicable equation in Chapterchapter three (3) of the Department's SWMG.

519.5 The Department may require for each area that a project proposes for use to meet the requirements of this chapter, including a contiguous area or an area with a shared BMP:

(a) Information listed in this section; or

(b) A SWMP.

519.6 A submitted SWMP shall use:

(a) A standard drawing size of twenty-four inches by thirty-six inches (24 in. x 36 in);

(b) One (1) of the following horizontal scales of profile, unless otherwise approved:

(1) One inch equals ten feet (1 in. = 10 ft.);

(2) One inch equals twenty feet (1 in. = 20 ft.);

(3) One inch equals thirty feet (1 in. = 30 ft.);

(4) One inch equals forty feet (1 in. = 40 ft.);

(5) One inch equals fifty feet (1 in. = 50 ft.); or

(6) One inch equals eighty feet (1 in. = 80 ft.);

(c) One (1) of the following vertical scales of profile, unless otherwise approved:

(1) One inch equals two feet (1 in. = 2 ft.);

(2) One inch equals four feet (1 in. = 4 ft.);

(3) One inch equals five feet (1 in. = 5 ft.); or

(4) One inch equals ten feet (1 in = 10 ft.); and

(d) Drafting media that yield first or second generation reproducible drawings with a minimum letter size of No. 4 (1/8 inch).

519.7 A SWMP shall not be approved without the signature and seal of the Director or the Director's designee on the plan.

519.8 For each as-built SWMP that an applicant submits to the Department, an applicant shall provide that a professional engineer licensed in the District of Columbia, certifies with seal and signature that:

(a) The design, and installation for an as-built plan:

(1) Conforms to engineering principles applicable to stormwater management; and

(2) Complies with the requirements of this chapter; and

(b) A set of instructions for operation and maintenance of each BMP has been provided to the applicant.

519.9 A SWMP for a project shall be consistent with each other project submittal, including:

(a) An erosion and sediment control plan; and

(b) A floodplain management plan.

519.10 The approved SWMP for a major regulated project shall be available on site for Department review for the entire period of construction during ordinary business hours.

520 STORMWATER MANAGEMENT: PERFORMANCE REQUIREMENTS FOR MAJOR LAND-DISTURBING ACTIVITY

520.1 A site that undergoes a major land-disturbing activity shall employ each Best Management Practice (BMP) and land cover necessary to meet the requirements of this section until site redevelopment that follows a Department-approved Stormwater Management Plan (SWMP) occurs.

520.2 A site that undergoes a major land-disturbing activity, except the area of a site that is in the existing Public Right of Way (PROW), shall maintain the following:

(a) Post-development peak discharge rate for a twenty-four (24) hour, two (2)-year frequency storm event at a level that is equal to or less than the storm event's pre-development peak discharge rate unless the site's discharge:

(1) Flows directly or through the separate sewer system to the main stem of the tidal Potomac or Anacostia Rivers, the Washington Channel, or the Chesapeake and Ohio Canal;

(2) Does not flow into or through a tributary to those waterbodies that runs above ground or that the Department expects to be daylighted to run above ground; and

(3) Will not cause erosion of land or transport of sediment.

(b) Post-development peak discharge rate for a twenty-four (24) hour, fifteen (15)-year frequency storm event at a level that is equal to or less than the storm event's pre-project peak discharge rate; and

(c) Post-development peak discharge rate from a twenty-four (24) hour, one hundred (100)-year storm event at a level that is equal to or less than the storm event's pre-project peak discharge rate if the site:

(1) Increases the size of Special Flood Hazard Area ~~(SFHA)~~ as delineated on the effective Flood Insurance Rate Map~~;~~ ~~(FIRM);~~ or

(2) Meets the following two conditions:

(A) Does not discharge to the sewer system and

(B) Has a post-development peak discharge rate for a one hundred (100)-year storm event that will cause flooding to a building.

520.3 A site that undergoes a major land~~-~~-disturbing activity shall achieve retention of the rainfall from the ninetieth (90^{th}) percentile rainfall event for the District of Columbia, measured for a twenty-four (24)-hour rainfall event with a seventy-two (72)-hour antecedent dry period (1.2 inch rainfall event) by:

(a) Employing each BMP necessary to retain the 1.2 inch Stormwater Retention Volume (SWRv), calculated as follows:

$$SWRv = [P \times [(Rv_I \times \%I) + (Rv_C \times \%C) + (Rv_N \times \%N)] \times SA] \times 7.48 / 12$$

SWRv = volume, in gallons, required to be retained
P = 90^{th} percentile rainfall event for the District (1.2 inches)

Rv_I = 0.95 (runoff coefficient for impervious cover)
Rv_C = 0.25 (runoff coefficient for compacted cover)
Rv_N = 0.00 (runoff coefficient for natural cover)
%I = post-development percent of site in impervious cover
%C = post-development percent of site in compacted cover
%N = post-development percent of site in natural cover
SA = surface area, in square feet, of land-disturbing activity

where, the surface area under a BMP shall be calculated as part of the impervious cover (%I);

(b) Employing each post-development land cover factored into the SWRv; and

(c) Calculating separately and achieving the SWRv, with P equal to 1.2 inches, for the portion of land-disturbing activity that is in the existing Public Right of Way (PROW), in compliance with the section of this Chapterchapter pertaining to performance requirements in the existing PROW.

520.4 A site that undergoes a major land-disturbing activity may achieve the 1.2 inch SWRv on site or through a combination of on-site retention and off-site retention, under the following conditions:

(a) The site shall retain on site a minimum of fifty percent (50%) of the 1.2 inch SWRv, calculated for the entire site, unless the Department approves an application for relief from extraordinarily difficult site conditions; and

(b) The site shall use off-site retention for the portion of the SWRv that is not retained on site.

520.5 A site that undergoes a major land-disturbing activity may achieve on-site retention by retaining more than the 1.2 inch SWRv for an area of the site, subject to the following conditions:

(a) At least fifty percent (50%) of the 1.2 inch SWRv from each Site Drainage Area (SDA), unless it drains into the combined sewer system, shall be:

(1) Retained; or

(2) Treated to remove eighty percent (80%) of total suspended solids; and

(3) The entirety of an area intended for use or storage of motor vehicles shall drain to each necessary BMP so that at least fifty

percent (50%) of the 1.2 inch SWRv flowing from that entire area is retained or treated;

(b) Retention in excess of a 1.2 inch SWRv for one area of the site may be applied to the volume required for another area of the site;

(c) The requirement for retention of a minimum of fifty percent (50%) of the 1.2 inch SWRv for the entire site shall be achieved, unless the Department approves an application for relief from extraordinarily difficult site conditions; and

(d) Retention of volume greater than that from a 1.7 inch rainfall event, calculated using the SWRv equation with a P equal to 1.7 inches, shall not be counted toward on-site retention.

520.6 A major land-~~-~~disturbing activity may achieve on-site retention by directly conveying volume from the regulated site to a shared BMP with available retention capacity.

521 STORMWATER MANAGEMENT: PERFORMANCE REQUIREMENTS FOR MAJOR LAND-~~-~~DISTURBING ACTIVITY CONSISTING OF BRIDGE, ROADWAY, AND STREETSCAPE PROJECTS IN THE EXISTING PUBLIC RIGHT OF WAY

521.1 This section applies only to the portion of a major regulated project that consists entirely of bridge, roadway, or streetscape work~~ in the existing public right of way (PROW).~~:

(a) In the existing Public Right of Way (PROW); or

(b) In the existing PROW and in the public space associated with the PROW.

521.2 A project in the existing PROW may comply with a requirement in this chapter to retain a Stormwater Retention Volume (SWRv) by:

(a) Retaining fifty percent (50%) of the SWRv on site and using off-site retention for the remaining volume;

(b) Achieving the SWRv; or

(c) Retaining on site the SWRv to the Maximum Extent Practicable (MEP), after proving that each opportunity for installing retention capacity has been exhausted in compliance with the MEP process for existing PROW detailed in the Department's Stormwater Management Guidebook (SWMG).

521.3 A project in the existing PROW shall:

(a) Prioritize, to the MEP, the management of stormwater from the roadway, including stormwater draining from roadway beyond the area of land-disturbing activity; and

(b) Not be required to install a Best Management Practice (BMP) or landcover:

(1) That provides retention capacity greater than that required to achieve the SWRv that is calculated for the area of land-disturbing activity; or

(2) That is outside the area of land-disturbing activity.

521.4~~521.3~~ An existing PROW project on an Anacostia Waterfront Development Zone (AWDZ) site may comply with a requirement in this chapter to achieve a Water Quality Treatment Volume (WQTv) by:

(a) Achieving the WQTv; or

(b) Achieving the WQTv to the MEP, after proving that each opportunity for installing retention and treatment capacity has been exhausted in compliance with the MEP process for existing PROW detailed in the SWMG.~~Department's Stormwater Management Guidebook (SWMG).~~

521.5~~521.4~~ A project in the existing PROW that elects to comply with the SWMG's MEP process for maximizing retention or treatment shall provide the following information demonstrating technical infeasibility or environmental harm:

(a) Detailed explanation of each opportunity for on-site installation of a BMP that was considered and rejected, and the reasons for each rejection, including each opportunity that could be created by reducing roadway width in order to create an expanded area for retention of the SWRv or treatment of the WQTv between the curb line and private property; and

(b) Evidence of site conditions limiting each opportunity for a BMP, including, as applicable:

(1) Data on soil and groundwater contamination;

(2) Data from percolation testing;

(3) Documentation of the presence of utilities requiring impermeable protection or a setback;

(4) Documentation of structural requirements that would not be satisfied by a BMP; ~~and~~

(5) Evidence of the applicability of a statute, regulation, court order, pre-existing covenant, or other restriction having the force of law; and~~law.~~

(6) Evidence of a District-approved use for the safe and effective transport of goods or people

~~521.5~~
521.6 A major regulated project in the existing PROW may achieve on-site retention by retaining more than the 1.2 inch SWRv for an area of the site or for an area that drains to the site, subject to the following conditions:

(a) At least fifty percent (50%) of the 1.2 inch SWRv from each Site Drainage Area (SDA), unless it drains into the combined sewer system, shall be:

(1) Retained; or

(2) Treated to remove eighty percent (80%) of total suspended solids to the MEP; and

(3) The entirety of an area intended for use or storage of motor vehicles shall drain to each necessary BMP so that at least fifty percent (50%) of the 1.2 inch SWRv flowing from that entire area is retained or treated;

(b) Retention in excess of a 1.2 inch SWRv for one area of the site or an area that drains to the site may be applied to the volume required for another area of the site;

(c) The requirement for retention of a minimum of fifty percent (50%) of the 1.2 inch SWRv for the entire site shall be achieved, unless the project achieves retention of the SWRv to the MEP; and

(d) Retention of volume greater than that from a 1.7 inch rainfall event, calculated using the SWRv equation with a P equal to 1.7 inches, shall not be counted toward on-site retention.

~~521.6~~521.7 If a project in the existing PROW that is retaining the SWRv to the MEP is not able to achieve retention of fifty percent (50%) of the SWRv for the entirety of an area intended for use or storage of motor vehicles, the Department may waive a requirement to provide treatment for that volume if the Department:

(a) Determines that a treatment BMP would displace or reduce the size of retention capacity to be installed; and

(b) Concludes that the displaced or reduced retention capacity would be as protective or more protective for District waterbodies than the alternative treatment BMP.

521.8~~521.7~~ An existing PROW project that is retaining the SWRv or the WQTv to the MEP shall not be required to use off-site retention for the difference between the required volume and the achieved volume.

522 STORMWATER MANAGEMENT: PERFORMANCE REQUIREMENTS FOR MAJOR SUBSTANTIAL IMPROVEMENT ACTIVITY

522.1 If a major substantial improvement activity demonstrates that it is not part of a common plan of development with a major land--disturbing activity, then it shall comply with the provisions of this section; otherwise, it shall comply with the requirements for a major land--disturbing activity.

522.2 For the purposes of calculating the cost of a major substantial improvement to a building or structure, an applicant may exclude the cost of replacing manufacturing and industrial equipment, including pumps, valve chambers, and wastewater treatment facilities, but may not exclude the cost of replacing boilers, furnaces, and other equipment that is part of the heating and cooling system or other infrastructure commonly found in a building or structure.

522.3 A site that undergoes a major substantial improvement activity shall employ each Best Management Practice (BMP) and land cover necessary to meet the requirements of this section until the property is redeveloped in compliance with these regulations.

522.4 A site that undergoes a major substantial improvement activity shall achieve retention of the rainfall from the eightieth (80^{th}) percentile rainfall event for the District of Columbia, measured for a twenty-four (24)-hour storm with a seventy-two (72)-hour antecedent dry period (0.8 inch rainfall event) by:

(a) Employing each BMP necessary to retain the 0.8 inch Stormwater Retention Volume (SWRv), calculated as follows:

$$SWRv = [P \times [(Rv_I \times \%I) + (Rv_C \times \%C) + (Rv_N \times \%N)] \times SA] \times 7.48 / 12$$

SWRv = volume, in gallons, required to be retained

P	=	80^{th} percentile rainfall event for the District (0.8 inches)
Rv_I	=	0.95 (runoff coefficient for impervious cover)
Rv_C	=	0.25 (runoff coefficient for compacted cover)
Rv_N	=	0.00 (runoff coefficient for natural cover)
%I	=	post-development percent of site in impervious cover
%C	=	post-development percent of site in compacted cover
%N	=	post-development percent of site in natural cover
SA	=	surface area, in square feet, of substantially improved building footprint plus land disturbance

where~~,~~ the surface area under a BMP shall be calculated as part of the impervious cover (%I); and

(b) Employing each post-development land cover factored into the SWRv.

(c) Calculating separately and achieving the SWRv, with P equal to 1.2 inches, for the portion of land-disturbing activity that is in the existing Public Right of Way (PROW), in compliance with the section of this Chapter~~chapter~~ pertaining to performance requirements in the existing PROW.

522.5 A site that undergoes a major substantial improvement activity may achieve the 0.8 inch SWRv on site or through a combination of on-site retention and off-site retention, under the following conditions:

(a) The site shall retain on site a minimum of fifty percent (50%) of the 0.8 inch SWRv, calculated for the entire site, unless the Department approves an application for relief from extraordinarily difficult site conditions; and

(b) The site shall use off-site retention for the portion of the SWRv that is not retained on site.

522.6 A site that undergoes a major substantial improvement activity may achieve on-site retention by retaining more than the 0.8 inch SWRv for an area of the site, subject to the following conditions:

(a) At least fifty percent (50%) of the 0.8 inch SWRv from each Site Drainage Area (SDA), unless it drains into the combined sewer system, shall be:

(1) Retained; or

(2) Treated to remove eighty percent (80%) of total suspended solids; and

(3) The entirety of an area intended for use or storage of motor vehicles shall drain to each necessary BMP so that at least fifty

percent (50%) of the 0.8 inch SWRv flowing from that entire area is retained or treated;

(b) Retention in excess of a 0.8 inch SWRv for one area of the site may be applied to the volume required for another area of the site;

(c) The requirement for retention of a minimum of fifty percent (50%) of the 0.8 inch SWRv for the entire site shall be achieved, unless the Department approves an application for relief from extraordinarily difficult site conditions; and

(d) Retention of volume greater than that from a 1.7 inch rainfall event, calculated using the SWRv equation with a P equal to 1.7 inches, shall not be counted toward on-site retention.

522.7 A major substantial improvement activity may achieve on-site retention by directly conveying volume from the regulated site to a shared BMP with available retention capacity.

523 STORMWATER MANAGEMENT: RESTRICTIONS

523.1 The Department may restrict use of an infiltration Best Management Practice (BMP) to prevent contamination of soil or groundwater and require submittal of and compliance with a Stormwater Pollution Prevention Plan ~~(SWPPP)~~ if:

(a) An applicant proposes to engage in a land use activity that has the potential to pollute stormwater runoff, as specified in the Department's Stormwater Management Guidebook (SWMG); or

(b) Surface contamination is present at the site.

523.2 To prevent stormwater migration in underlying soil or groundwater in an area determined to have sub-surface contamination of soil or groundwater, the Department may:

(a) Prohibit use of an infiltration BMP; or

(b) Limit use of an infiltration BMP, including by requiring~~a requirement~~ that an impermeable liner be used.

523.3 The Department may require a BMP that receives runoff~~may receive contaminated runoff in excess of applicable standards~~ from a stormwater hotspot designated in the Department's SWMG to include pollution control measures, including, as applicable, a baffle, skimmer, oil separator, grease trap, or other mechanism which prevents release of oil and grease in concentrations exceeding ten milligrams per Liter (10 mg/L).

523.4 The Department may require a BMP that receives runoff from an animal confinement area to:

(a) Connect~~Be connected~~ to a combined sewer, if DC Water approves the connection as not exceeding available capacity; or

(b) ~~-~~Include pollution control measures necessary to protect water quality standards of the receiving waterbody, if the runoff discharges directly to a waterbody or through the separate sewer system.

523.5 No person shall use a coal tar product, or other toxic material, to seal a BMP.

524 ~~[RESERVED] -~~STORMWATER MANAGEMENT: PERFORMANCE REQUIREMENTS FOR MAJOR REGULATED PROJECTS IN THE ANACOSTIA WATERFRONT DEVELOPMENT ZONE

524.1 An Anacostia Waterfront Development Zone site (AWDZ site) is a site within the Anacostia Waterfront Development Zone (AWDZ) that undergoes a major regulated project that is publicly owned or publicly financed.

524.2~~524.1~~ An AWDZ site shall employ each Best Management Practice (BMP) and land cover necessary to meet the requirements of this section until site redevelopment that follows a Department-approved Stormwater Management Plan ~~(SWMP)~~ occurs.

524.3~~524.2~~ Except for activities exempted under this chapter, if a provision of this section conflicts with any other provision of this chapter, an AWDZ site shall be subject to the more stringent provision.

524.4~~524.3~~ An AWDZ site that undergoes a major land-~~-~~disturbing activity shall achieve treatment of the rainfall from the ninety-fifth (95^{th}) percentile rainfall event for the District of Columbia, measured for a twenty-four (24)-hour rainfall event with a seventy-two (72)-hour antecedent dry period (1.7 inch rainfall event) by:

(a) Employing each BMP necessary to treat the 1.7 inch Water Quality Treatment Volume (WQTv) equal to the difference between:

(1) The post-development runoff from the 1.7 inch rainfall event; and

(2) The 1.2 inch Stormwater Retention Volume (SWRv);

(b) Calculating~~Calculate~~ the WQTv in subsection (a) as follows:

$$WQTv = ([P \times [(Rv_I \times \%I) + (Rv_C \times \%C) + (Rv_N \times \%N)] \times SA] \times 7.48 /12) - SWRv$$

WQTv	=	volume, in gallons, required to be retained or treated, above and beyond the SWRv
SWRv	=	volume, in gallons, required to be retained
P	=	95th percentile rainfall event for the District (1.7 inches)
Rv_I	=	0.95 (runoff coefficient for impervious cover)
Rv_C	=	0.25 (runoff coefficient for compacted cover)
Rv_N	=	0.00 (runoff coefficient for natural cover)
%I	=	post-development percent of site in impervious cover
%C	=	post-development percent of site in compacted cover
%N	=	post-development percent of site in natural cover
SA	=	surface area in square feet, of land-disturbing activity

where, the surface area under a BMP shall be calculated as part of the impervious cover (%I); and

(c) Employing each post-development land cover factored into the WQTv.

524.5~~524.4~~ An AWDZ site that undergoes a major substantial improvement activity and does not undergo a major land-disturbing activity shall:

(a) Comply with the performance requirements for major substantial improvement activity, except that the Stormwater Retention Volume (SWRv) shall be equal to the post-development runoff from the eighty-fifth (85th) percentile rainfall event for the District of Columbia, measured for a twenty-four (24)-hour rainfall event with a seventy-two (72)-hour antecedent dry period (1.0 inch rainfall event);

(b) Achieve treatment of the rainfall from the ninety-fifth (95th) percentile rainfall event for the District of Columbia, measured for a twenty-four (24)-hour rainfall event with a seventy-two (72)-hour antecedent dry period (1.7 inch rainfall event) by:

(1) Employing each BMP necessary to treat the 1.7 inch Water Quality Treatment Volume (WQTv) equal to the difference between:

(A) The post-development runoff from the 1.7 inch rainfall event; and

(B) The 1.0 inch SWRv;

(2) Calculating~~Calculate~~ the WQTv in subsection (b) as follows:

$$WQTv = ([P \times [(Rv_I \times \%I) + (Rv_C \times \%C) + (Rv_N \times \%N)] \times SA] \times 7.48 /12)\text{-}SWRv$$

WQTv = volume, in gallons, required to be retained or treated, above and beyond the SWRv

SWRv = volume, in gallons, required to be retained

P = 95th percentile rainfall event for the District (1.7 inches)

Rv_I = 0.95 (runoff coefficient for impervious cover)

Rv_C = 0.25 (runoff coefficient for compacted cover)

Rv_N = 0.00 (runoff coefficient for natural cover)

%I = post-development percent of site in impervious cover

%C = post-development percent of site in compacted cover

%N = post-development percent of site in natural cover

SA = surface area in square feet,

where, the surface area under a BMP shall be calculated as part of the impervious cover (%I); and

(3) Employing each post-development land cover factored into the WQTv.

524.6~~524.5~~ A major regulated project in the AWDZ may achieve on-site treatment for WQTv with:

(a) On-site treatment designed to remove eighty percent (80%) of Total Suspended Solids~~; (TSS);~~

(b) On-site retention; or

(c) Direct conveyance of stormwater from the site to an approved shared BMP with sufficient available treatment or retention capacity.

524.7~~524.6~~ An AWDZ site may achieve part of the WQTv by using off-site retention if:

(a) Site conditions make compliance technically infeasible, environmentally harmful, or of limited appropriateness in terms of impact on surrounding landowners or overall benefit to District waterbodies; and

(b) The Department approves an application for relief from extraordinarily difficult site conditions.

524.8~~524.7~~ An AWDZ site that achieves a gallon of Off-Site Retention Volume (Offv) by using Stormwater Retention Credits (SRCs) certified for retention capacity located outside of the Anacostia watershed shall use 1.25 SRCs for that gallon of Offv.~~OSRv.~~

524.9~~524.8~~ An AWDZ site shall obtain Department approval of an integrated pesticide management plan meeting the requirements of the Department's Stormwater Management Guidebook.

524.10~~524.9~~ A major regulated project in the AWDZ shall achieve the required level of stormwater management using one or more of the following methods, in the following order of preference:

(a) Vegetated BMPs and land covers designed to retain and beneficially use stormwater;

(b) Where compatible with groundwater protection, non-vegetated infiltration BMPs;

(c) Other low impact development practices;

(d) Collection and use of stormwater for on-site irrigation and other purposes; and

(e) Other on-site BMPs or design methods approved by the Department.

525 STORMWATER MANAGEMENT: SHARED BEST MANAGEMENT PRACTICE

525.1 A Shared Best Management Practice (S-BMP) may, upon approval by the Department:

(a) Provide stormwater management for a major regulated project in satisfaction of an on-site stormwater management requirement of that project; and

(b) Be eligible for Department certification of a Stormwater Retention Credit (SRC).

525.2 A Department-approved S-BMP may provide stormwater management for a nearby property if:

(a) Stormwater flow from the nearby property is directly conveyed to the S-BMP; and

(b) The S-BMP has sufficient capacity.

525.3 To obtain Department approval of the use of an existing S-BMP, a major regulated project shall show how each requirement of the project will be met by the S-BMP, including:

(a) Submit an as-built Stormwater Management Plan (SWMP) for the S-BMP that is accurate as of the time of submittal;

(b) Prove sufficient capacity of the S-BMP;

(c) Demonstrate the adequacy of each stormwater conveyance from the major regulated project to the S-BMP; and

(d) Show each drainage area conveying stormwater into the S-BMP from the major regulated project.

525.4 To obtain Department approval of the use of a proposed S-BMP, a major regulated project shall show how each requirement of the project will be met by the S-BMP, including:

(a) Submit a Department-approved SWMP~~stormwater management plan~~ for the S-BMP;

(b) Prove sufficient capacity of the S-BMP;

(c) Demonstrate the adequacy of each stormwater conveyance from the major regulated project to the S-BMP; and

(d) Show each drainage area conveying stormwater into the S-BMP from the major regulated project.

525.5 A major regulated project that uses a S-BMP to meet a requirement shall not pass the Department's final inspection until the S-BMP passes the Department's final inspection and is operational.

525.6 After an alteration to a S-BMP to provide stormwater management for another site, the site with the S-BMP shall:

(a) Pass the Department's inspection; and

(b) Submit an as-built SWMP, showing each area draining into the S-BMP and the means of conveyance.

525.7 The Department may certify a SRC for a S-BMP if the S-BMP meets each requirement for certification.

525.8 A site with a S-BMP that provides a volume of stormwater management to satisfy an on-site requirement of a major regulated project shall be responsible for maintenance of the S-BMP capacity to manage that volume and shall record that responsibility in a declaration of covenants.

525.9 If the Department determines that a S-BMP has ceased satisfying an on-site retention requirement for a site that underwent a major regulated project, the site shall be responsible for retaining the required volume on site or via use of off-site retention.

526 STORMWATER MANAGEMENT: RELIEF FROM EXTRAORDINARILY DIFFICULT SITE CONDITIONS

526.1 The applicant may apply for relief from extraordinarily difficult site conditions if it is technically infeasible or environmentally harmful:

(a) For a site to comply with the minimum on-site retention requirement (50% of Stormwater Retention Volume (SWRv); or

(b) For an Anacostia Waterfront Development Zone (AWDZ) site to comply with any portion of its Water Quality Treatment Volume ~~(WQTv)~~ or SWRv on site, except that AWDZ sites may also apply based on the limited appropriateness of on-site stormwater management.

526.2 The Department shall not provide relief unless the applicant proves that on-site compliance is technically infeasible or environmentally harmful, except that, for an AWDZ site, the Department may also consider the appropriateness of on-site compliance in terms of impact on surrounding landowners or overall benefit to District waterbodies.

526.3 In order to support its case for relief, the applicant shall provide the following information demonstrating technical infeasibility or environmental harm:

(a) Detailed explanation of each opportunity for on-site installation of a Best Management Practice (BMP)~~BMP~~ that was considered and rejected, and the reasons for each rejection; and

(b) Evidence of site conditions limiting each opportunity for a BMP, including, as applicable:

(1) Data on soil and groundwater contamination;

(2) Data from percolation testing;

(3) Documentation of the presence of utilities requiring impermeable protection or a setback; ~~and~~

(4) Evidence of the applicability of a statute, regulation, court order, pre-existing covenant, or other restriction having the force of law;~~law.~~

(5) Evidence that the installation of a retention BMP would conflict with the terms of a non-expired approval, applied for prior to the end of Transition Period Two A for a major land-disturbing activity or before the end of Transition Period Two B for a major substantial improvement activity, of a:

a. Concept review by the Historic Preservation Review Board;

b. Concept review by the Commission on Fine Arts;

c. Preliminary or final design submission by the National Capital Planning Commission;

d. Variance or special exception from the Board of Zoning Adjustment; or

e. Large Tract Review by the District Office of Planning; and

(6) For a utility, evidence that a property owner on or under whose land the utility is conducting work objects to the installation of a BMP; and

(7) For a major substantial improvement activity, evidence that the structure cannot accommodate a BMP without significant alteration, because of a lack of available interior or exterior space or limited load-bearing capacity.

526.4 An applicant for relief shall submit:

(a) A complete application; and

(b) Proof of payment of the applicable fee.

526.5 The Department shall not consider an incomplete application for relief; except that if an application is substantially complete, the Department may begin consideration.

526.6 In determining whether to grant relief, the Department may consider:

(a) The applicant's submittal;

(b) Other site-related information;

(c) An alternative design;

(d) The Department's Stormwater Management Guidebook; ~~(SWMG);~~

(e) Another BMP that complies with the requirements of this chapter; and

(f) Relevant scientific and technical literature, reports, guidance, and standards.

526.7 After considering whether an application meets the requirements of this section, the Department may:

(a) Require additional information;

(b) Grant relief;

(c) Grant relief, with conditions;

(d) Deny relief; or

(e) Deny relief in part.

526.8 No relief shall be granted unless, for the volume of relief granted, the Stormwater Management Plan (SWMP) for the project provides for:

(a) Use of off-site retention, with the Off-Site Retention Volume ~~(Offv)~~ documented on the approved SWMP; and

~~(b)~~ If the relief is from a minimum on-site retention requirement, treatment to remove eighty percent (80%) of total suspended solids.

~~(c)~~(b)

527 STORMWATER MANAGEMENT: USE OF OFF-SITE RETENTION THROUGH THE IN-LIEU FEE OR STORMWATER RETENTION CREDITS

527.1 A site that undergoes a major regulated project shall use off-site retention to achieve each gallon of its Off-Site Retention Volume (Offv).

527.2 No person shall allow a portion of their Offv obligation to be unfulfilled for any period of time.

527.3 A person shall achieve each gallon of Offv for each year by:

(a) Using one (1) Stormwater Retention Credit (SRC); or

(b) Paying the in-lieu fee to the Department.

527.4 An obligation to use off-site retention for a gallon of Offv shall end if:

(a) On-site retention of the gallon is achieved in compliance with a Department-approved Stormwater Management Plan (SWMP); or

(b) Site redevelopment that follows a Department-approved SWMP occurs.

527.5 No person shall use a SRC to achieve an Offv without obtaining the Department's approval.

527.6 Only the owner of a SRC may apply to the Department for approval to use a SRC to achieve an Offv.

527.7 The Department shall track the use of off-site retention to achieve an Offv.

527.8 An application to use a SRC to achieve an Offv shall be on a form that the Department provides and shall include:

(a) The unique serial number of the SRC; and

(b) Information about the site applying to use the SRC, including property location and stormwater management on the property.

527.9 A person may use a Department-certified SRC without regard to the location within the District of the best management practice~~BMP~~ or land cover that generated the SRC, except as specified for an Anacostia Waterfront Development Zone site.

527.10 The Department shall not approve an application to use a SRC to achieve an Offv if~~-~~:

(a) The SRC has already been used to achieve one (1) year of Offv; or

(b) The Department has retired the SRC.

527.11 The one (1)-year lifespan of a SRC and of the in-lieu fee begins on the date that it is used to achieve an Offv.

527.12 A site's obligation to use off-site retention to achieve its Offv shall begin on the date of successful completion of the Department's final construction inspection.

527.13 For each gallon of required Offv, the property owner shall provide the Department at least four (4) weeks before the proposed usage date:

(a) For use of a SRC, a completed application to use the SRC; and

(b) For use of an in-lieu fee:

(1) Notification of intent to use an in-lieu fee; and

(2) Proof of payment of the fee.

527.14 If a lapse in satisfaction of the obligation to achieve an Offv occurs, the Department shall declare the property owner out of compliance and:

(a) Assess the property owner the in-lieu fee annually for each gallon of Offv;

(b) Pro-rate the assessment to the period of lapsed compliance if the property owner comes into compliance; and

(c) Assess an administrative late fee.

527.15 Upon receipt of a notice related to noncompliance with an obligation to achieve an Offv, the property owner shall immediately:

(a) Comply; and

(b) Pay fees and charges assessed.

527.16 For a property owner who does not come into compliance within thirty (30) days after the date of the Department's notice of a lapse in satisfaction of an Offv obligation and who owns an SRC that has not been used to achieve the Offv for another property, the Department may apply that SRC to the Offv obligation that is out of compliance.

527.17~~527.16~~ If the Department finds that an obligation has terminated or that its administration of payments would be improved, it may:

(a) Pro-rate the amount of SRCs used and adjust accordingly~~appropriately~~ in the Department's tracking system; and

(b) Pro-rate the in-lieu fee and refund.

528 STORMWATER MANAGEMENT: MAINTENANCE

528.1 Each owner or designee of each lot and parcel that is part of a site that undertook a major regulated project shall be responsible for maintenance required by the Stormwater Management Plan (SWMP) approved by the Department and shall record that responsibility in a declaration of covenants.

528.2 The Department may assign maintenance responsibility for a Shared Best Management Practice (S-BMP) in an approved SWMP after considering:

(a) How maintenance will be achieved;

(b) Each lot and parcel's responsibility relative to its reliance on each S-BMP and land cover to comply with this Chapter;~~chapter;~~

(c) Administrative feasibility; and

(d) Accountability and enforceability.

528.3 The owner, governmental agency, or other person with maintenance responsibility shall ensure that a Best Management Practice (BMP)~~BMP~~ and a land cover on a lot or parcel is maintained in good working order if:

(a) The BMP or land cover was installed to meet the requirements of this chapter for a major regulated project; or

(b) The Department certified a Stormwater Retention Credit ~~(SRC)~~ for a gallon of retention capacity created by the BMP or land cover.

528.4 Natural land cover employed to comply with a retention requirement in this chapter shall not be converted to compacted or impervious land cover, unless the loss of retention capacity associated with the land conversion will be:

(a) Offset by a corresponding increase in retention capacity elsewhere on the site that complies with the requirements of this chapter; or

(b) Offset by a corresponding increase in use of off-site retention that complies with the requirements of this chapter; and

(c) The Department approves a change to the previously approved SWMP for the site, showing how the loss of retention capacity will be offset.

528.5 Compacted land cover employed to comply with a retention requirement in this chapter shall not be converted to impervious land cover, unless the loss of retention capacity associated with the land conversion will be:

(a) Offset by a corresponding increase in retention capacity elsewhere on the site that complies with the requirements of this chapter; or

(b) Offset by a corresponding increase in use of off-site retention that complies with the requirements of this chapter; and

(c) The Department approves a change to the previously approved SWMP for the site, showing how the loss of retention capacity will be offset.

528.6 Maintenance of each BMP and land cover shall comply with the applicable Department-approved SWMP, including promptly repairing and restoring each:

(a) Grade surface;

(b) Wall;

(c) Drain;

(d) Structure;

(e) Foundation;

(f) Sign;

(g) Plant; and

(h) Erosion or sediment control measure.

528.7~~528.5~~ If the Department finds that a BMP or land cover is not being properly maintained:

(a) The Department may require that the condition be corrected; and

(b) The governmental agency, owner, or other person charged with maintenance responsibility shall correct the condition.

528.8~~528.6~~ If an owner or other person charged with maintenance responsibility fails or refuses to correct a condition as the Department directs, the Department may:

(a) Declare the owner or person out of compliance;

(b) Take corrective action itself or through its contractor;

(c) Assess the cost incurred and fees; and

(d) Assess a fine or penalty.

528.9~~528.7~~ If the Department determines that the condition of a BMP or land cover presents an actual or imminent harm to the environment or the public health, the Department may:

(a) Declare the owner or other person charged with maintenance responsibility to be out of compliance;

(b) Take protective and corrective action itself or through its contractor without prior notice to the owner;

(c) Assess the cost incurred and fees; and

(d) Assess a fine or penalty.

528.10~~528.8~~ Used soil media removed from a BMP receiving drainage from an area intended for use or storage of motor vehicles shall not be re-used for planting or as fill material and shall be disposed of in a landfill or at a transfer station for transport to a landfill.

528.11~~528.9~~ Non-vegetative waste material from cleaning, maintaining, repairing, and replacing a BMP shall be disposed of in a landfill, trash transfer station, or other facility for processing these materials in accordance with District and Federal law.

529 STORMWATER MANAGEMENT: COVENANTS AND EASEMENTS

529.1 The owner of each lot and parcel that is part of a site that undertook a major regulated project shall record with the Recorder of Deeds:

(a) A declaration of covenants that includes the on-site and off-site responsibilities in the Department-approved Stormwater Management Plan (SWMP); and

(b) An easement that the Department requires to ensure access for inspection and maintenance of a Best Management Practice (BMP)~~BMP~~ or land cover employed to comply with this chapter.

529.2 An agency of the federal government or District government shall not be required to make or record a declaration of covenants, except that, if a District-owned property is sold to a private owner or leased for more than three (3) years, the property's SWMP must be incorporated in a declaration of covenants and recorded as a burden on the property or the leasehold.

529.3 The~~A~~ declaration of covenants and ~~an~~ easement shall:

(a) Be determined legally sufficient ~~as determined~~ by the Attorney General ~~Department~~ or the Department's designee;

(b) Be binding on each~~all~~ subsequent owner;~~owners;~~

(c) Include an agreement to indemnify the District of Columbia, its officers, agents, and employees from and against all claims or liability that may

arise out of or in connection with, either directly or indirectly, any of the owner's actions or omissions with regard to the construction, operation, maintenance or restoration of the BMP or land cover; and

(d) Provide for inspection of and access to the BMP or land cover at reasonable times by the Department or its authorized representative.

529.4 If the Department determines that a change to an approved SWMP for a site affects the terms of a declaration of covenants or an easement required by this chapter, the owner of each affected lot or parcel of that site shall revise as the Department approves and record the declaration of covenants or easement accordingly.

530 STORMWATER MANAGEMENT: IN-LIEU FEE

530.1 The base in-lieu fee established by the Department for a purpose of this chapter shall represent the full life-cycle cost for the Department to retain one gallon (1 gal.) of stormwater for one (1) year, including the following costs:

(a) Project planning;

(b) Project design;

(c) Project management;

(d) Construction and installation;

(e) Operations and maintenance;

(f) Project financing;

(g) Land acquisition;

(h) Administration of the in-lieu fee program; and

(i) Legal support for the in-lieu fee program.

530.2 The Department shall annually adjust the base in-lieu fee to account for inflation, using the Urban Consumer Price Index published by the United States Bureau of Labor Statistics.

530.3 The Department may re-evaluate the costs underlying the in-lieu fee and re-base the in-lieu fee as the Department determines necessary.

530.4 The Department shall provide notice in the *D.C. Register* prior to re-basing the in-lieu fee.

530.5 An in-lieu fee payment shall be based on the in-lieu fee in effect at the time payment is made.

530.6 An in-lieu fee payment shall:

(a) Be used solely to achieve increased retention in the District of Columbia;

(b) Be used to achieve increased retention in the Anacostia watershed, if the payment achieves Off-Site Retention Volume ~~(Offv)~~ for an Anacostia Waterfront Development Zone site.

(c) Be deposited in the Stormwater In-Lieu Fee Payment Special Purpose Revenue Fund,~~-~~ established by The Water Pollution Control Act of 1984 (D.C. Law 5-188; D.C. Official Code § 8-103.01 *et seq.*), as amended.

531 STORMWATER MANAGEMENT: CERTIFICATION OF STORMWATER RETENTION CREDITS

531.1 Only the Department shall certify a Stormwater Retention Credit (SRC); and no SRC shall be valid and usable for the purposes of this chapter unless the Department certifies it.

531.2 The Department shall:

(a) Assign a unique serial number to each SRC; and

(b) Retain and track information about each SRC, including final sale price.

531.3 A gallon of retention capacity in a Best Management Practice (BMP) or land cover is eligible for SRC certification if it meets the following eligibility requirements:

(a) The gallon retained by the BMP or land cover shall:

(1) Be in excess of the Stormwater Retention Volume (SWRv) for a major regulated project or, for a site that is not regulated, in excess of pre-project~~existing~~ retention;

(2) Be no more than the SRC ceiling; and

(3) Not be installed to comply with a stormwater management requirement of a statute, regulation, or court order, including for:

(A) Reduction of~~Not be required to reduce~~ Combined Sewer Overflows (CSOs) in compliance with the court-approved consent decree, including court-approved modifications, for

reducing CSOs in the District of Columbia, except that retention capacity installed on an experimental basis as a requirement of the consent decree shall be eligible if a subsequent modification of the consent decree ends the requirement to maintain that retention capacity; orcapacity.

(B) Compliance with a Watershed Implementation Plan established under a Total Maximum Daily Load for the Chesapeake Bay.

(b) Design, installation, and operation shall comply with a Department-approved Stormwater Management Plan (SWMP);

(c) The Department's final construction inspection shall be successfully completed;

(d) A Department inspection shall be successfully completed within six (6) months before the Department decides to certify an SRC; and

(e) An executed maintenance contract or a signed promise to follow a maintenance plan for the period of time for which the certification of SRCs is requested, in compliance with the Department-approved SWMP for the BMP or land cover, shall be in place.

531.4 The SRC-eligible retention capacityvolume described in Subsection 531.3(a) shall be calculated using the formulas in Chapterchapter seven (7) of the Department's Stormwater Management Guidebook.

531.5 The Department shall begin accepting applications for SRC certification after this section is published as final in the *D.C. Register*.

531.6 A person submitting an application for SRC certification shall be the owner of the land with the SRC-eligible BMP or land coverretention capacity or shall have been assigned the right to a SRC that is certified.

531.7 The Department may reject as premature an application for SRC certification if it is submitted more than three (3) months before the end of the preceding period of time for which the Department had certified a SRC for the retention capacity.

531.8 The Department shall not consider an incomplete application for SRC certification.

531.9 A complete application for SRC certification shall include:

(a) A completed Department application form;

(b) Documentation of the right to the SRC that would be certified;

(c) A copy of the Department-approved SWMP for the BMP or land cover with SRC-eligible retention capacity and the area draining into it;

(d) A copy of the as-built SWMP ~~f~~or the BMP or land cover with SRC-eligible retention capacity and the area draining into it, certified by a professional engineer licensed in the District of Columbia and meeting the requirements of this chapter;

(e) An executed maintenance contract or a signed promise to follow a maintenance plan for the period of time for which the certification of the SRC~~SRCs~~ is requested; ~~and~~

(f) Other documentation that the Department requires to determine that the eligibility requirements are satisfied, including documentation that a maintenance provider has the expertise and capacity to provide required maintenance for the time period of SRC certification; and~~certification.~~

(g) A signed promise from the owner of the property on which the BMP or land cover is located to notify the Department if, during the period of time for which a SRC is certified, the property is sold or otherwise transferred to another person.

531.10 If the Department determines that a complete application meets the eligibility requirements, it shall certify up to three (3) years' worth of SRCs for each gallon of SRC-eligible retention capacity.

531.11 The Department shall not certify an SRC:

(a) For a period of time that overlaps with the period of time for which the Department has already certified an SRC for the same retention capacity;

(b) For a period that begins earlier than the date of the submittal of a complete application; or

(c) For ineligible retention capacity.

531.12 The Department may waive submittal of documentation required for a complete application if the Department has the documentation on file that reflects current conditions, except that the Department shall not waive submittal of a current maintenance agreement or maintenance contract for the BMP or land cover.

531.13 The Department may conduct an inspection of a BMP or land cover for the purposes of this section before certification of an SRC and after certification.

531.14 The Department may refuse to certify an SRC for a person:

(a) Who is currently lapsed in compliance with an obligation to fulfill an Off-Site Retention Volume for a property; or

(b) Who is an original SRC owner for another SRC and who is currently not maintaining the associated BMP or land cover as promised for the period of time for which the Department certified that SRC.

~~531.14 For the purposes of certifying an SRC for retention capacity that was installed without an approved SWMP prior to the date these regulations are published as final in the *D.C. Register*, the Department may accept the following as a complete initial application:~~

~~(a) An application on a Department-provided form;~~

~~(b) A copy of the as-built SWMP for the retention capacity and the area draining into it, certified by a professional engineer licensed in the District of Columbia that the SWMP meets the requirements of this chapter;~~

~~(c) Documentation of site conditions prior to installation of the retention capacity;~~

~~(d) A copy of a current maintenance agreement or maintenance contract for the BMP or land cover; and~~

~~(e) Other documentation that the Department requires to determine that the eligibility requirements are satisfied.~~

531.15 At the Director's discretion and to allow for the aggregation of SRCs, the Department may approve a SWMP that proposes aggregation of retention from small sites under a common design and that:

(a) Would not otherwise trigger a stormwater management performance requirement in this chapter;

(b) Proposes the use of a common design for multiple installations of a BMP;

(c) Specifies well-defined technical criteria for location and placement of each BMP;

(d) Specifies details for how multiple installations will be constructed, operated, and maintained;

(e) Contains requirements for inspection by the Department or a Department-approved third party;

(f) Demonstrates the technical capacity to locate, design, install, and maintain each BMP; and

(g) Demonstrates that the requirements of this chapter will be met.

532 STORMWATER MANAGEMENT: LIFESPAN OF STORMWATER RETENTION CREDITS

532.1 A Stormwater Retention Credit (SRC) may be banked indefinitely, until:

(a) It is used to achieve a gallon of Off-Site Retention Volume~~off-site retention volume~~ (Offv) for one (1) year; or

(b) The Department retires it.

532.2 The Department shall retire an SRC if:

(a) An SRC owner submits a complete Department-provided application for retirement and the Department approves it; or

(b) A final determination to retire a SRC is made pursuant to this section.

532.3 Only the owner of an SRC may submit to the Department an application for retirement of that SRC.

532.4 An original SRC owner with an obligation to maintain a Best Management Practice (BMP) or land cover for a year for which the Department has certified an SRC may quit that obligation by submitting and receiving the Department's approval of a:

(a) Request that the Department retire the SRC corresponding to the year for which maintenance is required, if that SRC has not been used or sold;

(b) Request that the Department retire another SRC; or

(c) Payment of the in-lieu fee to the Department.

532.5~~532.3~~ If the Department determines that there is a retention failure associated with a certified SRC, the Department may:

(a) If the SRC has not been sold or used:

(1) Deny use of the SRC to achieve an Offv;

(2) Deny an application for transfer of ownership of the SRC;

(3) Retire the SRC; and

(4) Give notice to the owner of the SRC of the right to contest the denial or retirement through the administrative appeals process pursuant to Section 506 of this Chapter,~~chapter,~~ and give public notice of the denial or retirement on the Department's website for fifteen (15) days;

(b) If the SRC has been sold or used:

(1) Order the original SRC owner to replace the SRC with another SRC; or

(2) Assess on the original SRC owner the in-lieu fee corresponding to the SRC; and

(3) Give notice to the original SRC owner of the right to contest the determination through the administrative appeals process pursuant to Section 506 of this chapter.

532.6~~532.4~~ If a person fails to comply with the Department's order to replace an SRC or pay the in-lieu fee within sixty (60) days, the Department may assess an administrative late fee of ten percent (10%) of the corresponding in-lieu fee payment.

532.7~~532.5~~ If a retention failure associated with a SRC occurs, the Department may calculate compensatory SRCs and the in-lieu fee to reflect the time period for which the retention failure occurred.

532.8 If a retention failure associated with an SRC occurs or a SRC owner requests that the Department retire an SRC, the Department may pro-rate a SRC or an in-lieu fee payment accordingly.

533 STORMWATER MANAGEMENT: OWNERSHIP OF STORMWATER RETENTION CREDITS

533.1 A Stormwater Retention Credit (SRC) may be bought and sold.

533.2 No person may sell a SRC that:

(a) Has already been used to achieve an Off-Site Retention Volume~~off-site retention volume~~ (Offv); or

(b) The person does not own.

533.3 No person may complete a transfer of SRC ownership without receiving the Department's approval.

533.4 A complete application for transfer of SRC ownership shall be in writing on a Department-provided form that includes:

(a) The unique serial number of each SRC;

(b) Identification of the seller and the buyer, including contact information; and

(c) The purchase price.

533.5 Only the existing owner of an SRC (the seller) and the proposed SRC owner (the buyer) shall apply to transfer SRC ownership.

533.6 Before approving a transfer of SRC ownership, the Department shall verify the ownership and status of each SRC.

533.7 The Department shall undertake efforts to publicly share information of the price, purchase, sale, value, time, certification, and use of an SRC that is not personal, proprietary, a trade secret, or otherwise confidential.

534 STORMWATER MANAGEMENT: CERTIFICATION OF STORMWATER~~EXISTING~~ RETENTION CREDITS FOR A BEST MANAGEMENT PRACTICE OR LAND COVER INSTALLED BEFORE EFFECTIVE DATE OF STORMWATER RETENTION PERFORMANCE REQUIREMENTS

534.1 A person may apply for certification of a Stormwater Retention Credit (SRC) for a gallon of ~~existing~~ retention capacity ~~that increased retention relative to prior conditions~~ in a Best Management Practice (~~the limited circumstances described in this section.~~

~~534.2 The Department may certify an SRC for existing retention only if the~~ BMP) or land cover installed before the end of Transition Period One (TP1) or in compliance with a Stormwater Management Plan approved by the Department before~~that provides~~ the end of TP1 if:~~retention:~~

(a) The BMP or land cover was~~Was~~ installed after May 1, 2009; and

(b) The retention capacity meets the requirements for certification of a SRC, with the modifications in this section.

534.2 A gallon of retention capacity in an existing BMP or land cover is eligible for SRC certification if it meets the following eligibility requirements:

(a) The gallon retained by the BMP or land cover shall:

(1) Be in excess of the water quality treatment requirements in the Department's stormwater management regulations in place at the time the project was approved, or, for a site that was not regulated, in excess of pre-project retention;

(2) Be no more than the SRC ceiling; and

(3) Not be installed to comply with a stormwater management requirement of a statute, regulation, or court order, including for:

a. Reduction of Combined Sewer Overflows (CSOs) in compliance with the court-approved consent decree, including court-approved modifications, for reducing CSOs in the District of Columbia, except that ~~Achieves~~ retention capacity installed on an experimental basis as a requirement of the consent decree shall be eligible if a subsequent modification of the consent decree ends the requirement to maintain that retention capacity; or

(B) Compliance with a Watershed Implementation Plan established under a Total Maximum Daily Load for the Chesapeake Bay.

~~(a)~~(b) An as-built Stormwater Management Plan (SWMP) shall document the design, installation, and operation of the BMP or land cover in sufficient detail for the Department to determine its retention capacity in compliance with the specifications and calculations in the Department's Stormwater Management Guidebook (SWMG);~~(SWMG).~~

(c) A Department inspection shall be successfully completed within six (6) months before the Department decides to certify an SRC; and

(d) An executed maintenance contract or a signed promise to follow the Department-approved maintenance plan for the period of time for which the certification of SRCs is requested.

534.3 For the purposes of certifying an SRC for a BMP or land cover installed before the end of TP1 or in compliance with a SWMP approved by the Department before the end of TP1,~~existing retention,~~ a person shall submit the following as a complete application:

(a) A completed, Department-provided application form;

(b) If applicable, a~~A~~ copy of the Department-approved~~as-built~~ SWMP for the BMP or land cover ~~retention capacity~~ and the area draining into it, certified by a professional engineer licensed in the District of Columbia that the SWMP meets the requirements of this chapter;

(c) A copy of the as-built SWMP for the BMP or land cover and the area draining into it, certified by a professional engineer licensed in the District of Columbia that the SWMP meets the requirements of this chapter;

~~(c)~~(d) Documentation of pre-project site conditions~~ prior to installation of the retention capacity;~~;

~~(d)~~(e) An executed maintenance contract or a signed promise to follow a maintenance plan for the period of time for which the certification of SRCs is requested; ~~and~~

(f) A signed promise from the owner of the property on which the BMP or land cover is located to notify the Department if, during the period of time for which SRCs are certified, the property is sold or otherwise transferred to another person; and

~~(e)~~(g) Other documentation that the Department requires to determine that the eligibility requirements for certification of SRCs are satisfied.

535-539 [RESERVED]

540 SOIL EROSION AND SEDIMENT CONTROL: APPLICABILITY

540.1 No person shall engage in razing or land~~-~~-disturbing activity, including stripping, clearing, grading, grubbing, excavating, and filling of land, without obtaining the Department's approval of a soil erosion and sediment control plan, unless exempted in this chapter.

540.2 Notwithstanding any exemptions provided in this chapter,~~Chapter,~~ a person who engages in a demolition project that results in debris, dust, or sediment leaving the site shall apply each necessary control measure, upon receiving instruction to do so by the Department.

540.3 Notwithstanding any exemptions provided in this chapter, a person who exposes erodible material and causes erosion shall apply each necessary control measure, upon receiving instruction to do so by the Department.

540.4 A person who applies for Department approval of a soil erosion and sediment control plan shall be the owner of the property where the activity is to take place.

540.5 The ~~owner's designation of an agent does not remove the owner's responsibility, liability, or obligation under this chapter.~~

~~540.6 The~~ approved soil erosion and sediment control plan shall govern all construction work ~~on the property~~ requiring the control of soil erosion and sediment.

540.6~~540.7~~ At the Director's discretion, the Department may establish conditions for a general or blanket approval of soil erosion and sediment control plans that are solely covering specified activities carried out under and complying with specifications approved by the Department. These conditions may include requirements for an applicant to provide notice to the Department and comply with inspections as would normally be required under this chapter. The Department shall establish and revise any such conditions as necessary and publish them on its website as updates to the District of Columbia Standards and Specifications for Soil Erosion and Sediment Control.

541 SOIL EROSION AND SEDIMENT CONTROL: EXEMPTIONS

541.1 The following land-~~-~~disturbing activities are exempt from the requirement to comply with the soil erosion and sediment control provisions of this chapter, except as noted below and in Section 540 (Soil Erosion and Sediment Control: Applicability):

(a) For an individual house, townhouse, or rowhouse:

(1) Gardening;

(2) Landscaping;

(3) Repairs;

(4) Maintenance;

(5) Stormwater retrofits, provided that:

(A) The soil allows for percolation; and

(B) The retrofit location is no closer than ten feet (10 ft.) from a building foundation;

(6) Utility service connection, repair, or upgrade;

(b) A project for which the total cost is less than nine thousand dollars ($9,000);

(c) Tilling, planting, or harvesting of agricultural or horticultural crops;

(d) Installation of fencing, a gate, signpost, or a pole;

(e) Emergency work to protect life, limb or property, and emergency repairs, except that the following is not exempted to the extent described:

(1) The land disturbed must still be shaped and stabilized in accordance with the requirements of this chapter;

(2) Generally applicable control measures shall be used; and

(3) A plan shall be submitted within three (3) weeks after beginning the emergency work; and

(f) Activities that disturb less than fifty square feet (50 ft^2).

542 SOIL EROSION AND SEDIMENT CONTROL: PLAN

542.1 The soil erosion and sediment control plan shall not be approved without the date and signature of the Director or the Director's designee stamped on the plan.

542.2 The approved soil erosion and sediment control plan for a project shall be available on site for Department review for the entire period of construction during ordinary business hours.

542.3 The Department shall approve a soil erosion and sediment control plan only if the Department determines the following:

(a) The plan meets the requirements of this chapter and of the Department's Standards and Specifications for Soil Erosion and Sediment Control;

(b) The applicant has paid each applicable fee; and

(c) The applicant has certified, in writing, that he or she will implement each control measure specified in the plan.

542.4 The Department may, with respect to a soil erosion and sediment control plan:

(a) Reject a submission as incomplete;

(b) Approve;

(c) Deny;

(d) Approve or deny in part; and

(e) Require conditions or modifications.

542.5 If a plan is disapproved, the Department shall notify the applicant in writing, providing the specific reasons for the disapproval of the plan.

542.6 The Department may suggest modifications, terms, and conditions necessary to comply with the requirements of this chapter.

542.7 A soil erosion and sediment control plan may cover multiple phases of a project.

542.8 The applicant shall submit two (2) sets of prints of the soil erosion and sediment control plan to the Department for review.

542.9 The applicant shall, at a minimum, provide the following information on the soil erosion and sediment control plan:

(a) A title that indicates the plan is a soil erosion and sediment control plan;

(b) A project narrative;

(c) The address of the property;

(d) The lot, square, or parcel numbers;

(e) The name, address, and telephone number of:

(1) The property owner;

(2) The developer; and

(3) The plan designer;

(f) For sites where work will be done on slopes in excess of fifteen percent (15%), the seal and signature of a professional engineer, licensed in the District of Columbia;

(g) A vicinity sketch indicating north arrow, scale, and other information necessary to locate the property;

(h) One of the following horizontal scales of profile, unless otherwise approved:

(1) One inch equals ten feet (1 in. = 10 ft);

(2) One inch equals twenty feet (1 in. = 20 ft);~~ft.);~~

(3) One inch equals thirty feet (1 in. = 30 ft);~~ft.);~~

(4) One inch equals forty feet (1 in. = 40 ft);~~ft.);~~

(5) One inch equals fifty feet (1 in. = 50 ft);~~ft.);~~ or

(6) One inch equals eighty feet (1 in. = 80 ft);~~ft.);~~

(i) One of the following vertical scales of profile, unless otherwise approved:

(1) One inch equals two feet (1 in. = 2 ft);

(2) One inch equals four feet (1 in. = 4 ft);~~ft.);~~

(3) One inch equals five feet (1 in. = 5 ft);~~ft.);~~ or

(4) One inch equals ten feet (1 in. = 10 ft);~~ft.);~~

(j) Existing features that may be relevant factors in the development of an erosion prevention plan, such as vegetation, wildlife habitat, water areas, and topsoil conditions;

(k) The existing and proposed topography, including clear identification of all areas of slope greater than fifteen percent (15%);

(l) The proposed grading and earth disturbance including:

(1) Surface area involved;

(2) Volume of spoil material;

(3) Volume of borrow material; and

(4) Limits of clearing and grading including limitation of mass clearing and grading whenever possible;

(m) Storm drainage provisions, including:

(1) Velocities and quantities of flow from a sediment control measure to an approved point of discharge; and~~at outfalls; and~~

(2) Site conditions around each point of surface water discharge from the site;

(n) Erosion and sediment control provisions to minimize on-site erosion and prevent off-site sedimentation including:

(1) Provisions specified to ensure land disturbance does not extend beyond the proposed area of disturbance;

(2) Details of grading practices that will be used on the site;~~:~~

(3) Methods to minimize, to the extent practicable, off-site vehicle tracking of sediment and generation of dust; and

(4) Design details for structural control measures, including size and location of each erosion and sediment control measure, including:

(A) Use of a crushed stone dike on each access road that is above grade; and

(B) Use of a stabilized construction entrance for a construction project on each access road;

(o) Details of each interim and permanent stabilization measure, including statement of intent to adhere to the following, by placing the statement on the soil erosion and sediment control plan:

"Following initial land disturbance or re-disturbance, permanent or interim stabilization shall be completed within seven (7) calendar days for the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than three (3) horizontal to one (1) vertical (3:1); and fourteen (14) days for all other disturbed or graded areas on the project site. The requirements of this paragraph do not apply to those areas which are shown on the plan and are being used for material storage other than stockpiling, or for those areas on which actual construction activities are being performed. Maintenance shall be performed as necessary so that stabilized areas continuously meet the appropriate requirements of the District of Columbia Standards and Specifications for Soil Erosion and Sediment Control;"

(p) The sequence of construction, including:

(1) A description of the relationship between the implementation and maintenance of controls, including permanent and interim stabilization and the various stages or phases of earth disturbance and construction; and

(2) A sequence~~schedule and time frame~~ for each of the following activities:

(A) Clearing and grubbing for those areas necessary for installation of perimeter controls;

(B) Construction of perimeter controls;

(C) Remaining clearing and grubbing;

(D) Road grading;

(E) Grading for the remainder of the site;

(F) Utility installation, including the use or blocking of storm drains after construction;

(G) Final grading, landscaping, or stabilization; and

(H) Removal of controls;

(q) A general description of the predominant soil types on the site, as described by the appropriate soil survey information available from the United States Department of Agriculture National Resources Conservation Service;

(r) Recommendations~~A soils report, including recommendations~~ for areas with unstable soils from a professional engineer licensed~~, identified~~ in the ~~Christiana Sunnyside Association by the~~ District of Columbia~~; Soil Survey. This soils report shall be obtained from a geotechnical engineering entity;~~ and

(s) A statement placed on the soil erosion and sediment control plan stating that the applicant shall contact the Department to schedule a preconstruction~~pre-construction~~ meeting before the commencement of a land--disturbing activity.

542.10 After receiving notification that a soil erosion and sediment control plan meets the requirements for the Department's approval, the applicant shall submit a final preconstruction application including:

(a) One (1) Mylar copy of the plan, except for a site that disturbs less than five thousand square feet (5,000 ft^2) of land;

(b) Seven (7) paper copies of the plan, except a site that disturbs less than five thousand square feet (5,000 ft^2) of land shall submit four (4) paper copies; and

(c) Proof that each applicable fee for Department services has been paid.

542.11 The Department shall issue the approved copies of the soil erosion and sediment control plan after the applicant has submitted proof that each applicable fee for Department services has been paid.

542.12~~542.10~~ Following approval of the plan, the applicant shall request the Department's approval at each of the following stages of construction:

(a) Installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading; and

(b) Final stabilization of the site before the removal of erosion and sediment controls. Final stabilization means that all land-~~-~~disturbing activities at the site have been completed and either of the following two (2) criteria are met:

(1) A uniform (for example, evenly distributed, without large bare areas) perennial vegetative cover with a density of seventy percent (70%) of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or

(2) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

542.13 Except that this subsection shall automatically lapse if the Department implements separate regulations for groundwater protection and dewatering, if a person engaged in land-disturbing activity sees or smells contaminated groundwater or soil or determines as the result of laboratory analysis that groundwater or soil is contaminated, as defined in the District of Columbia Brownfield Revitalization Amendment Act of 2000, effective June 13, 2001, as amended (D.C. Law 13-312; D.C. Official Code §§ 8-631 *et seq.*) or the Underground Storage Tank regulations at 20 DCMR Chapter 62:

(a) That person or~~542.11 When a person sees or smells or determines as the result of other analysis that contaminated groundwater or soil has been encountered during land disturbing activity,~~ the applicant shall notify the Department immediately by the most expeditious means possible, and then in writing;~~writing.~~

(b) The Department may prohibit or limit the use of an infiltration BMP on the site; and

~~(b)~~(c) On a site that has~~542.12 When~~ contaminated groundwater that will be dewatered~~is encountered~~ during or after construction~~land disturbing activity on an area that drains to a District waterbody~~ directly or through

the separate storm sewer system into a District waterbody,~~,~~ the applicant shall submit as soon as practicable to the Department for review and approval a separate detailed dewatering pollution reduction plan~~, for reducing or eliminating contamination from the discharge,~~ which shall include:

(1) A site description;

(2) Identification of the potential source of the contaminant;

(3) Description of control measures to reduce contamination sufficient to prevent discharge in excess of the District's surface water quality standards;~~pollutant discharges;~~

(4) Monitoring procedures and a monitoring schedule;

(5) A maintenance and inspection schedule;

(6) Record keeping and reporting; and

(7) Contact information for an on-site responsible person, including mobile phone and email address.

542.14~~542.13~~ A soil erosion and sediment control plan shall be designed in compliance with this chapter by a District-licensed:

(a) Professional engineer;

(b) Land surveyor; or

(c) Architect.

542.15~~542.14~~ In support of a plan which it submits for approval, the applicant shall provide additional available~~technical~~ information that the Department considers necessary to demonstrate compliance with erosion and sediment control requirements in this chapter.

542.16~~542.15~~ A copy of each approved plan shall be at the construction site from the date of commencement of the construction activities to the date of final stabilization and shall be made available for the Department's inspection.

543 SOIL EROSION AND SEDIMENT CONTROL: REQUIREMENTS

543.1 Erosion and sediment control measures~~, including waterway crossing and stream bank protection measures,~~ shall be those the Department approves.

543.2 The Department shall maintain a copy of its Standards and Specifications for Soil Erosion and Sediment Control on its website and make a hard copy available for review at its offices.

543.3 Soil erosion and sediment control measures shall prevent transportation of sediment from the site.

543.4 Waterway crossing and stream bank protection measures designed and installed in compliance with the Department's Standards and Specifications for Soil Erosion and Sediment Control shall be assumed to be adequate for that purpose.

543.5 A best management practice~~Best Management Practice (BMPs)~~ shall be protected from sedimentation and other damage during construction to ensure proper post-construction operation.

543.6~~543.5~~ Erosion and sediment control measures shall be in place before and during land disturbance, except as otherwise specifically stated.

543.7~~543.6~~ Erosion and sediment control measures shall be in place to stabilize an exposed area as soon as practicable after construction activity has temporarily or permanently ceased but no later than fourteen (14) days following cessation, except that temporary or permanent stabilization shall be in place at the end of each day of underground utility work that is not contained within a larger development site.

543.8~~543.7~~ Permanent stabilization of streets and parking areas shall be with base course crushed stone or other Department-approved measures.

543.9~~543.8~~ Measures shall be implemented and corrective action taken, including as specified by the Department, to prevent the discharge to District sewers or District waterbodies of erodible material or waste material including those materials that have been transported off site.

543.10~~543.9~~ A site disturbing greater than five thousand square feet (5,000 ft^2) of land shall:

(a)~~-~~ Adhere to a Stormwater Pollution Prevention Plan (SWPPP) that:

~~(1)~~(2) The Department provides in its Stormwater Management Guidebook,

~~(2)~~(3) The Department approves as including the minimum measures in the Department-provided SWPPP; or

~~(3)~~(4) Is required under the Construction General Permit issued by Region III of the United States Environmental Protection Agency;~~Agency,;~~ and

(b) Post a legible copy of the SWPPP on site.

543.11
~~543.10~~ A person shall avoid work on a slope in excess of fifteen percent (15%), to the maximum extent practicable. Where avoidance is not practicable, the Soil Erosion and Sediment Control Plan for the site shall be designed, signed, and sealed by a professional engineer, licensed in the District of Columbia, and the applicant shall incorporate additional protection strategies which the Department may require in order to prevent erosion or transportation of sediments from the site.

543.12~~543.11~~ Except on an area that is undergoing construction, perimeter controls that disturb land, including dikes, swales, ditches, and perimeter slopes, shall be stabilized within one (1) week of initial land disturbance or redisturbance:

(a) On the surface of each disturbed area; and

(b) On each associated slope greater than three (3) horizontal to one (1) vertical (3:1).

543.13~~543.12~~ Runoff from the site shall be controlled by either diverting or conveying the runoff through areas with erosion and sediment control measures, such as through the installation of lined conveyance ditches, channels, or checkdams.

543.14~~543.13~~ Critical area stabilization shall be applied to each cut and fill slope:

(a) That is equal to or steeper than 3:1;

(b) That is flatter than 3:1 if the Department determines that the soil characteristics require it; and

(c) To every cut and fill slope when construction is out-of-season for planting and until permanent protection can be provided.

543.15~~543.14~~ If the Department determines that a cut and fill slope is likely to result in erosion by stormwater of sediment from the site onto adjacent property or a nearby waterbody, then the cut and fill slope shall be protected against erosion by the use of structural diversions that are protected by vegetation or matting, in a frequency and manner that a geotechnical or civil engineer licensed in the District of Columbia has determined, based on site conditions, is sufficient to prevent erosion.

543.16

~~543.15~~ Stockpiled material:

(a) That is actively being used during a phase of construction shall be protected against erosion by establishing and maintaining perimeter controls around the stockpile; and

(b) That is not being actively used or added to shall be stabilized with mulch, temporary vegetation, hydro-seed or plastic within fifteen (15) calendar days after its last use or addition.

543.17~~543.16~~ Sediment traps or basins and other erosion and sediment controls shall be:

(a) Installed no later than the first phase of land grading;

(b) Installed as soon as new site-related runoff is detected; and

(c) Employed at all times to protect inlets or storm sewers below silt-producing areas.

543.18~~543.17~~ Debris basins, diversions, waterways, and related structures shall be seeded and mulched, or have sod or a stabilization blanket installed immediately after they are built.

543.19~~543.18~~ Construction site access measures to minimize off-site vehicle tracking shall~~-~~:

(a) Be installed no later than the first day of construction;

(b) Stabilize each construction entrance;

(c) Include each additional measure required to keep sediment from being:

(1) Tracked, or otherwise carried, onto public streets by construction vehicles; and

(2) Washed into a storm drain or waterway; and

(d) Comply with all other Department requirements.

543.20~~543.19~~ Off-site accumulations of sediment:

(a) Shall be removed daily during construction; and

(b) Shall be removed immediately if the Department so requires after an inspection.

543.21~~543.20~~ Maintenance shall be performed to prevent stabilized areas from becoming unstabilized.

543.22~~543.21~~ A sign that notifies the public to contact the Department in the event of erosion or other pollution shall be prominently posted on every site subject to this chapter, and the sign shall:

(a) Be in plain view of and readable by the public at a distance of twelve feet (12 ft);~~ft.);~~

(a) Be placed at each entrance to the site or as directed by the Department; and

(b) Provide contact information identified by the Department, including telephone numbers and email address.

544 SOIL EROSION AND SEDIMENT CONTROL: ROADWAY PROJECTS

544.1 Rough graded rights-of-way awaiting installation of utilities or pavement shall be protected by the installation of:

(a) Interceptor ~~interceptor~~ dikes across rights-of-way so located as to limit roadway grade to a length between dikes of not more than five hundred feet (500 ft); or~~ft.).~~

(b) Alternative controls that are recommended by a Professional Engineer (PE) licensed in the District of Columbia and that are approved by the Department.

544.2 Temporary diversion dikes and flumes, or alternative controls that are recommended by a PE licensed in the District of Columbia and that are approved by the Department, shall be used to carry runoff down cut-and-fill slopes to an outlet approved by the Department as part of the soil erosion and sediment control plan.

544.3 A permanent drainage structure, including diversions at top-of-slope cuts and diversions to lead runoff to a storm sewer or other suitable outlet, shall be installed at the completion of rough grading, unless the Department approves an alternative that has been recommended by a PE licensed in the District of Columbia.~~grading.~~

545 SOIL EROSION AND SEDIMENT CONTROL: BUILDINGS, DEMOLITION, RAZING, AND SITE DEVELOPMENT

545.1 Erosion shall be controlled by the installation of gutters and downspouts as soon as practicable.

545.2 Measures shall be taken to achieve a non-eroding velocity for stormwater exiting from a roof or downspout or to temporarily pipe that stormwater directly to a storm drain.

545.3 The site work shall maximize the preservation of natural vegetation and limit the removal of vegetation to that which is necessary for construction or landscaping activity.

545.4 If site conditions preclude employment of other means of erosion control, the Department may approve installation of small dikes constructed along a low-lying perimeter area of a job site.

545.5 In an area along a waterbody, a buffer must be established:

(a) By not disturbing the land immediately adjacent to the waterbody, except to restore native vegetation;

(b) Of at least twenty-five feet (25 ft)~~ft.)~~ on both sides of the water body, measured perpendicular to and horizontally from the top of bank; and

(c) With vegetation or other measure required by the Department to insure that the buffer acts as a filter to trap sediment and keep it onsite.

545.6 The Department may approve an exception to or modification of the requirement for a project to establish a buffer if:

(a) During construction, the~~The~~ project employs the control measures specified in the~~each~~ Department-approved Soil Erosion~~alternative practice to provide comparable protection against erosion during construction~~ and Sediment Control Plan for the project; and

~~(a)~~(b) By~~, by~~ the end of construction and thereafter, the project:~~to:~~

(1) Achieves a 1.7 inch Stormwater Retention Volume (SWRv) for the area of land disturbance within the buffer, calculated using the SWRv formula in Section 520 of this chapter, with a P equal to 1.7 inches;

(2) Applies~~Apply~~ for relief from extraordinarily difficult site conditions for a portion of the 1.7 inch SWRv and achieves the treatment and off-site retention requirements for the volume of relief granted; or

(3) Receives a ~~If the~~ Department determination~~determines~~ to grant relief for a portion of a the 1.7 inch SWRv, ~~for a project but~~ on-site treatment is not feasible, and the Department approves

alternatives to on-site treatment that will help~~may approve alternative measures~~ to protect or restore the waterbody for which the buffer is intended; and

~~(b)~~(c) The land disturbance is:

(1) Required to construct, install, or repair a:

(A) Public trail~~s~~ for walking, biking, and similar purposes;

(B) Public point~~s~~ of access for boating, fishing, or~~and~~ viewing a waterbody;~~waterbodies;~~ or

(C) Stormwater~~A stormwater~~ outfall or other utility line; or

~~(2) Required to enable Of an area that was impervious before the project, if the requirement to establish a buffer in that area would make the proposed project unviable; or~~

~~(3)~~(2) ~~(3) Of a compacted or natural area, if the requirement to establish a buffer in that area would prevent~~ development of the rest of the site in a manner that is similar to the proposed project.

546 SOIL EROSION AND SEDIMENT CONTROL: UNDERGROUND UTILITIES

546.1 If the land-~~-~~disturbing activity involves work on an underground utility, the site shall comply with the following requirements:

(a) No more than five hundred linear feet (500 ft)~~ft.)~~ of trench shall be open at any one time;

(b) All excavated material shall be placed on the uphill side of a trench;

(c) Interim or permanent stabilization shall be installed upon completion of refilling; and

(d) When natural or artificial grass filter strips are used to collect sediment from excavated material, mulches and matting shall be used in order to minimize erosion of these materials.

547 SOIL EROSION AND SEDIMENT CONTROL: RESPONSIBLE PERSONNEL

547.1 If a site involves a land disturbance of five thousand square feet (5,000 ft^2) or more, the owner of the site and the site manager shall ensure that a responsible person is present or available as this section requires.

547.2 A responsible person shall, while the site is in a phase involving land-disturbing activity, ensure that the activity complies with this chapter by:

(a) Inspecting the site and its erosion and sediment control measures at least once biweekly and after a rainfall event to identify and remedy each potential or actual erosion problem;

(b) Being available to respond to each potential or actual erosion problem identified by construction personnel; and

(c) Being available to speak on site with the Department to remedy each potential or actual erosion problem.

547.3 A responsible person shall be:

(a) Licensed in the District of Columbia as a civil or geotechnical engineer, a land surveyor, or architect; or

~~(a)~~(b) Certified ~~certified~~ through a training program that the Department approves, including a course on erosion control provided by another jurisdiction or professional association.

547.4 During construction, the responsible person shall have available on site proof of professional licensing or~~documentation~~ of successful completion of a Department-approved training program.

547.5 A Department-approved training program shall cover the following topics, as demonstrated in the training syllabus:

(a) The detrimental effects of sediment pollution to waterbodies;

(b) The benefits of proper and effective erosion and sediment control implementation and maintenance;

(c) The purpose and provisions of the District of Columbia erosion and sediment control laws, rules, and regulations;

(d) A description of sediment as a pollutant;

(e) The process of:

(1) Erosion;

(2) Sediment transport; and

(3) Sediment deposition;

(f) Proper implementation of erosion and sediment control;

(g) Recognition and correction of improperly implemented erosion and sediment controls;

(h) Proper maintenance of erosion and sediment controls; and

(i) Responsibilities of supervisory and enforcement personnel.

548-551 ~~548-552~~ [RESERVED]

552 TRANSITION

552.1 Sections 500 through 545, 546, 547, and 599 of this chapter shall be enforced immediately upon publication as final, except as described below.

552.2 The Department shall enforce a transition to the stormwater management performance requirements in §§ 520 through 522, as follows:

(a) A major regulated project submitting a Stormwater Management Plan (SWMP) in support of a building permit application before the end of Transition Period One (TP1), shall:

(1) Be exempt from the requirements of §§ 520 through 522;

(2) Comply with the preceding stormwater management requirements for water quality treatment and detention, in 21 DCMR §§ 529-30 (as published at 35 DCR 21 (January 1, 1988)), as amended and effective through June 30, 2013; and

(3) Have the right to generate each applicable Stormwater Retention Credit for each gallon of eligible retention capacity in excess of the water quality treatment requirements in subparagraph (2).

(b) A major land-disturbing activity submitting a SWMP in support of a building permit application after TP1 and before the end of Transition Period Two A (TP2A) and a major substantial improvement activity submitting a SWMP in support of a building permit application after TP1 and before the end of Transition Period Two B (TP2B) shall comply with this chapter, except that:

(1) The requirement in § 520 to achieve a minimum of fifty percent (50%) of the 1.2 inch Stormwater Retention Volume (SWRv) on site shall be waived; and

(2) The entire SWRv may be achieved off-site, in accordance with § 527.

(c) A major regulated project submitting a SWMP in support of a building permit application, for an area that was described explicitly in an Advanced Design (AD) and for which the approval of the AD reviewing body has not expired, shall comply with:

(1) Paragraph (a) of this subsection, if the AD was submitted before the end of TP1; and

(2) Paragraph (b) of this subsection, if the AD was submitted after TP1 and before the end of TP2A, for a major land-disturbing activity or before the end of TP2B, for a major substantial improvement activity.

(d) An area of a multi-phased major land-disturbing activity for which each stormwater infrastructure and best management practice required in a Department-approved SWMP was installed during a preceding phase of construction shall be deemed to have achieved compliance with the stormwater management requirements of this chapter and shall not be required to submit a separate SWMP to support a building permit application.

552.3 A major regulated project shall comply with the stormwater management requirements of §§ 552.1 and 552.2 that are enforced at the time it submits a SWMP if:

(a) The project must re-apply for a building permit because the preceding permit has expired under 12A DCMR § 105.5 or the permit application had been abandoned under 12A DCMR § 105.3.2; or

(b) The project applies for a building permit after the approving body's approval of an AD has expired.

552.4 This section shall be narrowly construed, and nothing in this section shall be interpreted to otherwise affect the enforcement of the other requirements and procedures in this chapter.

Section 599 is amended to delete the section and replace it with the following:

599 DEFINITIONS

599.1 When used in this chapter, the following terms and phrases shall have the meanings ascribed:

Advanced Design (AD) - Detailed design for an area of a project described explicitly in a:

(a) Stage Two (2) Planned Unit Development (PUD) application to the District Zoning Commission;

(b) Application for design review under the Capitol Gateway Overlay District to the District Zoning Commission; and

(c) Final design submission to the National Capital Planning Commission (NCPC).

Anacostia Waterfront Development Zone (AWDZ) - the following areas of the District of Columbia, as delineated on a map in the Department's Stormwater Management Guidebook:

(a) Interstate 395 and all rights-of-way of Interstate 395, within the District, except for the portion of Interstate 395 that is north of E Street, S.W., or S.E.;

(b) All land between that portion of Interstate 395 that is south of E Street, S.W., or S.E., and the Anacostia River or Washington Channel;

(c) All land between that portion of Interstate 695, and all rights of way, that are south of E Street, S.W. or S.E., and the Anacostia River;

(d) The portion of Interstate 295 that is north of the Anacostia River, within the District, and all rights-of-way of that portion of Interstate 295;

(e) All land between that portion of Interstate 295 that is north of the Anacostia River and the Anacostia River;

(f) The portions of:

(1) The Anacostia Freeway that are north or east of the intersection of the Anacostia Freeway and Defense Boulevard and all rights-of-way of that portion of the Anacostia Freeway;

(2) Kenilworth Avenue that extend to the northeast from the Anacostia Freeway to Eastern Ave; and

(3) Interstate 295, including its rights-of-way~~,~~ that are east of the Anacostia River and that extends to the southwest from the Anacostia Freeway to Defense Boulevard.

(g) All land between those portions of the Anacostia Freeway, Kenilworth Avenue, and Interstate 295 described in paragraph (6) of this section and the Anacostia River;

(h) All land that is adjacent to the Anacostia River and designated as parks, recreation, and open space on the District of Columbia Generalized Land Use Map, dated January 2002, except for the land that is:

(1) North of New York Avenue, N.E.;

(2) East of the Anacostia Freeway, including rights-of-way of the Anacostia Freeway;

(3) East of the portion of Kenilworth Avenue that extends to the northeast from the Anacostia Freeway to Eastern Avenue;

(4) East of the portion of Interstate 295, including its rights-of-way, that is east of the Anacostia River and that extends to the southwest from the Anacostia Freeway to Defense Boulevard, but excluding the portion of 295 and its rights-of-way that go to the northwest across the Anacostia River;

(5) Contiguous to that portion of the Suitland Parkway that is south of Martin Luther King, Jr. Avenue; or

(6) South of a line drawn along, and as a continuation both east and west of the center line of the portion of Defense Boulevard between Brookley Avenue, S.W., and Mitscher Road, S.W.;

(i) All land, excluding Eastern High School, that is:

(1) Adjacent to the land described in paragraph (8) of this section;

(2) West of the Anacostia River; and

(3) Designated as a local public facility on the District of Columbia Generalized Land Use Map, dated January 2002;

(j) All land that is:

(1) South or east of that portion of Potomac Avenue, S.E., between Interstate 295 and 19th Street, S.E.; and

(2) West or north of the Anacostia River;

(k) The portion of the Anacostia River within the District; and

(l) The Washington Channel.

Anacostia Waterfront Development Zone Site (AWDZ site) - A site within the Anacostia Waterfront Development Zone ~~(AWDZ)~~ that undergoes a major regulated project that is publicly owned or publicly financed.

Animal confinement area - An area, including a structure, used to stable, kennel, enclose, or otherwise confine animals, not including confinement of a domestic animal on a residential property.

Applicant - A person or their agent who applies for approval pursuant to this chapter.

As-built plan - A set of architectural, engineering, or site drawings, sometimes including specifications~~,~~ that certifies, describes, delineates, and presents details of a completed construction project.

Best Management Practice (BMP) - Structural or nonstructural practice that minimizes the impact of stormwater runoff on receiving waterbodies and other environmental resources, especially by reducing runoff volume and the pollutant loads carried in that runoff.

Buffer - An area along a stream, river, or other natural feature that provides protection for that feature.

Building permit - Authorization for construction activity issued by the District of Columbia Department of Consumer and Regulatory Affairs.

Clearing - The removal of trees and brush from the land excluding the ordinary mowing of grass, pruning of trees or other forms of long-term landscape maintenance.

Common plan of development - Multiple, separate, and distinct land-~~-~~disturbing, substantial improvement, or other construction activities taking place under, or to further, a single, larger plan, although they may be taking place at different times on different schedules.

Compacted cover - An area of land that is functionally permeable, but where permeability is impeded by increased soil bulk density as compared to natural cover, such as through grading, construction, or other activity and will require regular human inputs such as periodic planting, irrigation, mowing, or fertilization. Examples include landscaped planting beds, lawns, or managed turf.

Control measure - Technique, method, device, or material used to prevent, reduce, or limit discharge.

Construction - Activity conducted for the:

(a) Building, renovation, modification, or razing of a structure; or

(b) Movement or shaping of earth, sediment, or a natural or built feature.

Critical area stabilization - Stabilization of areas highly susceptible to erosion, including down-slopes and side-slopes, through the use of brick bats, straw, erosion control blanket mats, gabions, vegetation, and other control measures.

Cut - An act by which soil or rock is dug into, quarried, uncovered, removed, displaced, or relocated and the conditions resulting from those actions.

Demolition - The removal of part or all of a building, structure, or built land cover.

Department - The District Department of the Environment or its agent.

Detention - Controlling the peak discharge rate of stormwater from a site.

Dewatering - Removing water from an area or the environment using an approved technology or method, such as pumping.

Director - The Director of the District Department of the Environment.

District - The District of Columbia.

Drainage area - Area contributing runoff to a single point.

Easement - A right acquired by a person to use another person's land for a special purpose.

Electronic media - Means of communication via electronic equipment, including the internet.

Erosion - The process by which the ground surface, including soil and deposited material, is worn away by the action of wind, water, ice, or gravity.

Excavation - An act by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced or relocated and the conditions resulting from those actions.

~~**Existing retention** - Retention on a site, including by each existing Best Management Practice (BMP) and land cover, before retrofit of the site with installation of a new BMP or land cover.~~

Exposed area - Land that has been disturbed or land over which unstabilized soil or other erodible material is placed.

Grading - Causing disturbance of the earth, including excavating, filling, stockpiling of earth materials, grubbing, root mat or topsoil disturbance, or any combination of them.

Impervious cover - A surface area which has been compacted or covered with a layer of material that impedes or prevents the infiltration of water into the ground, examples include conventional streets, parking lots, rooftops, sidewalks, pathways with compacted

sub-base, and any concrete, asphalt, or compacted gravel surface and other similar surfaces.

Infiltration - The passage or movement of surface water through the soil profile.

Land cover - Surface of land that is impervious, compacted, or natural.

Land cover change - Conversion of land cover from one type to another, typically in order to comply with a requirement of this chapter or to earn certification of a Stormwater Retention Credit.

Land-disturbing activity - Movement of earth, land, or sediment that disturbs the land surface and the~~and~~ related use of pervious land to support that movement. Land-disturbing activity ~~This~~ includes stripping, grading, grubbing, trenching, excavating, transporting, and filling of land, as well as the use of pervious adjacent land for movement and storage of construction vehicles and materials. Land-disturbing activity does not include repaving or remilling that does not expose the underlying soil.

Low Impact Development (LID) - A land planning and engineering design approach to manage stormwater runoff within a development footprint. It emphasizes conservation, the use of on-site natural features, and structural best management practices to store, infiltrate, evapotranspire, retain, and detain rainfall as close to its source as possible with the goal of mimicking the runoff characteristics of natural cover.

Major land-disturbing activity - Activity that disturbs, or is part of a common plan of development that disturbs, five thousand square feet (5,000 ft^2) or greater of land area, except that multiple distinct areas~~projects~~ that each disturb less than 5,000 ft^2 of land and that are in separate, non-adjacent sites do not constitute a major land-disturbing activity.

Major regulated project - A major land-disturbing activity or a major substantial improvement activity.

Major substantial improvement activity - Substantial improvement activity and associated land-disturbing activity, including such activities that are part of a common plan of development, for which the combined footprint of improved building and land-disturbing activity is five thousand square feet (5,000 ft^2) or greater. A major substantial improvement activity may include a substantial improvement activity that is not associated with land disturbance.

Market value of a structure - Assessed value of the structure for the most recent year, as recorded in the real property assessment database maintained by the District of Columbia's Office of Tax and Revenue.

Natural cover - Land area that is dominated by vegetation and does not require regular human inputs such as irrigation, mowing, or fertilization to persist in a healthy condition. Examples include forest, meadow, or pasture.

Nonstructural Best Management Practice (BMP) - A land use, development, or management strategy to minimize the impact of stormwater runoff~~,~~ including conservation of natural cover~~,~~ or disconnection of impervious surface.

Off-site retention - Use of a stormwater retention credit or payment of in-lieu fee in order to achieve an off-site retention volume under these regulations.

Off-Site Retention Volume (Offv) - A portion of a required stormwater retention volume or required Water Quality Treatment Volume that is not retained on site.

On-site retention - Retention of a site's stormwater on that site or via conveyance to a shared best management practice on another site.

On-site stormwater management - Retention, detention, or treatment of stormwater on site or via conveyance to a shared best management practice.

Original Stormwater Retention Credit (SRC) owner ~~--~~ A person who is indicated as the proposed SRC owner in an application to the Department for the certification of an SRC. The proposed SRC owner becomes the original SRC owner upon the Department's certification of the SRC.

Owner - The person who owns real estate or other property, or that person's agent.

Peak discharge - The maximum rate of flow of water at a given point and time resulting from a storm event.

Person - A legal entity, including an individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, cooperative, the District government and its agencies, and the federal government and its agencies.

Post-development - Describing conditions that may be reasonably expected to exist after completion of land development activity on a site.

Practice - A system, device, material, technique, process, or procedure that is used to control, reduce, or eliminate an impact from stormwater; except where the context indicates its more typical use as a term describing a custom, application, or usual way of doing something.

Pre-development - Describing conditions of meadow land and its relationship to stormwater before human disturbance of the land.

Pre-project - Describing conditions, including land covers, on a site that exist before~~at~~ the construction described in~~time that~~ a stormwater management plan has begun. ~~is submitted to the Department.~~

Publicly-owned or publicly-financed project – A project: ~~– Project:~~

(a) That is District-owned or District-instrumentality owned;

(b) Where at least fifteen percent (15%) of a project's total cost is District-financed or District-instrumentality financed; or

(c) That includes a gift, lease, or sale from District-owned or District instrumentality-owned property to a private entity.

Public Right of Way (PROW) - The surface, the air space above the surface (including air space immediately adjacent to a private structure located on public space or in a public right of way), and the area below the surface of any public street, bridge, tunnel, highway, lane, path, alley, sidewalk, or boulevard.

Public Space - All the publicly owned property between the property lines on a street, park, or other public property as such property lines are shown on the records of the District, and includes any roadway, tree space, sidewalk, or parking between such property lines.

Raze - The complete removal of a building or other structure down to the ground or to its foundation. ~~-~~

Record drawing - The final annotated set of engineering drawings for a construction project, which includes all deviations, field changes, approved changes, constructed depths of footing and structural elements, and horizontal and vertical locations of utility facilities referenced to survey data.

Responsible person - Construction personnel knowledgeable in the principles and practices of erosion and sediment control and certified by a Department-approved soil erosion and sedimentation control training program to assess conditions at the construction site that would impact the effectiveness of a soil erosion or sediment control measure on the site.

Retention - Keeping a volume of stormwater runoff on site through infiltration, evapo-transpiration, storage for non-potable use, or some combination of these.

Retention capacity - The volume of stormwater that can be retained by a best management practice or land cover.

Retention failure - Failure to retain a volume of stormwater for which there is an obligation to achieve retention, including retention that an applicant promises to achieve in order to receive Department-certified Stormwater Retention Credits. ~~(SRCs).~~ Retention failure may result from a failure in construction, operation, or maintenance; a change in stormwater flow; or a fraud, misrepresentation, or error in an underlying premise in an application.

Retrofit - A best management practice or land cover installed in a previously developed area to improve stormwater quality or reduce stormwater quantity relative to current conditions.

Runoff - That portion of precipitation (including snow-melt) which travels over the 1and surface, and also from rooftops, either as sheet flow or as channel flow, in small trickles and streams, into the main water courses.

Sediment - Soil, including soil transported or deposited by human activity or the action of wind, water, ice, or gravity.

Sedimentation - The deposition or transportation of soil or other surface materials from one place to another as a result of an erosion process.

Shared Best Management Practice (S-BMP) - A Best Management Practice (BMP), or combination of BMPs, providing stormwater management for stormwater conveyed from another site or sites.

Site - A tract, lot or parcel of 1and, or a combination of tracts, 1ots, or parcels of land for which development is undertaken as part of a unit, sub-division, or project. The mere divestiture of ownership or control does not remove a property from inclusion in a site.

Site Drainage Area (SDA) - The area that drains to a point on a site from which stormwater discharges.

Soil - All earth material of whatever origin that overlies bedrock and may include the decomposed zone of bedrock which can be readily excavated by mechanical equipment.

Soil Erosion and Sediment Control Plan - A set of drawings, calculations, specifications, details, and supporting documents related to minimizing or eliminating erosion and off-site sedimentation caused by stormwater on a construction site. It includes information on construction, installation, operation, and maintenance.

Soils report - A geotechnical report addressing all erosion and sediment control-related soil attributes, including but not limited to site soil drainage and stability.

Storm sewer - A system of pipes or other conduits which carries or stores intercepted surface runoff, street water, and other wash waters, or drainage, but excludes domestic sewage and industrial wastes.

Stormwater - Flow of water that results from runoff, snow melt runoff, and surface runoff and drainage.

Stormwater management - A system to control stormwater runoff with structural and nonstructural best management practices, ~~Best Management Practices,~~ including: (a)

quantitative control of volume and rate of surface runoff and (b) qualitative control to reduce or eliminate pollutants in runoff.

Stormwater Management Guidebook (SWMG) - The current manual published by the Department containing design criteria, specifications, and equations to be used for planning, design, and construction, operations, and maintenance of a site and each best management practice~~Best Management Practice~~ on the site.

Stormwater Management Plan (SWMP) - A set of drawings, calculations, specifications, details, and supporting documents related to the management of stormwater for a site. A SWMP includes information on construction, installation, operation, and maintenance.

Stormwater Pollution Prevention Plan (SWPPP) - A document that identifies potential sources of stormwater pollution at a construction site, describes practices to reduce pollutants in stormwater discharge from the site, and may identify procedures to achieve compliance.

Stormwater Retention Credit (SRC) - One gallon (1 gal.) of retention ~~capacity~~ for one (1) year, as certified by the Department. May also be referred to as a RainReC.

Stormwater Retention Credit Ceiling - Maximum retention for which the Department will certify a Stormwater Retention Credit,~~n SRC,~~ calculated using the Stormwater Retention Volume (SWRv) equation with P equal to 1.7 inches.

Stormwater Retention Volume (SWRv) - Volume of stormwater from a site for which the site is required to achieve retention.

Stripping - An activity which removes or significantly disturbs the vegetative surface cover including clearing, grubbing of stumps and rock mat, and top soil removal.

Substantial improvement - A repair, alteration, addition, or improvement of a building or structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure before the improvement or repair is started.

Structural best management practice - A practice engineered to minimize the impact of stormwater runoff, including a bioretention, green roof, permeable paving system, system to capture stormwater for non-potable uses, etc.

Supplemental review - A review that the Department conducts after the review it conducts for a first re-submission of a plan.

Swale - A narrow low-lying stretch of land which gathers or carries surface water runoff.

Transition Period One (TP1) – The one hundred and eighty (180) day period of time starting upon publication of the notice of adoption as final in the *D.C. Register* of the stormwater retention rulemaking.

Transition Period Two A (TP2A) – For a major land-disturbing activity, the three hundred and sixty-five (365) day period of time starting at the completion of Transition Period One.

Transition Period Two B (TP2B) – For a major substantial improvement activity, the five hundred and forty-five (545) day period of time starting at the completion of Transition Period One.

Waste material - Construction debris, dredged spoils, solid waste, sewage, garbage, sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.