

Disclaimer

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ENVIRONMENTAL PROTECTION AGENCY**[EPA-HQ-OW-2009-0817; FRL-]****Stakeholder Input; Stormwater Management Including Discharges from New Development and Redevelopment****AGENCY:** Environmental Protection Agency.**ACTION:** Notice.

SUMMARY: The Environmental Protection Agency (EPA) is announcing its plans to initiate national rulemaking to establish a comprehensive program to reduce stormwater discharges from new development and redevelopment and make other regulatory improvements to strengthen its stormwater program. The purpose of this notice is to request input from the public to help EPA shape such a comprehensive program and to announce EPA's intent to hold several public "listening sessions" in January 2010. EPA seeks input on this undertaking regarding performance, effectiveness and cost of stormwater control measures; ecological data, including ecological benefits from stormwater controls; technical information on design, implementation and operation and maintenance of stormwater control measures; suggestions for how the existing program may be modified to better meet the goals of the Clean Water Act; and any other information that may help EPA develop improvements to the existing program, including better control of pollutants in stormwater from the built environment created by development and redevelopment.

DATES: Written comments must be submitted on or before [insert date 60 days after publication in the Federal Register].

ADDRESSES: Submit your comments, identified by Docket ID No. **EPA-HQ-OW-2009-0817**, by one of the following methods:

- www.regulations.gov: Follow the on-line instructions for submitting comments.
- Email: OW-Docket@epa.gov, Attention Docket ID No. EPA-HQ-OW-2009-0817
- Fax: 202-566-9744
- Mail: Water Docket, U.S. Environmental Protection Agency, Mail code: 4203M, 1200 Pennsylvania Ave., NW, Washington, DC 20460. Attention Docket ID No. EPA-HQ-OW-2009-0817.
- Hand Delivery: Water Docket, EPA Docket Center, EPA West Building Room 3334, 1301 Constitution Ave., NW, Washington, DC, Attention Docket ID No. EPA-HQ-OW-2009-0817. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. **EPA-HQ-OW-2009-0817**. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or e-mail. The www.regulations.gov website is an "anonymous access" system, which means EPA will not

know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

FOR FURTHER INFORMATION CONTACT: For further information on the notice, contact Jonathan Angier, EPA Headquarters, Office of Water, Office of Wastewater Management at tel.: 202-564-0729 or e-mail: angier.jonathan@epa.gov.

Public Listening Sessions: EPA will hold several informal public listening sessions in January 2010 to gather input on possible regulatory changes to the stormwater program. The public listening sessions will provide a review of EPA's current regulatory approach to permitting stormwater discharges, a summary of the recommendations from the National Research Council report *Urban Stormwater Management in the United States* (The National Academies Press, 2009), and potential considerations for regulatory changes to strengthen the program. The public listening sessions will afford an opportunity for the public to provide input on regulatory actions that EPA is considering. Brief oral comments (three minutes or less) will be accepted at the

sessions, and written statements will be accepted. The dates and locations of the listening sessions are as follows:

- January 19, 2010, 10:00 a.m. to 3:00 p.m. at EPA Region 5 Office, 77 W. Jackson Blvd., Chicago, IL 60604
- January 20, 2010, 10:00 a.m. to 3:00 p.m. at EPA Region 9 Office, 75 Hawthorne Street San Francisco, CA 94105
- January 25, 2010, 10:00 a.m. to 3:00 p.m. at EPA Region 8 Office, 1595 Wynkoop Street Denver, CO 80202-1129
- January 26, 2010, 10:00 a.m. to 3:00 p.m. at EPA Region 6 Office, 1445 Ross Avenue, Suite 1200 Dallas, Texas 75202
- January 28, 2010, 10:00 a.m. to 3:00 p.m. at EPA HQ Office, Ariel Rios Building 1200 Pennsylvania Ave. NW, Washington, DC 20004

In order to provide adequate seating for those wishing to attend EPA's public listening sessions, interested individuals must register to attend by January 15, 2010 on the Internet at <http://www.epa.gov/npdes/stormwater/rulemaking>.

SUPPLEMENTARY INFORMATION:

I. General Information

A. How Can I Get Copies of This Document and Other Related Information?

1. Docket. EPA has established an official public docket for this action under Docket ID No. EPA-HQ-OW-2009-0817. The official public docket is the collection of materials that is

available for public viewing at the Water Docket in the EPA Docket Center, (EPA/DC) EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC. Although all documents in the docket are listed in an index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Publicly available docket materials are available in hard copy at the EPA Docket Center Public Reading Room, open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202)566-1744, and the telephone number for the Water Docket is (202) 566-2426.

2. Electronic Access. You may access this Federal Register document electronically through the EPA Internet under the “Federal Register” listings at <http://www.epa.gov/fedrgstr/>. Electronic versions of this notice and other stormwater documents are available at EPA’s stormwater website <http://www.epa.gov/npdes/stormwater/rulemaking>.

An electronic version of the public docket is available through EPA's electronic public docket and comment system, EPA Dockets. You may use EPA Dockets at <http://www.epa.gov/edocket/> to submit or view public comments, access the index listing of the contents of the official public docket, and to access those documents in the public docket that are available electronically. Once in the system, select “search”, then key in the appropriate docket identification number.

Certain types of information will not be placed in the EPA Dockets. Information claimed as CBI and other information whose disclosure is restricted by statute, which is not included in the official public docket, will not be available for public viewing in EPA's electronic public

docket. EPA policy is that copyrighted material will not be placed in EPA's electronic public docket but will be available only in printed, paper form in the official public docket. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the docket facility identified in Section I.A.1.

Submitting CBI. Do not submit this information to EPA through regulations.gov or e-mail. Clearly mark all of the information that you claim to be CBI. For CBI information on computer discs mailed to EPA, mark the surface of the disc as CBI. Also identify electronically the specific information contained in the disc or that you claim is CBI. In addition to one complete version of the specific information claimed as CBI, you must submit a copy that does not contain the information claimed as CBI for inclusion in the public document. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR Part 2.

It is important to note that EPA's policy is that public input, whether submitted electronically or in paper, will be made available for public viewing in EPA's electronic public docket as EPA receives them and without change, unless the input contains copyrighted material, CBI, or other information whose disclosure is restricted by statute. When EPA identifies any input containing copyrighted material, EPA will provide a reference to that material in the version of the document that is placed in EPA's electronic public docket. The entire printed submittal, including the copyrighted material, will be available in the public docket.

Documents submitted on computer disks that are mailed or delivered to the docket will be transferred to EPA's electronic public docket. Input that is mailed or delivered to the Docket will be scanned and placed in EPA's electronic public docket. Where practical, physical objects will

be photographed, and the photograph will be placed in EPA's electronic public docket along with a brief description written by the docket staff.

B. How and to Whom Do I Submit Input?

You may submit input electronically, by mail, through hand delivery/courier, or in person by attending one of the 5 listening sessions. To ensure proper receipt by EPA, identify the appropriate docket identification number in the subject line on the first page of your input. Please ensure that your input is submitted within the specified comment period.

1. Electronically. If you submit electronic input as prescribed below, EPA recommends that you include your name, mailing address, and an e-mail address or other contact information in the body of your comment. Also include this contact information on the outside of any disk or CD-ROM you submit, and in any cover letter accompanying the disk or CD-ROM. This ensures that you can be identified as the submitter of the comment and allows EPA to contact you in case EPA cannot read your submittal due to technical difficulties or needs further information on the substance of your input. EPA's policy is that EPA will not edit your input, and any identifying or contact information provided in the body of the text will be included as part of the input that is placed in the official public docket, and made available in EPA's electronic public docket. If EPA cannot read your submittal due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your input.

i. EPA Dockets. Your use of EPA's electronic public docket to provide input to EPA electronically is EPA's preferred method for receiving comments. Go directly to EPA Dockets at <http://www.epa.gov/edocket>, and follow the online instructions for submitting input.

Once in the system, select “search”, and then key in Docket ID No. EPA-HQ-OW-2009-0817. The system is an “anonymous access” system, which means EPA will not know your identity, e-mail address, or other contact information unless you provide it.

ii. E-mail. Input may be sent by electronic mail (e-mail) to ow-docket@epa.gov, Attention Docket ID No. EPA-HQ-OW-2009-0817. In contrast to EPA's electronic public docket, EPA's e-mail system is not an “anonymous access” system. If you send an e-mail directly to the Docket without going through EPA's electronic public docket, EPA's e-mail system automatically captures your e-mail address. E-mail addresses that are automatically captured by EPA's e-mail system are included as part of the submittal that is placed in the official public docket, and made available in EPA's electronic public docket.

iii. Disk or CD-ROM. You may submit input on a disk or CD-ROM that you mail to the mailing address identified in this section. These electronic submissions will be accepted in Microsoft Word or ASCII file format. Avoid the use of special characters and any form of encryption.

2. By Mail. Send the original and three copies of your input to: Water Docket, Environmental Protection Agency, Mailcode: 4101T, 1200 Pennsylvania Ave., NW., Washington, DC, 20460, Attention Docket ID No. EPA-HQ-OW-2009-0817.

3. By Hand Delivery or Courier. Deliver your input to: Public Reading Room, Room B102, EPA West Building, 1301 Constitution Avenue NW., Washington, DC 20004, Attention Docket ID No. EPA-HQ-OW-2009-0817. Such deliveries are only accepted during the Docket's normal hours of operation (8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal

holidays).

II. Background

Statutory and Regulatory Overview

Under section 402(p) of the Clean Water Act, the Environmental Protection Agency regulates stormwater discharges from municipal separate storm sewer systems (publicly-owned conveyances or systems of conveyances that discharge to waters of the U.S. and are designed or used for collecting or conveying storm water, are not combined sewers, and are not part of a publicly-owned treatment works), stormwater discharges associated with industrial activity, and stormwater discharges from construction sites of one acre or larger. See 40 CFR 122.26(a).

Under EPA's regulations, these stormwater discharges are required to be covered by National Pollutant Discharge Elimination System (NPDES) permits.

EPA developed the stormwater regulations under section 402(p) in two phases, as directed by the statute. In the first phase, under section 402(p)(4), EPA promulgated regulations establishing application requirements for NPDES permits for stormwater discharges from medium and large municipal separate storm sewer systems (MS4s) (serving populations of 100,000 or more) and stormwater discharges associated with industrial activity. EPA published the final Phase I rule on November 16, 1990 (55 FR 47990). See 40 CFR 122.26. The Phase I rule, among other things, defined "stormwater discharges associated with industrial activity" to include construction sites of five acres or larger. 40 CFR 122.26(b)(14)(x). In the second phase, under section 402(p)(5) and (6), EPA was required to conduct a study to identify other

stormwater discharges that needed further controls to protect water quality, report to Congress on the results of the study, and to designate for regulation additional categories of stormwater discharges not regulated in Phase I. EPA promulgated the Phase II rule on December 8, 1999, designating small MS4s and small construction sites (one-five acres) and requiring NPDES permits for these discharges. 64 FR 68722.

With respect to MS4s, the Phase I regulations are primarily application requirements that identify components that must be addressed in permit applications from large and medium MS4s. The regulations require these MS4s to develop a stormwater management program (SWMP), track and oversee industrial facilities regulated under the NPDES stormwater program, conduct monitoring, and submit periodic reports.

Under the Phase II rule, regulated small MS4s are generally defined as any MS4 that is not already covered by the Phase I program and that are located within the urbanized area boundary as determined by the U.S. Decennial Census. Separate storm sewer systems such as those serving military bases, universities, large hospital or prison complexes, and highways are also included in the definition of “small MS4.” 40 CFR 122.26(b)(16). In addition, a small MS4 located outside of an urbanized area may be designated as a regulated small MS4 if the NPDES permitting authority determines that its discharges cause, or have the potential to cause, an adverse impact on water quality. See 40 CFR 122.32(a)(2), 123.35(b)(3).

Phase II stormwater regulations also require that the MS4, under the permit, implement stormwater management programs (SWMPs), and require that the SWMPs include six minimum control measures. The minimum control measures are: public education and outreach, public

participation and involvement, illicit discharge detection and elimination, construction site runoff control, post construction runoff control, pollution prevention and good housekeeping.

Regulations applicable to Phase II MS4 permits are found in 40 CFR 122.30-122.37. In general, Phase II MS4 permits are general permits, although small MS4s may apply for individual permits under the Phase I rule's application provisions in 40 CFR 122.26(d).

Under section 402(p)(6), EPA is authorized to designate additional stormwater discharges to be regulated other than those already regulated, and to establish a comprehensive program to regulate them. In addition, under EPA's stormwater regulations, EPA (or States authorized to administer the NPDES program) may require NPDES permits for currently unregulated stormwater discharges by designating discharges pursuant to 40 CFR 122.26(a)(9)(i)(C) or (D).

National Research Council Report

In 2006, EPA asked the National Research Council (NRC) to conduct a review of its stormwater program, considering all entities regulated under the program, i.e., municipal, industrial and construction. In October 2008, the National Research Council released the report *Urban Stormwater Management in the United States* (The National Academies Press, 2009) finding, among other things, that "the rapid conversion of land to urban and suburban areas has profoundly altered how water flows during and following storm events, putting higher volumes of water and more pollutants into the nation's rivers, lakes, and estuaries. These changes have degraded water quality and habitat in virtually every urban stream system."

This report recommends a number of actions, including conserving natural areas, reducing hard surface cover (e.g., roads and parking lots – impervious surface areas), and

retrofitting urban areas with features that hold and treat stormwater (NRC, *Report in Brief*, 2008). EPA takes seriously the significant findings and recommendations included in the NRC Report, and continues to evaluate how the Agency's stormwater program can be strengthened in light of the report. The *Report in Brief* can be accessed at:

http://dels.nas.edu/dels/rpt_briefs/stormwater_discharge_final.pdf. A full copy of the report can be obtained from The National Academies Press,

http://books.nap.edu/catalog.php?record_id=12465. A prepublication copy is available at:

http://www.epa.gov/npdes/pubs/nrc_stormwaterreport.pdf.

EPA shares the NRC Committee's perspective that it is imperative that the stormwater regulations be as effective as possible in protecting water quality. The NRC Report has provided EPA with the opportunity to reexamine the effectiveness of its stormwater programs, some of which are nearly 20 years old. For instance, EPA is interested in assessing the level of accountability that the regulations and the permits issued under the regulations provide to MS4s to minimize the discharge of pollutants in stormwater. The role of MS4s in reducing stormwater impacts from the built environment is crucial and growing, given that these sources of adverse water quality impacts are continually expanding. As the urban, suburban and exurban human environment expands, there is an increase in impervious land cover and therefore an increase in stormwater discharges. This increase in impervious land cover reduces or eliminates the natural infiltration of precipitation, which greatly increases the volume of stormwater discharges. This increased volume of stormwater discharges results in the scouring of rivers and streams; degrading the physical integrity of aquatic habitats, stream function and overall water quality. In

addition, the increase in impervious land cover results in the increase of the pollutant load discharged from storm sewers. As precipitation moves across roads, rooftops, and other impervious surfaces, it picks up pollutants that are then discharged, either directly or through storm sewers, to our Nation's waters.

To address the degradation of water quality caused by stormwater discharges from impervious cover, EPA is exploring regulatory options that would strengthen the stormwater program, including establishing specific post construction requirements for stormwater discharges from, at a minimum, new development and redevelopment. EPA does not currently regulate stormwater discharges from new development and redevelopment directly. However, both Phase I MS4s and Phase II MS4s are required through the MS4 permit to address stormwater discharges from new development and redevelopment in their SWMPs, but the regulations do not include specific management practices or standards to be implemented. Among the Phase I requirements for a SWMP is a "comprehensive master plan to develop, implement, and enforce controls to reduce the discharge of pollutants from municipal storm sewers, which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed." (40 CFR 122.26(d)(2)(iv)(A)(2)).

Phase II regulations include post construction requirements as one of the six minimum control measures to be addressed in the SWMP. Small MS4s must "develop, implement, and enforce a program to address" stormwater discharges from new development and redevelopment projects of one acre or greater to "ensure that controls are in place that would prevent or

minimize water quality impacts.” 40 CFR 122.34(b)(5). The program must include strategies including structural and/or non-structural best management practices (BMPs) appropriate for the community; use of ordinances or other regulatory mechanisms to the extent allowable under State, Tribal or local law; and measures to ensure adequate long-term operation and maintenance of BMPs. The Phase II rule recommends (but does not require) that the program to address stormwater from new development and redevelopment should attempt to maintain pre-development runoff conditions by installing and implementing stormwater control measures.

As stated in the report, the NRC found that "stormwater permits leave a great deal of discretion to the regulated community to set their own standards and to self-monitor." As a result, across the Nation there is inconsistency in the NPDES program and in stormwater management programs required by NPDES permit with respect to stormwater discharges from MS4s caused by stormwater discharges from development. Despite the lack of specificity in the current regulations, some permitting authorities have required controls for stormwater discharges from developed property that neutralize the impacts from stormwater by promoting practices that retain stormwater on-site through infiltration, evapotranspiration, or stormwater reuse. To help make permitting more consistent and robust nationally, EPA is considering ways to strengthen the MS4 permit regulations, including establishing specific requirements for stormwater discharges from, at a minimum, new development and redevelopment; expanding the area defined as MS4s to include rapidly developing areas; and devising a single set of consistent regulations for all MS4s. In addition, EPA is exploring regulatory options to directly address stormwater discharges from new development and redevelopment, including new and re-

developed sites outside the MS4 boundary, that may be contributing to waterbody impairment, through the designation of an additional category or categories of discharges under CWA section 402(p)(6).

Proposed Information Collection Request (ICR)

EPA has proposed an Information Collection Request (ICR) to collect data to support this effort to strengthen the stormwater regulations (published October 30, 2009, 74 FR 56191). The proposed ICR discusses the administration of three questionnaires: the first for the owners, operators, developers, and contractors of new development and redevelopment; the second for the owners and operators of MS4s (including those not federally regulated); and the third for the States and territories. The data collected through this ICR would support EPA's rulemaking activities by providing EPA with information to characterize the current level of stormwater controls and stormwater control measures; the area currently covered by federal and state stormwater requirements; the current burden and expenditures by States and MS4s associated with existing requirements; and technical, financial, and environmental data needed to quantify the incremental pollutant removals, compliance costs, and impacts for various regulatory options that EPA might consider. Under the proposed ICR, EPA seeks any available information concerning current stormwater control practices, including those referred to as green infrastructure or low-impact development. For further information, see: www.epa.gov/npdes/stormwater/rulemaking.

III. Input on Stormwater Practices and Considerations for Modifying Regulations

Today's notice is being issued to make the public aware of opportunities to provide input on current stormwater practices and to inform the public of and solicit comment on EPA's preliminary considerations for modifying or supplementing EPA's stormwater regulations. EPA is accepting information during the listening sessions and/or by submission of written comments in order to gain early public input on stormwater practices and regulations.

A. Solicitation for Additional Input Regarding Stormwater Control Practices

1. In addition to the information collection request described above, EPA is soliciting comment and input from the general public concerning current stormwater control practices, as well as information concerning innovative approaches to stormwater control. In particular, EPA is seeking information on the following aspects of structural approaches to stormwater control: design, performance, operation and maintenance, capital and lifetime cost, and environmental and economic benefit information on practices that retain stormwater on-site through infiltration, evapotranspiration, or stormwater reuse. EPA solicits comment and input on these retention practices that have been used for "green field" development, redevelopment (where there was some pre-existing infrastructure), and retrofitting existing development. While a significant amount of data has been collected and is available (see, EPA's Urban BMP Performance Tool (www.epa.gov/npdes/stormwater/urbanbmp) or the International Stormwater BMP Database (www.bmpdatabase.org)), EPA is accepting any more recent information that is not already available in these databases.

2. Cost comparisons of different stormwater management approaches for specific sites. EPA solicits comment and input on different stormwater management approaches, including comparison of stormwater management systems that rely primarily on conveyance and detention of excess discharge with stormwater management systems that relies primarily on on-site retention. Cost comparisons should preferably be between similar sized projects and/or between individual management methods of similar scope and capability.
3. Design, performance, operation and maintenance, capital and lifetime costs, and environmental and economic benefit information for communities and/or site owners or operators that have elected to modify or retrofit their stormwater management practices for existing development, as a separate effort that is not in conjunction with redevelopment. This may occur if the existing stormwater management practices were insufficient to reduce pollutants, restore habitat and stabilize stream morphology, or to correct past mistakes. This may also occur as part of a larger watershed restoration plan. EPA is also soliciting comments and input on: where retrofit practices have been installed, what the drivers were for the project, and information on the specific retrofit practices that were installed.
4. EPA is also soliciting comments and input on monitoring information that may have been collected to show the impacts of stormwater control measures on water quality and/or flow rates in the receiving waterbody. This includes information on the effects of retrofits for existing discharges (before and after installation, if possible), as well as

any water monitoring information obtained before and after new development and redevelopment.

B. Preliminary Considerations for Modifying/Supplementing EPA's Stormwater Regulations:

By today's notice, EPA is informing the public of its preliminary considerations for modifying or supplementing EPA's stormwater regulations and soliciting public input on these considerations. The following are ideas that EPA is considering for strengthening the stormwater requirements and for which EPA seeks input:

1. *Expand the area subject to federal stormwater regulations.* EPA currently requires MS4s within Census-designated urbanized areas to apply for permit coverage (see <http://www.epa.gov/npdes/stormwater/urbanmaps> for maps of all urbanized areas). Based on the 1990 Census, there are 405 urbanized areas in the United States that cover 2% of total U.S. land area and contain approximately 63 percent of the Nation's population. Under the present regulations, development that is occurring outside currently regulated MS4s may not be subject to federal controls to protect water quality notwithstanding the fact that the resulting stormwater discharges may be contributing to waterbody impairment. For example, for Phase II MS4s, only the portion of the municipal jurisdiction (i.e. township) that is within the Census-designated urbanized area is required to be regulated, which may leave stormwater discharges in parts of the jurisdiction unregulated.

EPA solicits comments and input from the public on the need for expanding the

area subject to federal regulation, and, if needed, how to expand the coverage of the federal stormwater program beyond the Census urbanized area boundary. EPA would be interested in views on (1) how to identify the appropriate jurisdictional boundaries for permit coverage, including the township, county, sewer district, or others; (2) how to identify areas that should be covered based on development pressures and to protect water quality; and (3) whether EPA should consider regulating stormwater discharges from particular types or sizes of development that are not covered by an MS4 permit.

2. Establish specific requirements to control stormwater discharges from new development and redevelopment. EPA is considering establishing specific requirements, including standards, to control stormwater discharges from new development and redevelopment. EPA welcomes comments on what standard or standards could apply to new development and redevelopment that promote sustainable practices that mimic natural processes to 1) infiltrate and recharge, 2) evapotranspire, and/or 3) harvest and reuse precipitation. For example, there could be a national requirement for on-site stormwater controls such that post development hydrology mimics predevelopment hydrology on a site-specific basis. EPA could establish a suite of specific options of standards for meeting such a requirement, for example, on-site retention of a specific size storm event in an area, limits on the amount of effective impervious surfaces (defined as impervious surfaces with direct hydraulic connection to the downstream drainage (or stream) system, also referred to as directly connected impervious area), use of site-specific calculations to determine predevelopment hydrology, and/or use of regional

specific standards to reflect local circumstances. EPA could require these standards as part of the MS4 permit on a site-specific basis. EPA is interested in input regarding the need for and the type of standards to set. Should the standard be different for discharges from new development versus redevelopment and, if so, how should it differ? Are there specific circumstances in which (for example) a requirement for new development and redevelopment to maintain pre-development hydrology would not be advisable or would cause other environmental impacts? Finally, EPA is interested in input regarding responsibility for maintaining stormwater control measures that infiltrate, evapotranspire and/or reuse water.

The impacts from stormwater discharges from new and redevelopment occur not only within the MS4 but also from sources outside the MS4 regulated areas. EPA is interested in input regarding the appropriate framework for implementing standards for new and redevelopment outside of the MS4 regulations.

3. *Develop a single set of consistent requirements for Phase I and Phase II MS4s.* EPA's Phase I regulations primarily contain application requirements that identify components that must be addressed in permit applications. The Phase II regulations establish six "minimum measures" that must be included in an MS4 permit that were more specific than Phase I. Many Phase I and Phase II permits address issues that are virtually identical. EPA requests input on whether EPA should modify the regulations to develop a consistent set of requirements that would apply to all regulated MS4s. For example, should EPA apply the six minimum measures to all MS4s? Should EPA add other

measures? For instance, Phase I MS4s are required to implement a program to control discharges for industrial facilities in their service area. Should this requirement be extended to all MS4s? EPA also requests input on any other modifications to improve the stormwater regulations.

4. Require MS4s to address stormwater discharges in areas of existing development through retrofitting of the sewer system, drainage area, or individual structures with improved stormwater control measures. Stormwater discharge from large areas of impervious cover in developed areas is a significant contributor to water quality impairments in the receiving waters of urban areas. Changes to the stormwater management practices in areas of existing development will reduce these impacts. In some states, MS4 permits now require the MS4 to install retrofit practices that infiltrate or otherwise retain stormwater in areas of existing development to reduce these impacts. EPA requests input on whether it should consider requirements for the retrofit of existing development to address stormwater. In particular, EPA requests comment on requiring MS4s to develop a long-term retrofit implementation plan that is targeted to addressing stormwater problems in urban waters.

5. *Whether EPA should include additional changes to the stormwater regulations (for example, requiring permits to include buffer requirements) in sensitive areas.* EPA is interested in views on whether it should consider making any other changes to the current regulatory program (e.g., specific structural or nonstructural stormwater control measures) in addition to the ones described above to protect waterbodies in sensitive areas.

Date: 12/17/09

Signature: 

Peter Silva, Assistant Administrator

Office of Water

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