



August 13, 2010

Via electronic mail

Executive Officer David Gibson and Members of the Board
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Re: Comments on Tentative Order R9-2010-0016.

Dear Mr. Gibson and Members of the Board:

We write on behalf of the Natural Resources Defense Council (“NRDC”). We have reviewed the July 23, 2010 draft of Tentative Order No. R9-2010-0016, NPDES No. CAS0108740 (“Permit”), the latest draft of the Municipal Separate Storm Sewer System NPDES Permit for Riverside County, and appreciate the opportunity to submit the following comments. Overall, we support the draft Permit’s inclusion of Low Impact Development (“LID”) based onsite retention requirements for new development and significant redevelopment. However, we are concerned that as written, the Permit fails to fully implement provisions present in other MS4 permits throughout California, thereby failing to meet the Clean Water Act’s “maximum extent practicable” standard (*see* 33 U.S.C. 1342(p)(3)(b)(iii)), and is in critical aspects vague or otherwise requires clarification to ensure that its terms are enforceable.

In particular, we focus our comments here on the Permit’s Development Planning Component, which is crucial to addressing the root causes of stormwater pollution. As the U.S. EPA has noted:

Most stormwater runoff is the result of the man-made hydrologic modifications that normally accompany development. The addition of impervious surfaces, soil compaction, and tree and vegetation removal result in alterations to the movement of water through the environment. As interception, evapotranspiration, and infiltration are reduced and precipitation is converted to overland flow, these modifications affect not only the characteristics of the developed site but also the watershed in which the development is located. Stormwater has been identified as one of the leading sources of pollution for all waterbody types in the United

States. Furthermore, the impacts of stormwater pollution are not static; they usually increase with more development and urbanization.¹

In order to address this source of pollution, the U.S. EPA has stated that “permit[s] must include clear, measurable, enforceable provisions for implementation of LID. . . .”²

1. The Permit Should Ensure that Only Water Retained Onsite Counts Toward the Design Capture Volume

Section F.1.d mandates that “[e]ach Copermittee must require LID BMPs or make a finding of technical infeasibility for each Priority Development Project in accordance with the LID waiver program in section F.1.d.(7).” LID BMPs then “must be sized and designed to ensure onsite retention without runoff, of the volume of runoff produced from a 24-hour 85th percentile storm event (design capture volume).” Permit at ¶ F.1.d.(4)(c)(i). However, the Permit also allows that “[i]f onsite infiltration LID BMPs are technically infeasible per section F.1.d.(7)(b), other LID BMPs may treat any volume that is not retained onsite provided that the other LID BMPs are sized to hold the design storm volume that is not infiltrated.” Permit at ¶ F.1.d.(4)(c)(ii). This language is problematic for several reasons, outlined below.

First, this section erroneously states that where infiltration BMPs alone are technically infeasible, other LID BMPs may be employed to treat the volume of runoff *not retained* onsite. This language improperly excludes any requirement that a site first use all LID practices that *retain* water onsite—including those other than infiltration such as evapotranspiration or capture and onsite reuse—to meet the design capture requirement where feasible, even where infiltration may not be. A Priority Development Project should not be permitted to participate in the Permit’s offsite mitigation program or to employ other means of addressing the design capture volume where LID based options for the onsite retention of stormwater are available. The Permit’s language in section F.1.d.(4)(c) must therefore reflect that a finding of infeasibility may only be made where use of any and all LID practices that retain water onsite, including evapotranspiration and capture, is infeasible.

Second, this section would allow for measures that do not retain water onsite, described by the Permit as “other LID BMPs,” to count toward the design capture requirement. Practices that allow for the discharge of any volume of stormwater to receiving waters would have to be 100% effective at removing pollutants—a condition almost certain not to be attained—in order to provide the equivalent water quality benefit derived from retaining the same volume of stormwater onsite. The Permit should be revised such that it clearly states that only water

¹ U.S. Environmental Protection Agency (December 2007) *Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices*, at v.

² Letter from Douglas E. Eberhardt, EPA, to Michael Adackapara, Santa Ana Regional Water Quality Control Board (February 13, 2009), at 2-3.

retained onsite may count towards the design capture requirement and that a site using BMPs that allow for offsite discharge must participate in the LID Waiver Program to address the volume not retained onsite.³

Of particular concern in this regard is that the Permit does not define the term “LID BMPs.” As a result, the Permit would allow virtually any practice, potentially including conventional stormwater management techniques, which have been demonstrated to be far less effective at removing pollutants than LID-based retention practices,⁴ to count toward meeting the Permit’s design capture requirement. While we argue here that practices that do not retain stormwater onsite, such as biofiltration, should not count towards the onsite retention standard at all, should the Board determine to allow the use of such practices, it should clearly define the term “LID BMPs,” or more appropriately, delete the phrase and explicitly state which practices may be used. The Board should additionally ensure that conventional or structural treatment practices that are not LID based may not count toward the Permit’s LID requirements.

Further troubling is that, in allowing “LID BMPs” to count toward the design capture requirement, the Permit includes no performance requirements or metrics, and requires only that “other LID BMPs [shall be] sized to hold the design storm volume that is not infiltrated,” or that “LID BMPs must be designed for an appropriate surface loading rate to prevent erosion, scour and channeling within the BMP.” Permit at ¶ F.1.d.(4)(c)(ii). The Permit should be revised to require that, in addition to the above standard, any practices that allow for the discharge of stormwater in-lieu of onsite retention must, at a minimum, reduce the pollutant load in such discharge to equivalent levels as would be achieved through use of onsite retention. The Board should further ensure that discharges resulting from other BMPs not contribute to erosion or other volume based impacts to receiving waters, as opposed to impacts only within the BMP.⁵ Given that practices that do not incorporate onsite retention have been shown to be less effective at reducing pollution in stormwater runoff, we suggest that biofiltration or other practices allowing for discharge of runoff may be allowed, if at all, only if accompanied by a “multiplier”

³ We do not oppose the use of, for example, biofiltration as a means of addressing stormwater runoff when onsite retention of the design storm is demonstrated to be technically infeasible, however, when biofiltration is used it should trigger a requirement to provide alternative or in-lieu compliance under Section F.1.d.(7) and should not be a means of satisfying these requirements.

⁴ R. Horner, *Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices (“LID”) for Ventura County* (February 2007); R. Horner, *Investigation of Low-Impact Site Design Practices for the San Diego Region* (2008).

⁵ This approach was recently adopted by the Los Angeles Regional Board in Order No. R4-2010-0108, the Ventura County MS4 Permit, which requires that use of biofiltration practices that discharge a portion of the design capture volume must achieve equivalent environmental benefits as would onsite retention practices. Los Angeles Regional Water Quality Control Board, Order No. R4-2010-0108, at E.III.1.(b).

or “mitigation factor,” requiring treatment of between 1.5 to 2.0 times the volume required to be treated through onsite retention.⁶

2. The Low Impact Development Waiver Program Should Require Use of Practices that Retain Water Onsite

The Permit requires that the “LID waiver program must clearly exhibit that it will not allow Priority Development Projects to result in a net impact (after consideration of any mitigation) from pollutant loadings over and above the impact caused by projects meeting LID requirements.” Permit at ¶ F.1.d.(7)(a). While we support the use of a performance requirement for waiver projects in general, we note that as currently drafted, the Permit allows for its “LID Requirements” to be met through use of unspecified “LID BMPs” with no express performance requirement or standard. We suggest, in order to ensure that any alternative or in-lieu program adequately protects surface waters in Riverside County, that the Permit language be changed to state that Priority Development Projects shall not result in a net impact “from pollutant loadings over and above the impact caused by projects meeting the onsite LID retention requirements.” This requirement would tie use of alternative or in-lieu programs specifically to achieving equivalent benefits to onsite retention, and remove any confusion over what standard of performance is required under this provision of the Permit.

Further, the Permit’s inclusion of a provision allowing for a LID waiver program to authorize implementation of either “an off-site mitigation project,” or “other mitigation developed by the Copermittees” should be clarified to require that any such project or mitigation measure must incorporate practices that result in the onsite retention of stormwater runoff equivalent to the volume not retained onsite by the Priority Development Project.

Such a move could help to ensure compliance with the Clean Water Act, would protect Riverside County’s aquatic resources, and would further serve important policy goals of the State. Given our current state of drought, Governor Schwarzenegger has issued a proclamation calling on water agencies to take additional actions to protect and enhance water supplies.⁷ By requiring offsite mitigation through practices that retain stormwater runoff, captured or infiltrated water could be used to increase water supplies through onsite use or recharging groundwater, in furtherance of this goal. In contrast, the draft Permit would currently allow most or all of that water to be discharged through use of biofiltration or “other LID BMPs,” without any volume retained to increase water supplies.

⁶ *Id.* See Also, State of West Virginia (June 22, 2009) Department of Environmental Protection, Division of Water and Waste Management, General National Pollution Discharge Elimination System Water Pollution Control Permit, NPDES Permit No. WV0116025 at 15.

⁷ Gov. Arnold Schwarzenegger, Proclamation, State of Emergency: Water Shortage, Feb. 27, 2009, available at <http://gov.ca.gov/proclamation/11557>.

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Conclusion

We appreciate the efforts made to date to implement sound LID standards in the Permit, and would be pleased to respond to any questions you may have about our comments. We believe the above suggested changes will significantly improve the effectiveness of the permit, and we urge that the Board implement these modifications before it is adopted.

Sincerely,

A handwritten signature in black ink, appearing to read "Noah Garrison". The signature is fluid and cursive, with the first name "Noah" being more prominent than the last name "Garrison".

Noah Garrison
Natural Resources Defense Council