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March 25, 2009

In reply refer to:
Place ID#: 710562
Order Reg Measure ID# 329556
SWU:Ebecker

County of San Diego
Land Development Division
1600 Pacific Highway, Room 212
San Diego, CA 92101

Attn: Chandra L. Wallar
Deputy Chief Administrative Officer

SUBJECT: FINDING OF ADEQUACY FOR THE JANUARY 2, 2009 UPDATED COUNTYWIDE MODEL STANDARD URBAN STORMWATER MITIGATION PLAN (SUSMP) REQUIREMENTS FOR DEVELOPMENT APPLICATIONS

On July 24, 2008, the San Diego Municipal Storm Water Copermittees (Copermittees) submitted an updated Model SUSMP in accordance with Section D.1.d.(8)(b) of California Regional Water Quality Control Board, San Diego Region (Regional Board) Order No. R9-2007-0001 (MS4 Permit). The Model SUSMP defines the minimum Best Management Practices (BMPs) to be incorporated into the Copermittees' priority development projects. In a September 18, 2008 letter, the Regional Board provided comments on the Model SUSMP. The letter also conveyed National Resource Defense Council (NRDC) September 9, 2009 comments on the updated Model SUSMP for the Copermittees to consider and respond to.

The Copermittes resubmitted the Model SUSMP on January 2, 2009 with changes and responses to Regional Board and NRDC comments. The Regional Board has reviewed this updated Model SUSMP and concludes that the Copermittees have adequately addressed relevant comments and that the January 2, 2009 Model SUSMP meets the requirements of the MS4 Permit. Attached to this letter, is NRDC's letter dated February 23, 2009, regarding the January 2, 2009 Model SUSMP. NRDC's additional comments and suggested changes to the Model SUSMP are not reflected in the Model SUSMP, but should be considered by the Copermittees during update of the Copermittees' local SUSMPs.

Prior to March 25, 2010, each Copermittee shall update their local SUSMP to implement the updated requirements in accordance with the MS4 Permit Section D.1.d.(8)(c).

If you have any questions regarding the above, please contact Eric Becker by e-mail at ebecker@waterboards.ca.gov or by phone at (858) 492-1785.

Respectfully,

JOHN H. ROBERTUS
Executive Officer

Attachment: NRDC February 23, 2009 Letter

CC: National Resource Defense Council
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Attention: Bart Lounsbury

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NRDC
THE EARTH'S BEST DEFENSE

SAN DIEGO COASTKEEPER

February 23, 2009

Mr. John Robertus
Executive Officer
San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
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Re: Incorporating a Numeric Performance Standard into the Model SUSMP for San Diego County

Dear Mr. Robertus:

The Natural Resources Defense Council and San Diego Coastkeeper have participated extensively in the 2006-2007 San Diego MS4 permitting process. Thereafter, we have commented on, and sponsored expert technical review of, subsequent proceedings required by the Permit to revise the Model SUSMP. Both before and after Permit adoption, NRDC and Coastkeeper have consistently raised concerns about the lack of clear standards for the implementation of post-construction stormwater management BMPs in general and low impact development ("LID") practices in particular. Unfortunately, we remain extremely concerned that the Model SUSMP, while overall a useful guidance document, fails to specify the necessary performance criteria to ensure that stormwater pollution is, in fact, reduced to the Clean Water Act's "maximum extent practicable" ("MEP") standard.

In January 2007, we submitted comments on the second revised Tentative Order and noted its problematic failure to include specific, numeric performance requirements. In February 2007, we petitioned the State Board to overturn the approval of the San Diego MS4 Permit ("Permit") in large part because of the aforementioned problem. We held our petition in abeyance, however, with the understanding that the Model SUSMP revision process would address our concerns. In April and September 2008, during the drafting of the Model SUSMP, we submitted letters to the County of San Diego and to the Regional Board reiterating the need for specific, numeric performance requirements. We believe, though, that the most recent draft of the Model SUSMP does not adequately set forth such requirements but that, with a few small revisions, it could be brought into line with the MEP standard and with other stormwater regulations around the country. We have detailed these revisions below and urge you to require the County to revise the Model SUSMP accordingly.

I. The Model SUSMP Must Compensate for the Lack of Clear Performance Standards in the Permit and Implement Its Mandate to Maximize LID by Requiring a Robust Numeric Performance Standard for Low Impact Development.

There is an emergent consensus nationwide that LID practices are the most effective stormwater management techniques, besides providing many other benefits, such as reducing the need for imported water, increasing property values, mitigating the urban heat island effect, and creating aesthetically pleasing landscapes. In California, the Ocean Protection Council, for instance, strongly endorsed LID last year by "resolv[ing] to promote the policy that new developments and redevelopments should be designed consistent with LID principles" because "LID is a practicable and superior approach ... to minimize and mitigate increases in runoff and runoff pollutants and the resulting impacts on downstream uses, coastal resources and communities."[1] EPA has also called upon Regional Boards across California to prioritize the implementation of LID, even "recommend[ing] that the [South Orange County draft] permit be revised to put more emphasis on LID [and to] require that LID be woven into the design of specified new development and redevelopment projects."[2] In other MS4 permit contexts, EPA has also specifically endorsed the use of metrics, particularly the EIA approach that NRDC advocated for the San Diego Permit.

It is becoming clear that without requiring the implementation of LID practices designed to satisfy feasible and clear metrics, stormwater permits cannot meet the Clean Water Act's "maximum extent practicable" ("MEP") standard for pollution reduction. Critically, the prioritization of LID practices is insufficient by itself to meet the MEP standard and *must* be paired with a measurable requirement for the implementation of LID. We outlined very similar concerns during the approval process for the South Orange County MS4 Permit, which was rejected by the Regional Board in part because it contained much of the same vague language as the San Diego Permit and Model SUSMP. We have attached our January 24, 2008, letter to reiterate the legal problems that arise from such language (these concerns are also summarized in Section II below).

Since its inception, the MS4 permitting program has been seriously hampered by a pervasive absence of numeric performance standards for the implementation of BMPs such as LID. For this reason, in December 2007, the State Water Resources Control Board commissioned a report which found that "[t]he important concept across all of [the] approaches [described in the report] is that the regulations established a

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[1] California Ocean Protection Council, *Resolution of the California Ocean Protection Council Regarding Low Impact Development* (May 15, 2008). We have enclosed a CD that includes all of the documents referenced in our letter.

[2] Environmental Protection Agency, Comments re Draft MS4 Permit for Southern Orange County (email from Eugene Bromley) (Jan. 24, 2008) (hereinafter "EPA South OC Comments").

performance requirement to limit the volume of stormwater discharges."[3] The report also noted that "[m]unicipal permits have the standard of Maximum Extent Practicable (MEP) which lends itself more naturally to specifying and enforcing a level of compliance for low impact development."[4] EPA has highlighted similar but more specific concerns, remarking that subjective and imprecise language (such as requiring "a portion" of a site to address LID, as in the Permit at D.1(d)(4)) is "vague" and that EPA recommends "more precise requirements."[5]

Various jurisdictions nationwide have begun adopting numeric performance standards for stormwater management, frequently pairing these with requirements to implement LID practices:

- **Pennsylvania:** Capture at least the first two inches of rainfall from all impervious surfaces and retain onsite (through reuse, evaporation, transpiration, and/or infiltration) at least the first one inch of runoff;[6]

- **Anacostia, Washington, D.C.:** Retain onsite the first one inch of rainfall and provide water quality treatment for rainfall up to the two-year storm volume;[7]

- **West Virginia:** Retain onsite the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation;[8]

- **Georgia:** Treat the runoff from 85% of the storms that occur in an average year (*i.e.*, provide treatment for the runoff that results from a rainfall depth of 1.2 inches);[9]

- **Central Coast, California (RWQCB, Phase II):** Limit effective impervious area ("EIA") at development projects to no more than 5% of total project area (interim criteria); establish an EIA limitation between 3% and 10% in local stormwater management plans (permanent criteria);[10]

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[3] State Water Resources Control Board, *A Review of Low Impact Development Policies: Removing Institutional Barriers to Adoption* at 23 (Dec. 2007) (emphasis added) (hereinafter "SWRCB LID Report").
[4] *Id.* at 4.
[5] EPA South OC Comments.
[6] Pennsylvania Stormwater Best Management Practices Manual, Chapter 3 at 7 (Dec. 30, 2006).
[7] *See* SWRCB LID Report at 20-21.
[8] State of West Virginia, NPDES Permit No. WV0116025 at 13-14.
[9] Georgia Stormwater Management Manual, Unified Stormwater Sizing Criteria at 1.3-1.
[10] Central Coast Regional Water Quality Control Board, Letter from Roger Briggs re Notification to Traditional, Small MS4s on Process for Enrolling under the State's General NPDES Permit for Storm Water Discharges (Feb. 15, 2008) (hereinafter "Central Coast Phase II Letter").

- **All Federal Buildings over 5,000 square feet** (under EPA's draft guidance for implementation of the Energy Independence and Security Act of 2007): Manage onsite (*i.e.*, prevent the offsite discharge of) the 95th percentile storm through infiltration, harvesting, and/or evapotranspiration.

For the reasons outlined above, it is imperative that the Model SUSMP require new development and redevelopment projects to implement LID practices designed in accordance with a clear performance requirement. As detailed below, we recommend that the Model SUSMP include a standard which requires onsite retention, with no surface discharge, of the rainfall from the 85th percentile storm. This approach is not only consistent with practice nationally and in California, but Dr. Richard Horner demonstrated its practicability in the San Diego region in technical analyses prepared prior to adoption of the Permit in 2007 (all of which are part of the administrative record).

This critical element, lacking in the Permit, has not been sufficiently addressed in the Model SUSMP, as we believe the Executive Officer and the Regional Board intended. Such clear regulatory requirements must be included and must be consistent with MEP and related requirements, as well as the mainstream of stormwater control across the country. Indeed, the Permit's requirements for such vague actions as "drain[ing] a portion of impervious areas ... into pervious areas" and "minimiz[ing] the impervious footprint of the project" with no specific numeric performance requirement beyond the SUSMP treatment control sizing criteria are not adequate or consistent with standard practice in the field, nor do they implement the Permit's fundamental requirement—added at the adoption hearing—to ***maximize*** LID. (Permit at D.1(d)(8).)

Unfortunately, the Model SUSMP does not clearly and unambiguously set forth a performance standard for LID, therefore failing to cure the problem with the Permit and failing to comply with the Regional Board's expectation and direction in 2007. As it stands, the Model SUSMP merely outlines a process for choosing and designing LID features and describes the SUSMP treatment control sizing criteria that function as a minimum requirement for stormwater treatment in California. While meeting the minimum SUSMP criteria would be a seriously deficient performance standard because stormwater requirements have advanced significantly since the establishment of these criteria, the Model SUSMP nonetheless allows waivers of these minimum sizing criteria for nebulously defined demonstrations of infeasibility. Requiring that projects simply meet the minimum requirements of the State Board's nine-year-old Order WQ 2000-11, and then allowing waivers of these minimum requirements, is a far cry from *maximizing* the implementation of LID, especially given the numerous more recent and more stringent examples (listed above) from elsewhere in the country. Currently, the Permit and the Model SUSMP stand as examples of the approach that EPA and others have criticized as inadequate. (Permit at D.1(d)(4)-(6).) In order to comply with the State Board's prescription that "[t]he important concept across all of [the] approaches [studied by the State Board] is that the regulations established a *performance requirement* to

limit the volume of stormwater discharges," the changes described in Section III are required.[11]

II. The Permit and the Model SUSMP Are Inconsistent with the Clean Water Act Because They Collectively Do Not Set Forth Legally Adequate BMPs to Implement LID.

The lack of clarity and specific requirements noted above is not only inconsistent with state and national practice, and therefore fails to comply with the MEP requirement, but it also violates the Clean Water Act because the vagueness of the LID provisions prevents them from constituting legally adequate BMPs and from allowing the Regional Board to understand what actions are required by the Permit. NRDC has previously addressed these and related issues in comments in 2008 on the proposed MS4 permit for South Orange County. We attach for your reference these comments and incorporate them herein, since they apply with equal force to this issue. By way of summary, however, BMPs that do not require a reasonably clear and specific performance standard fail to meet the legal definition, and practical function, of a "Best Management Practice." Particularly where, as here, BMPs are intended to serve in part or whole as effluent limits, this vagueness is unlawful and deeply undercuts the effectiveness of the Permit. Among other things, neither staff nor the Regional Board members themselves can understand the level of water quality control required by the Permit and the Model SUSMP now, since neither document contains clear and reasonably specific requirements for LID implementation.

Twenty years after the first adoption of MS4 permits—with water quality problems associated with urban runoff still a serious problem in San Diego—it is far past time for staff or the Regional Board to essentially guess about what the Permit requires or what actions will be taken in order to comply with its terms. We respectfully submit that the edits set forth below are required to cure these key problems and bring the Permit into line with standard practice in the field and applicable legal requirements.

III. The Model SUSMP Can Be Easily Revised to Include the Necessary Numeric Performance Standard and Accompanying Alternative Compliance Requirements.

The Model SUSMP already contains a useful outline of the process of designing stormwater management BMPs to incorporate LID features—it simply needs to establish a clear numeric performance standard that will require the implementation of LID practices to the MEP standard and also allow for alternative compliance where onsite compliance is technically infeasible. The approach that we recommend is consistent with other stormwater management programs across the country, as discussed above. To clarify the primacy of LID implementation and to establish a robust performance

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[11] State Water Resources Control Board, *A Review of Low Impact Development Policies: Removing Institutional Barriers to Adoption* at 23 (Dec. 2007) (emphasis added).

standard, we recommend that the following text be inserted in Chapter 2 after the introductory section on page 14.

Design Standards for Priority Development Projects

To implement the general requirements of Permit Provision D.1.d, the Copermittees have developed the following design standards and alternative compliance criteria for Priority Development Projects. These requirements shall be implemented and constitute requirements of the Permit.

- ***Onsite Volumetric Retention Requirement:*** *All Priority Development Projects must be designed to retain onsite, with no runoff, the volume of water that results from a 24-hour 85th percentile storm event (the "onsite retention volume") as determined from the County of San Diego's 85th Percentile Precipitation Isopluvial Map (rainfall depths vary from 0.55" to 1.55").*

- ***Prioritization of LID:*** *In designing stormwater management BMPs to accommodate the onsite retention volume, project applicants must first utilize LID features to meet the onsite volumetric retention requirement. If the implementation of all technically feasible LID features does not allow a project to retain the full onsite retention volume, project applicants may utilize other stormwater management BMPs to retain the remaining required volume onsite.*

- ***Alternative Compliance and Offsite Mitigation:*** *If exceptional site constraints render compliance with the onsite volumetric retention requirement technically infeasible, project applicants must implement all technically feasible retention features and treat any remaining surface discharge (up to the onsite retention volume) through the practices outlined in this Model SUSMP. When a Copermittee allows a project applicant to exercise this alternative compliance option, the project applicant must either*

  (1) construct an offsite mitigation project or

  (2) provide sufficient funds to the Copermittee for a public project

  that will retain a volume of stormwater (the "offsite retention volume") equivalent to the portion of the onsite retention volume that was not retained onsite times 1.5.[12]

[12] We recommend a ratio of 1:1.5 for the offsite retention volume. This is consistent with the other stormwater regulations mentioned above and with numerous other environmental mitigation programs around the country.

- ***Timing of Offsite Mitigation Projects:*** *Projects addressing the offsite mitigation volume, whether performed by the project applicant or by the Copermittee after collecting in-lieu funds, must be constructed and fully operational within 36 months of the final discretionary approval of the applicant's project by the Copermittee. Funding sufficient to address the offsite mitigation volume must be transferred to the Copermittee (for public offsite mitigation projects) or to an escrow account (for private offsite mitigation projects) within one month of final discretionary approval by the Copermittee. In addition, a specific offsite mitigation project must be identified, and funding allocated to that project, within 18 months of final discretionary approval by the Copermittee.*

To clarify the applicability of this section, the Model SUSMP's section discussing "Waivers from Numeric Sizing Criteria" on page 12 should be revised to reflect the requirement that all projects receiving waivers can only receive a "waiver" from the onsite retention requirement (and thus the section should be renamed "Waivers from the Onsite Volumetric Retention Requirement"), must still treat all surface discharge up to the design volume, and must construct—or provide funds for the construction of—an offsite project that will mitigate the deleterious effects of allowing onsite non-compliance by the project. These recommendations should rectify the shortcomings of the Permit itself and make the Model SUSMP and its requirements consistent with the MEP standard and with stormwater regulations in other locations around the U.S.

IV. Conclusion.

We appreciate the opportunity to comment on the Model SUSMP and the Copermittees' willingness to involve us in this process. We strongly urge you to require the revisions that we have recommended above, as they are necessary to address the legal inadequacies of the Permit by establishing a clear, numeric performance standard that requires the implementation of LID and allows for alternative compliance in situations of technical infeasibility.

Please feel free to contact us with any questions.

Sincerely,

David Beckman
Bart Lounsbury
Natural Resources Defense Council

Gabriel Sohmer
San Diego Coastkeeper