January 10, 2014

Via electronic mail

Mr. Sam Unger
Executive Officer and Members of the Board
California Regional Water Quality Control Board, Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013
Email: RB4-LBMS4February2014@waterboards.ca.gov

Re: Comments on Tentative Order R4-2014-XXXX, Long Beach MS4 Permit, November 2013 Draft

Dear Mr. Unger:

On behalf of the Natural Resources Defense Council ("NRDC"), the Los Angeles Waterkeeper ("Waterkeeper"), and Heal the Bay (collectively, "Environmental Groups"), we are writing with regard to the November 2013, Draft Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges from the City of Long Beach, Draft Permit R4-2014-XXXX, NPDES Permit No. CAS004003 ("LB MS4 Permit" or "Draft Permit"). We appreciate the opportunity to submit these comments to the Los Angeles Regional Water Quality Control Board ("Regional Board") on the Draft Permit.

I. Introduction

While we believe the Draft Permit in many aspects either appropriately preserves requirements or improves upon requirements contained in the predecessor Long Beach MS4 permit[1] – now almost 15 years old – we are concerned that in other critical aspects the Draft Permit fails to meet the requirements of the federal Clean Water Act and California Porter Cologne Act, and is otherwise inconsistent with both state and federal law. We urge the Regional Board to revise the Draft Permit in accordance with the legal requirements outlined in the comments we present below. Specifically, many of our concerns with the Los Angeles County Municipal Separate Storm Sewer System NPDES

[1] Los Angeles Regional Water Quality Control Board, Order No. 99-060, NPDES Permit No. CAS004003 ("1999 Permit").

Permit (Order No. R4-2012-0175, NPDES Permit No. CAS004001), which are articulated in a petition submitted to the State Water Resources Control Board on December 10, 2012, are applicable to the Draft LB MS4 Permit. Thus, our Petition for Review of the Regional Board's adoption of Order No. R4-2012-0175 is hereby incorporated and attached as Exhibit A ("Environmental Groups' Petition").

II. Summary of Comments

We are concerned that the Draft Permit in several aspects fails to meet the requirements of federal and state law, and is inadequate to control pollution and protect the region's waters, which are threatened by persistent, pervasive contamination from urban runoff. We note a few provisions that are appropriately incorporated and legally required in the Draft Permit, followed by a summary of provisions that require revision for the Draft Permit to pass legal muster.

- Almost identical provisions to the Draft Permit's Receiving Water Limitations have been upheld against numerous administrative, judicial, and enforcement challenges, and under federal law must prohibit discharges that cause or contribute to a violation of water quality standards as an independently enforceable provision. The Draft Permit includes illegal safe harbors that attempt to excuse compliance with the Receiving Water Limitations provisions in some circumstances, in violation of federal anti-backsliding regulations under 33 U.S.C. § 402(o) and 40 C.F.R. § 122.44(1) and in violation of state and federal antidegradation requirements, including 40 C.F.R. § 131.12(a)(1) and State Board Resolution No. 68-16.

- The Draft Permit fails to adequately require that certain interim and final Waste Load Allocations ("WLAs") established by applicable Total Maximum Daily Loads ("TMDLs") are enforceable permit effluent limitations pursuant to 40 C.F.R. § 122.44(d)(1)(vii)(B).

- The Draft Permit, in several instances, is inconsistent with adopted TMDLs.

- For TMDLs, the Draft Permit incorporates unlawful compliance schedules that are inconsistent with federal requirements under the Clean Water Act.

- The Draft Permit fails to include interim numeric benchmarks for TMDL implementation to properly track TMDL compliance.

- The Draft Permit must require Low Impact Development practices to retain stormwater runoff on-site, which are commonly required in other jurisdictions and are the most practicable means of protecting and restoring water quality in Los Angeles County.

- The Draft Permit establishes unlawfully high thresholds for applicability of its otherwise enforceable Low Impact Development standards.

- The Draft Permit inappropriately allows for use of biofiltration practices that discharge runoff and pollutants where retention of stormwater runoff, either on-site or off-site is feasible.

- The Draft Permit inappropriately establishes a goal of discharge water quality in comparison to Municipal Action Levels rather than against Water Quality Standards.

- The Draft Permit fails to explicitly include TMDL monitoring plans.

- The Draft Permit fails to require adequate monitoring for toxicity at outfalls.

III. Background Information

For factual and legal background information for the following concerns, please refer to Environmental Groups' Petition, attached as Exhibit A, at pages 2-9, and comments submitted to the Regional Board on July 23, 2012 by NRDC, Los Angeles Waterkeeper, and Heal the Bay on the Draft LA MS4 Permit (June 6, 2012 Draft), Tentative Order R4-2012-XXXX, attached as Exhibit B, at pages 3-20 ("Environmental Groups' LA MS4 Comments").

IV. Specific Concerns

A. The Draft Permit Includes Illegal Safe Harbors in Violation of Federal Anti-Backsliding and Antidegradation Requirements

The Draft Permit appropriately requires that "Discharges from the MS4 that cause or contribute to the violation of receiving water limitations are prohibited," similar to the prohibition contained in the 1999 Long Beach Permit. (Draft Permit, at 28.)[2] However, under the Draft Permit, the City of Long Beach is provided with several different compliance options, two of which trigger application of a safe harbor. In particular, Long Beach may elect to develop or participate in a Watershed Management Program ("WMP"), or Enhanced Watershed Management Program ("EWMP"). (Draft Permit, at Part VII.C.) These programs in many aspects allow a permittee to draft their own permit

[2] Receiving Water Limitations are defined as: "Any applicable numeric or narrative water quality objective or criterion, or limitation to implement the applicable water quality objective or criterion, for the receiving water as contained in Chapter 3 or 7 of the Water Quality Control Plan for the Los Angeles Region (Basin Plan), water quality control plans or policies adopted by the State Water Board, or federal regulations, including but not limited to, 40 CFR § 131.38." (Draft Permit, at Attachment A, A-15.)

requirements, conditions, and schedules for compliance. And, although it is a goal of these programs to ensure that stormwater discharges do not cause or contribute to exceedances of RWLs, and that TMDL WLAs are achieved, it is not a requirement that the programs achieve these results in fact. Long Beach, like permittees under the LA MS4 Permit, is instead given a safe harbor from the prohibition on violations of RWLs, or, in some cases of TMDL limits, if it participates in a WMP or an EWMP. The safe harbors include relief from RWL compliance: 1) during the development of a WMP or an EWMP, before the plan approved (Draft Permit, at Part VII.C.2.d); 2) after a plan is submitted to and approved by the Regional Board (Draft Permit, at Part VII.C.2.b); and, 3) when the specific RWL (or combination of water quality standard and waterbody) at issue is already addressed by a TMDL (Draft Permit, at Parts VII.C.3.a, VIII.E.1.d, F.1.d.) By allowing these safe harbors, the Draft Permit excuses compliance with TMDL WLAs, and with its RWLs where the previous permit mandated compliance.

Safe harbors included in the Draft Permit violate federal anti-backsliding provisions because they render the RWLs less stringent than in the previous permit and do not qualify as exceptions to the federal Clean Water Act anti-backsliding rule. (*See* Environmental Groups' Petition at 15-21.) The safe harbors also violate state and federal antidegradation requirements because they would lead to lower water quality in waters to which Long Beach discharges. (*See* Environmental Groups' Petition at 24.) For these reasons, the Regional Board must remove the safe harbors in the Draft Permit.

B. The Draft Permit Unlawfully Fails to Incorporate Waste-Load Allocations Consistent With Applicable TMDLs

The Clean Water Act and its implementing regulations require that NPDES permits are consistent with the assumptions and requirements of TMDL WLAs for waters in the region. (40 C.F.R. § 122.44(d)(1)(vii)(B).) However, in violation of federal requirements, the Draft Permit fails to ensure compliance with all interim and final WLAs for these TMDLs and additionally incorporates illegal compliance schedules.

The Draft Permit specifies that where Long Beach is implementing an EWMP and runoff is retained up to the 85th percentile storm, the Permittee is deemed in compliance with TMDL WLAs. (Draft Permit, at Part VIII.F.1.d.) This alternative means of compliance creates a safe harbor from final TMDL requirements[3] and incorporates a provision that is inconsistent with the WLAs and federal regulations. Further, there is no assurance under this mechanism that final limits, and therefore water quality standards and beneficial uses, will ever be met. (*See* Environmental Groups' Petition at 25.) Similarly, illegal

[3] The Draft Permit also unlawfully eliminates the need to comply with interim WQBELs and RWLs where Long Beach engages in either type of watershed management program. Indeed the Draft Permit includes a safe harbor for violations of interim limits that occur during and after WMP or EWMP development rather than requiring the interim limits defined in the TMDL are actually achieved. (Draft Permit, at Parts VII.C.3.a, VIII.E.1.d)

TMDL compliance schedules incorporated in the Draft Permit[4] fail to comply with federal provisions related to TMDL compliance. (*See* Environmental Groups' Petition at 26-27; *see also* Environmental Groups' LA MS4 Comments at 39-41.)

In addition, and as described below, there are inconsistencies between the Draft Permit and adopted TMDLs for the Long Beach Region. We ask the Regional Board to modify the Draft Permit to ensure consistency with these TMDLs.

1. Long Beach City Beaches and Los Angeles River Estuary TMDL for Indicator Bacteria

The Draft Permit does not specify how the geometric mean is derived for the Long Beach City Beaches and Los Angeles River Estuary TMDL for Indicator Bacteria. We suggest that "geometric mean" be changed to "rolling 30-day geometric mean" in tables K.1. and K.2.a. on page 105 of the permit for clarity and consistency with the adopted TMDL.

2. Los Angeles River Nitrogen TMDL

In the adopted Los Angeles River Nitrogen TMDL, MS4 permittees are required to comply with the one-hour average and thirty day average water quality-based effluent limitations for four forms of nitrogen. The TMDL states that *"In addition, the highest four-day average within the 30-day period shall not exceed 2.5 times the 30-day average wasteload allocation"* as it applies to ammonia. This additional requirement for ammonia is absent from the Draft Permit, and we ask for its inclusion on page 108 of the permit.

3. Los Angeles River Bacteria TMDL

The Los Angeles River Bacteria TMDL adopted in 2010 states that *"The final WLAs for the geometric mean target during any time at any river segment and tributary in the Los Angeles River Watershed is zero (0) days of allowable exceedances."* We ask that the above requirement be added to page 108 of the permit to be consistent with the adopted TMDL.

4. Los Angeles River Trash TMDL

We request that the Draft Permit include tables 7.2-2 and 7.2-3 of the adopted Los Angeles River Trash TMDL to clarify how compliance points will be calculated, or, at a minimum include TMDL language in the tentative permit that describes the calculation

[4] *See* Draft Permit at 20: "The City of Long Beach shall comply with applicable water quality based effluent limitations WQBELs as set forth in Part VIII of this Order pursuant to applicable compliance schedules."

procedures (e.g. Compliance is XX% of the baseline load calculated as a rolling 3-year annual average).

5. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

The Draft Permit includes final mass-based water quality-based effluent limitations, expressed as an annual loading of pollutants in the sediments deposited into water bodies, for metals and PAHs and total DDT and total PCBs in tables on pages 119 and 120, respectively. Upon comparing these tables with final Basin Plan amendment dated 2011, it appears the final wasteload allocations included in the Draft Permit are incorrect; final effluent limitations in the Draft Permit depict wasteload allocations for the Los Angeles County MS4 instead of City of Long Beach MS4. We feel it is imperative that the tables on pages 119 and 120 of the Permit be changed to reflect the correct final mass-based water quality-based effluent limitation for metals, PAHs, total DDT, and total PCBs. Please update the permit with the correct allocations as noted below:

Final, mass-based TMDLs and Allocations for metals and PAHs (Kg/year)

Water Body	Total Cu	Total Pb	Total Zn	Toal PAHs
Dominguez Channel Estuary	0.6	1.52	7.6	0.0038
Inner Harbor	0.463	9.31	31.71	0.024
Outer Harbor	0.63	18.1	56.4	0.073
San Pedro Bay	137.9	372.2	1449.7	12.0
LA River Estuary	375.8	698.9	2572.7	24.56

Final, mass-based TMDLs and Allocations for total DDT and total PCBs (g/year)

Water Body	Total DDTs	Total PCBs
Dominguez Channel Estuary	0.007	0.006
Inner Harbor	0.014	0.016
Outer Harbor	0.004	0.014
San Pedro Bay	0.333	3.01
LA River Estuary	1.067	3.441

C. The Draft Permit's Planning and Land Development Program Provisions Are Inadequate

Subject to the overarching requirement that pollution in discharges from MS4 systems be controlled to the maximum extent practicable or "MEP," (33 U.S.C. § 1342(p)(3)(B)(iii)), 40 C.F.R. section 122.26(d)(2)(iv)(A)(2) requires municipalities to implement controls to

reduce polluted runoff from MS4s that "receive discharges from areas of new development and significant redevelopment." The sections that implement this requirement are contained in the Draft Permit's Planning and Land Development Program. While the controls in this section, particularly the Draft Permit's low impact development ("LID") based stormwater runoff retention requirements, represent in general a substantial step forward from those in the 1999 Permit, the Draft Permit's controls are undermined by: 1) the incorporation of an unjustifiably lenient applicability threshold; 2) a lack of clarity with respect to the Draft Permit's Alternative Compliance provisions; 3) allowing biofiltration off-site, and 4) a lack of clarity or rigor with regards to the approval process to waive the Draft Permit's core LID provisions in favor of a Permittee developed local ordinance. As a result, while providing a potentially strong framework, the Draft Permit's Planning and Land Development Program fails to meet the requirements of the Clean Water Act's MEP standard, and must be revised in order to pass legal muster under the federal Act.

1. The Draft Permit's Performance Criteria Appropriately Require New Development and Redevelopment Projects to Retain On-Site the 0.75-inch, 24-hour rain event or the 85th percentile, 24-hour rain event, whichever is larger.

At the outset, we strongly support that the Draft Permit establishes requirements for new development and redevelopment projects to retain on-site the runoff from the 85th percentile, 24-hour rain event or the 0.75 inch, 24-hour rain event, whichever is greater.[5] This requirement, resulting in retention of stormwater runoff with no off-site discharge in the vast majority of storms, is consistent with on-site retention requirements of other permits throughout California, as well as in permits and ordinances found in all corners of the United States.

2. LID Is Cost-Effective and Provides Significant Economic Benefits

LID "provides ecosystem services and associated economic benefits that conventional stormwater controls do not."[6] Because traditional stormwater management approaches involve the construction of complex systems of infrastructure, they can entail substantial costs. Since LID attempts to mimic the predevelopment hydrology of a site, emphasizing

[5] We note, however, that examples provided for in Environmental Groups' LA MS4 Comments, including reports from Dr. Richard Horner and examples of permits and ordinances from other jurisdictions, would support requirements for projects to retain runoff from up to and including the 95th percentile storm event. (*See* Environmental Groups' LA MS4 Comments, at 22-24; *see also* Central Coast Regional Board, Resolution No. R3-2013-0032, approving Post Construction Stormwater Management Requirements for Development Projects in the Central Coast Region to comply with the Statewide NPDES General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems, Order NO. 2013-0001-DWQ ("Phase II MS4 Permit").)

[6] ECONorthwest, The Economics of Low-Impact Development: A Literature Review, at iii. (2007) ("ECONorthwest") (Exh. 61).

storage and use, infiltration, and use of a site's existing drainage conditions, "[c]ost savings are typically seen in reduced infrastructure because the total volume of runoff to be managed is minimized."[7]

Further, LID can provide substantial benefits in Los Angeles and southern California in terms of increased local supply of water. A 2009 study conducted by NRDC and the University of California, Santa Barbara, "A Clear Blue Future," found that implementing green infrastructure practices that emphasize on-site infiltration or capture and reuse had the potential to increase local water supplies by up to 405,000 acre feet per year by 2030 at new and redeveloped residential and commercial properties in Southern California and the San Francisco Bay area.[8] This represents roughly two-thirds of the volume of water used by the entire city of Los Angeles each year.

3. The Draft Permit's Planning and Land Use Program Fails to Meet the Requirements of the MEP Standard Due to its Unjustifiably Lenient Applicability Thresholds, is Hampered by a Lack of Clarity with respect to Alternative Compliance, Would Improperly Allow for Biofiltration to be Used When On-Site Retention is Feasible, and Creates an Unlawful Self-Regulatory Scheme in Violation of the Clean Water Act.

Although we support the inclusion of strong retention standards for stormwater runoff, we are concerned that the provisions of the Planning and Land Use Program in several aspects fail to meet the requirements of both state and federal law.

a. The Applicability Threshold for New Development Projects is Set Unjustifiably High and Fails to Meet MEP

The Draft permit establishes the threshold for application of requirements under the Planning and Land Development section for New Development Projects as "All development projects equal to 1 acre or greater of disturbed area *and* adding more than 10,000 square feet of impervious surface acres." (Draft permit, at 61 (emphasis added).) This threshold, in particular the requirement that a project disturb 1-acre and *additionally* add 10,000 square feet of impervious surface, is unlawfully lenient in comparison with other Phase I permits in California, which have implemented substantially lower threshold requirements, demonstrating their practicability. For example, the recently adopted San Diego Regional MS4 Permit, covering San Diego County and portions of

[7] U.S. Environmental Protection Agency (December 2007) *Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices*, at 2; U.S. Department of Housing and Urban Development, The Practice of Low Impact Development, at 33 (2003) (Exh. 62).
[8] NRDC and University of California at Santa Barbara (2009) A Clear Blue Future: How Greening California Cities Can Address Water Resources and Climate Challenges in the 21st Century. See also, NRDC (2011) Capturing Rainwater from Rooftops: An Efficient Water Resource Management Strategy that Increases Supply and Reduces Pollution.

Orange and Riverside Counties, requires any new development projects "that create[s] 10,000 square feet or more of impervious surfaces (collectively over the entire project site)" to comply with the Permit's Development Planning Component provisions, without any requirement that the site also disturb 1-acre or greater of land.[9] The San Francisco Bay Region MS4 Permit[10] sets the same 10,000 square foot threshold for all non-"Special Land Use Category" development, while "Special Land Uses" are set at 5,000 square feet.

More rigorous in its application thresholds for development, the Low Impact Development Ordinance for the City of Los Angeles establishes that development creating, adding, or replacing only 500 square feet or more of impervious area may trigger requirements to implement LID practices to reduce stormwater runoff and pollution.[11] Thus, the threshold set forth in the Draft permit, applying requirements only to development adding 10,000 square feet of impervious surface *and* disturbing greater than one acre can hardly be construed as meeting the MEP standard when multiple other permits and local ordinances have set substantially more stringent standards.

Moreover, the Draft permit's threshold for new development is entirely nonsensical and unsupported when compared with the permit's applicability threshold for Redevelopment Projects. The Draft permit states that redevelopment projects subject to the Draft permit's performance criteria are: "Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site. . . ." (Draft Permit at 62). Thus, new development (including greenfield developments on open space), typically *less* likely to be constrained by space or density considerations than redevelopment projects, are afforded the far *more* lenient standard for applicability. Indeed, the concern over potential space constraints in a redevelopment context are explicitly addressed by off-ramp provisions in the Draft Permit, which allow for alternative compliance in cases of technical infeasibility for redevelopment locations where the "density and/ or nature of the project would create significant difficulty for compliance with the on-site volume retention requirement." (Draft Permit at 64). We urge the Regional Board to include an applicability requirement commensurate with the City of Los Angeles' Ordinance. At a minimum, the applicability threshold for new development should be no less stringent than that set for redevelopment projects and should not include any requirement for an additional 1-acre

[9] San Diego Regional Water Quality Control Board (May 8, 2013) National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds Within the San Diego Region, Tentative Order No. R9-2013-0001, NPDES Permit No. CAS0109266, at 83.

[10] San Francisco Regional Water Quality Control Board (October 14, 2009, revised November 28, 2011) Order No. R2-2009-0074, NPDES Permit No. CAS612008, Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit for the discharge of stormwater runoff from the municipal separate storm sewer systems (MS4s) of the . . . San Francisco Bay Municipal Regional Stormwater Permit (MRP), at C.3.b.ii.(1)(a).

[11] City of Los Angeles (Sept. 28, 2011) Low Impact Development Ordinance, at Sec. 64.72.D.

of disturbed land, in line with other permits in California. As currently drafted, the standard fails on its face to meet the MEP requirements of the CWA.

b. Repaving of Greater than 10,000 Square Feet of Surface Area on Publicly Owned Streets or Parking Lots Should Trigger Requirements to Meet Post-Construction Low Impact Development Standards

While it is critical that the MS4 permit address new and redevelopment projects and prevent the introduction of new or additional sources of pollution to receiving waters, the vast majority of runoff stems from existing development. One of the primary opportunities to address runoff from the existing built environment is through retrofit of existing streets and parking lots. We support the Draft Permit's requirement that new streets, roads, highways, and freeway construction must follow U.S. EPA guidance regarding green streets, but urge the Regional Board to require that roadway construction of this size should be required to meet the Draft Permit's otherwise applicable on-site stormwater runoff retention standards where technically feasible, and require offsite mitigation where it is not. The Statewide General Permit for Small MS4s in California requires that road projects that create 5,000 square feet or more of newly constructed contiguous impervious surface, including widening of existing road surface:

> shall comply with Section E.12.e. Low Impact Development Standards except that treatment of runoff of the 85th percentile that cannot be infiltrated onsite shall follow U.S. EPA guidance regarding green infrastructure to the extent feasible (2013-0001-DWQ at 50).

The Draft Permit should similarly require infiltration or evaporation of the 85th percentile storm or 0.75 inch storm, whichever is larger, to the extent feasible at projects creating 5,000 or more square feet of impervious surface.

Further, projects that result in the reconstruction or resurfacing of greater than 10,000 square feet of street, road, highway, freeway, or parking lot surface (or resurfacing of more than 25 parking spaces) should, at minimum, be required to implement post-construction LID BMPs, such as curb cuts, swales, or other retention practices. Of note, the City of Santa Monica adopted a green streets requirement with a threshold based on monetary expenditures:

> Any Municipal street, road and alley re-construction project of $500,000.00 or more of construction costs, excluding repaving projects of existing roads, shall implement post-construction BMPs for green transportation infrastructure.[12]

[12] An Ordinance of the City Council of Santa Monica Amending Santa Monica Municipal Code Chapter 7.10 to Update and Clarify the Urban Runoff Pollution Ordinance (July 27, 2010).

c. The Draft Permit's Alternative Compliance Provisions Lack Clarity and Should Distinguish Between Groundwater Replenishment Facilities that Convey Runoff From the Project Site (Hydrologically Connected) and Those that Are Hydrologically Unconnected From the Project Site

We strongly support efforts to use LID and groundwater recharge or other stormwater capture practices to increase water supplies in California. These initiatives are in line with California's stated policy goals. For example, the State Water Resources Control Board's State Recycled Water Policy establishes a goal of increasing the capture and use of stormwater over the amount used in 2007 by at least 500,000 acre-feet per year by 2020, and by at least one million acre-feet annually by 2030.[13] While we are encouraged by the Regional Board's move to incorporate provisions that could promote increased reliance on local water supply strategies such as groundwater replenishment, we are concerned that the Draft Permit is unclear in its definition of "off-site." (Draft Permit at 65.) The Regional Board must provide clarification whether it intends for the term to mean an "off-site" project that is hydrologically unconnected to the project site, or a "regional" (or off-site) project that may receive runoff conveyed to it from the project site.[14] Conveying runoff from the project site to a regional groundwater replenishment facility that will retain that runoff, albeit at a different location, typically does not implicate significant water quality concerns. Where the same, specific quantum of water is ultimately retained, 100 percent of the pollution contained in that particular volume of water will be prevented from reaching receiving waters. In contrast, where a project performs off-site mitigation at some other location within the same watershed or sub-watershed that is not hydrologically connected to the original project site, it raises substantial concerns as to whether the alternate location will provide equal or greater water quality benefits to the receiving surface water. Among the issues presented by this form of off-site mitigation are whether the off-site mitigation will be performed at a similar land use; whether the mitigation project will achieve equivalent pollutant load reduction; and if so, what pollutants it will be monitored for. In practice it may prove exceedingly difficult to assess the equivalency of benefits to surface water quality from retention from one site to the next.

The Draft Permit should be revised to allow off-site mitigation or alternative compliance at a site hydrologically unconnected from the project site only when it is technically infeasible for the project to retain runoff on-site.

[13] State Water Resources Control Board (May 14, 2009) State Recycled Water Policy.

[14] The provision under the "Options for Stormwater Management Design, Most Preferred Stormwater Management Options" requiring that a project opting to perform off-site groundwater replenishment "Must also provide reduction through treatment of the SWDQv at the project site" implies the former, that projects may perform off-site mitigation at a site hydrologically unconnected to the project within the same sub-watershed. In addition to the concerns described above.

d. The Draft Permit's Alternative Compliance Provisions for Biofiltration are Insufficiently Protective of Water Quality and Would Improperly Allow Use Of Biofiltration Off-site, Even Where On-Site Retention or Biofiltration were Feasible

In contrast to retention practices, which ensure that 100 percent of the pollutant load in the retained volume of runoff does not reach receiving waters, biofiltration practices that treat and then discharge runoff through an underdrain result in the release of pollutants to receiving waters. Indeed, in order to achieve equivalent pollutant load reduction benefits to the use of on-site retention, biofiltration practices would have to be 100 percent effective at filtering pollutants from runoff, which they are invariably not. Thus, we are concerned that equivalent pollutant load reduction is not guaranteed by a biofiltration system even when treating 1.5 times the design stormwater runoff volume.

Even if the Regional Board allows the use of biofiltration for compliance on-site in cases of technical infeasibility, there is no justification for the Board's proposal to allow use of biofiltration to achieve compliance off-site at retrofit projects. (Draft Permit, at 66.) Where on-site retention is infeasible, off-site mitigation through retention of the design storm volume, including at a retrofit project, should be allowed, coupled with requirements that the project demonstrate equivalent off-site pollutant load reduction and perform on-site treatment of the design stormwater volume. However, it is unclear whether the Draft Permit's Offsite Project – Retrofit Existing Development, requires infeasibility for on-site retention in the first instance. In this connection, it would appear to allow biofiltration to be performed at an off-site retrofit project, even where on-site retention was feasible. This provision fails to meet MEP. The Draft Permit should be revised to explicitly state that biofiltration is not authorized as a method of alternative compliance at offsite locations under any circumstance where on-site compliance is feasible, and is likewise not authorized where biofiltration can be performed on-site where retention is infeasible.

e. The Draft Permit's Water Quality Mitigation Criteria should apply to *all* BMPs

The Draft Permit establishes water quality mitigation criteria that serve as benchmarks applicable to new and redevelopment project BMPs only. Specifically, the Draft Permit requires the Permittee to meet the listed pollutant benchmarks prior to the discharge to the MS4. In general, we support performance-based criteria for BMPs.

One of the most significant shortcomings in previous stormwater permits is the lack of performance-based criteria for BMPs. As a result, BMPs are added as part of permit requirements or pollution abatement efforts without any focus on the quality of the water exiting the BMPs. An effective way to ensure the success of stormwater programs and the attainment of water quality standards is to assess BMPs based on performance. Flow-based design criteria are simply not adequate to ensure that water quality standards are

consistently met because flow, and corresponding BMP size, is but one factor determining BMP effectiveness.

The Ventura MS4 appropriately contains Treatment BMP Performance standards that apply to all treatment BMPs being implemented under the Permit.[15] Thus, we urge the Regional Board to increase the applicability of the Water Quality Mitigation Criteria to all treatment BMPs being implemented under the Permit.

f. The Draft Permit's Local Ordinance Equivalence Provision Creates a Self Regulatory Scheme in Violation of the Clean Water Act

The Draft Permit allows for Long Beach to "submit documentation to the Regional Water Board that the alternative requirements in the local ordinance will provide equal or greater reduction in storm water discharge pollutant loading and volume as would have been obtained through string conformance [with Permit requirements]." (Draft Permit at 70). However, the revised Long Beach Low Impact Development Standards (Chapter 18.74 of the Building Code) do not meet the intent or requirements of the Draft Permit's Planning and Land Development Program. For example, the 2013 revisions to the Standards include a "hardship determination" that states:

> "Whenever there are practical difficulties involved in carrying out the provisions of this chapter, the Director shall have the authority to grant modifications to the provisions of this chapter for individual cases…" (Building Code at 18.74.070).

This "off-ramp" does not ensure equivalency with the Draft Permit requirements or meet the requirements of MEP. In addition, certain applicability thresholds in the Long Beach Standards are weaker than the Draft Permit requirements, especially for redevelopment sites. Therefore, the current Long Beach Low Impact Development Standards should not be considered for equivalency.

Further, in the event the Board were to consider the Long Beach Standards, it is unclear if the equivalency determination will be made through the public process or in an Executive Officer action. We urge the Board to adopt the former.

The Local Ordinance Equivalence provision has the potential to exempt development from participation in the Permit's core requirements to prevent the discharge of pollutants to the MS4 system. These requirements, encompassing the permit's on-site stormwater controls, LID requirements, alternative performance criteria, hydromodification controls, and other post-construction requirements, are necessarily reviewed through a public process in order to determine whether the permit meets the requirements of the Clean

[15] Los Angeles Regional Water Quality Control Board, Ventura County Municipal Separate Stormwater National Pollutant Discharge Elimination System (NPDES) Permit; Order No. R4-2010-0108; NPDES Permit No. CAS004002, July 8, 2010 at 37.

Water Act's MEP standard. This determination lies properly with the Regional Board in the first instance, through the process of public review and hearing.[16]

D. The Draft Permit's Monitoring and Reporting Program Requires Further Specificity

The Clean Water Act requires that a Permittee undertake a self-monitoring program sufficient to determine compliance with its NPDES permit. (*See* 40 C.F.R. § 122.44(i)(1).) Appropriately, the Tentative Monitoring and Reporting Program ("Tentative MRP") outlines this as an objective: "The primary objectives of the Monitoring Program are to…assess compliance with receiving water limitations and water quality-based effluent limitations established to implement Total Maximum Daily Load wet weather and dry weather wasteload allocations…" (Draft Permit at E-3.)

We conceptually support the proposal to require both receiving water monitoring and stormwater and non-stormwater outfall based monitoring to assess a Permittee's compliance with the permit. (Draft Permit at E-4.) The combination of monitoring will be used to establish compliance or violations of the permit. However, many of the specific requirements for the core monitoring program elements outlined in the Tentative MRP should be enhanced to improve upon the existing monitoring program and assist in assessment of water quality.

As an overarching comment, the Tentative MRP is difficult to evaluate, as it is unclear what monitoring is already underway and what additional monitoring locations are required in the Draft Permit.

1. <u>Receiving Water Monitoring</u>

    a. The MRP should specify a minimum number of receiving water monitoring locations

The Tentative MRP does not specify the required number of receiving water monitoring locations or exact monitoring locations. Instead, the Tentative MRP states that "[r]eceiving water monitoring shall be performed at all surface waters downstream of the Discharger's MS4 discharges, and at TMDL receiving water compliance points as designated in TMDL monitoring plans approved by the Los Angeles Regional Water Board Executive Officer..." (Draft Permit at E-4.) The MRP should identify specific additional locations and include a map of all receiving water monitoring locations, including the existing mass emissions stations and TMDL receiving water compliance points.

[16] *Environmental Defense Center, Inc. v. U.S. E.P.A* (9th Cir. 2003) 344 F.3d 832, 854-56

b. The Tentative MRP should include additional receiving water monitoring parameters

The Receiving Water Monitoring requirements contain an insufficient number of monitoring parameters and inappropriately focus on only known impairments, rather than a comprehensive assessment of the waterbody. Specifically the Tentative MRP requires monitoring for flow, known impairments, hardness, pH, dissolved oxygen, temperature, specific conductivity and toxicity. Additional "screening parameters" are required to be monitored during the first year, and if no hits are found, monitoring can be discontinued. Theoretically under this scenario, a waterbody may only be assessed once during the entire permit, which may extend beyond five years as history has shown, for pollutants such as metals, nutrients and pesticides which are often found at levels exceeding water quality standards in waterbodies throughout the county. TMDL monitoring certainly will not make up this gap. Instead, the Regional Board should maintain the parameters that are currently monitored in the receiving water. (*See* Order No. 99-060.) This is particularly important for assessing trends over time. This same list of parameters should be additionally be monitored as part of the outfall monitoring program.

2. Outfall Monitoring

The Tentative MRP requires outfall based monitoring from "…at least one major outfall per subwatershed (HUC-12) drainage area, within the Permittee's jurisdiction." (Draft Permit at E-18.) However, this will not ensure that appropriate land-use categories are monitored in order to be able to more readily determine if a MS4 is causing or contributing to a water quality objective exceedance. We request that the Regional Board require monitoring from more than one outfall in each HUC-12. Drainages carrying stormwater from commercial, industrial, and high-use transportation should be prioritized.

a. The MRP should determine the quality of a Permittee's discharge relative to Water Quality Standards, not action levels

The Tentative MRP states that a goal of both the stormwater outfall and non-stormwater outfall based monitoring is to "Compare concentrations of pollutants in the Discharger's MS4 effluent to municipal action levels…" (E-4). This comparison is inappropriate, as the MRP should determine the quality of a Permitttee's discharge relative to Water Quality Standards and effluent limits, not municipal action levels. Further, the calculated MAL values are weak and completely inappropriate. Using the 25th percentile in developing the MAL values means that 75 percent of the time, BMPs performed better. The Regional Board has not provided any justification for using the 25th percentile standard. Moreover, the Tentative MRP only requires action (3 years later) "for those subwatersheds with a running average of twenty percent or greater of exceedances of the MALs in any discharge of storm water from the MS4." (G-13). Instead, as was done in

the Ventura MS4,[17] the discharge should be compared to water quality standards, and the median performance values should be used for developing Treatment BMP Performance Standards.

3. TMDL Monitoring

a. A summary of TMDL monitoring locations, frequencies and parameters should be included in the MRP

The Tentative MRP "incorporates by reference" and simply lists the TMDL Monitoring Plans that have been approved in Table E-1. (Draft Permit at E-7). Referencing the Monitoring Plans makes review of the overall scope of the Tentative MRP monitoring program in conjunction with the TMDL monitoring plans extremely difficult, as the monitoring provisions are not described in the permit itself. It is difficult to discern if the TMDL monitoring programs are adequate for determining if water quality objectives are achieved in the receiving water. The Regional Board should include a summary of TMDL monitoring locations, frequencies and parameters in the MRP or Permit Factsheet.

4. Regional Studies

a. The Board should include bioassessment monitoring in the Permit that is sufficient for determining receiving water trends and stormwater impacts on specific aquatic communities

The Tentative MRP requires that the Permittees participate in the SMC Regional Monitoring Program ("SMC") for bioassessment monitoring. The SMC recently updated their strategy for the coming five years. It is unclear if bioassessment will be part of this upcoming effort. Thus, the Regional Board should not count on SMC to develop and maintain an appropriate monitoring program.

Further, the current SMC program is inappropriate for the purposes of the MS4. While the SMC Regional Monitoring Program is useful in measuring the overall health of Southern California watersheds, probabilistic monitoring does not provide adequate information on compliance or trends over time at specific sites.

There is brief mention of Permittees contributing resources towards the San Gabriel and Los Angeles River Regional Watershed Management Programs; however, it is unclear what this monitoring entails and what would be required under this permit. It is critical that biological communities in all watersheds throughout Los Angeles County are adequately monitored. Bioassessment monitoring is critical to assess the full impacts of the discharge and should be performed on a regular basis.

[17] Order No. R4-2010-0108.

In addition the Regional Board should discuss how the bioassessment results will be evaluated. If bioassessment results raise concern, when compared to the Southern California Index of Biological Integrity, for example, the Permittee should be required to assess the impact and determine the source of impairment. This is a critical component absent in the Draft MRP.

b. The MRP should include enhanced aquatic toxicity outfall monitoring requirements

We support the proposed aquatic toxicity monitoring in both dry and wet weather in the receiving water. We also support the three required monitoring events each year for receiving water monitoring. However, the Tentative MRP does not require outfall monitoring unless the TIE performed in response to a receiving water hit is inconclusive (E-20). Toxicity can be very fleeting. In order to ensure that toxic discharge is identified, the Regional Board should require outfall monitoring for toxicity three times per year, at a minimum, at the same time that the receiving water monitoring location is sampled. The toxicity tests should continue for the term of the permit. Outfall toxicity monitoring is important, as it characterizes the discharge without in-stream dilution. The Permittee should select dischargers that are chronically flowing and that represent high-impact land uses such as transportation and industrial.

c. The MRP should require TST data reporting

Consistent with the 2010 USEPA guidance[18], we urge the Regional Board to also require toxicity data be reported for the Test of Significant Toxicity ("TST") statistical method (pass/fail and percent effected). This is also consistent with current drafts of the statewide Toxicity Policy.

5. Miscellaneous Monitoring Provisions

The Tentative MRP states that "[m]onitoring shall commence within 30 days after approval of the IMP, or within 60 days after approval of the CIMP by the Executive Officer…" (E-9). How long does the Regional Board anticipate this approval process taking? We are concerned that the limited staff resources may significantly delay this approval process and inhibit adequate monitoring from taking place for an extended period of time.

[18] U.S. Environmental Protection Agency. 2010a. National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document. EPA 833-R-10-003. Washington, DC: Office of Wastewater Management.

V. Conclusion

Environmental Groups appreciate this opportunity to comment on the Draft Permit. Please feel free to contact us with any questions or concerns you may have.

Sincerely,

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