NRDC
THE EARTH'S BEST DEFENSE

1314 2nd Street
Santa Monica, CA 90403
ph: 310-434-2300
fax: 310-434-2399
www.nrdc.org

Heal the Bay

1444 9th Street
Santa Monica, CA 90401
ph: 310-451-1550
fax: 310-496-1902
www.healthebay.org

October 15, 2007

Chair Francine Diamond and Members of the Board
California Regional Water Quality Control Board, Los Angeles Region
320 W. 4th St., Suite 200
Los Angeles, CA 90013

Re: Second Draft Ventura County Municipal Separate Storm Sewer System Permit, dated August 28, 2007 (NPDES Permit No. CAS004002)

Dear Chair Diamond and Members of the Board:

On behalf of Heal the Bay and the Natural Resources Defense Council, we submit the following comments on the August 28, 2007, Second Draft Ventura County Municipal Separate Storm Sewer System Permit ("Second Draft" or "Permit"), NPDES Permit No. CAS004002. We continue to support strongly many of the aspects of the Permit. We submit these comments to address important areas in which the Permit must be strengthened to meet the maximum extent practicable ("MEP") standard for municipal dischargers and best resolve Ventura County's water quality problems.

Our comments concern four areas within the Permit: (1) municipal action levels; (2) performance criteria for best management practices ("BMPs"); (3) low impact development; and (4) monitoring requirements. We believe that the Permit can be – and needs to be – revised as we have described in order to meet the Clean Water Act's NPDES standards.

I. Municipal Action Levels ("MALs")

The MALs provided in the Permit are seriously flawed and should be either completely revised or removed.

The Second Draft includes municipal action levels ("MALs") that were calculated using nationwide Phase I MS4 monitoring data. The Clean Water Act requires municipal dischargers to reduce stormwater pollution to the Maximum Extent Practicable ("MEP"), a standard that continually evolves and improves as better technologies become available and are demonstrated to be effective. In the Second Draft, the Board is using the MALs to represent MEP numerically. While we agree that MALs can be useful as interpretations of the MEP standard, the values presented in the Second Draft are completely inappropriate and in no shape or form represent MEP.

Although MALs are not intended to reflect water quality standards, the comparison to California Toxics Rule ("CTR") criteria brings to light flaws with the proposed values. As shown in the following table, the proposed copper, lead, and zinc MALs are significantly less stringent than CTR criteria. For instance, the lead MAL is *fourteen times* less stringent than the CTR chronic criterion. Discrepancies of this magnitude are not substantiated.

Parameter	Proposed MAL (ug/L)	CTR Acute Criterion(ug/L)	CTR Chronic Criterion(ug/L)
Total Cu	70.7	13.5	9.38
Total Pb	62.2	82.17-110	3.16-4.24
Total Ni	19.2	470.9	52.16
Total Zn	756	122.7	121.7

Table 1: Comparison of proposed MAL values and CTR criteria

More important, a comparison of the MALs to actual BMP performance data shows that the MALs are flawed and that they do not represent the MEP standard. The attached tables (Exhibit 1) were taken from an analysis by Geosyntec Consultants of the ASCE/EPA BMP database.[1] The comparison of the proposed MALs to demonstrated BMP effluent water quality clearly indicates that the MALs are set to reflect relatively poor BMP performance, not average or "best" practicable performance, as specifically required by the Clean Water Act's MEP standard. For instance, the proposed MAL for total copper is 70.7 ug/L, while over 95% of the hydrodynamic devices in the database achieve at least 38.55 ug/L total copper. The median performance is 15.409 ug/L. As another example, the MAL for zinc is 756 ug/L, while even the worst 5% of biofilter BMPs achieve 181.275 ug/L. The median performance is 30.256 ug/L.

In other words, almost all of the BMPs that were monitored achieved better effluent water quality than the proposed MAL in these cases, and the median performance is vastly superior to the MAL value. This discrepancy between the proposed MALs and demonstrated BMP performance cannot be justified given that MALs are defined to reflect and interpret MEP. The data set forth above show that, presently, MALs actually represent a Lowest Extent Practicable ("LEP") standard in many instances. Dischargers can "practicably" achieve significantly higher effluent quality than the MAL values suggest. Moreover, the inadequate MALs are weakened even further by the Permit's allowance for exceedances of the MAL values up to 20% of the time.

The MAL concept has great potential as an expression of MEP. Staff should be supported and encouraged in their efforts to better define MEP. MALs should furthermore be retained in the final Permit, but they must be strengthened to reflect good science and existing technical achievement in this region and the rest of the country. The Board could use as its reference point the water quality achieved by the top 10% of MS4 programs in the U.S.

---

[1] The Geosyntec study was an internally funded document on BMP performance. Heal the Bay's use of this information does not imply any agreement or disagreement by Geosyntec with the conclusions advanced by Heal the Bay.

Alternatively, the Board could utilize the Geosyntec analysis of BMP performance to develop appropriate MALs.

II. Performance Criteria

The Board should include performance-based criteria

One of the most significant shortcomings in previous stormwater permits and municipal stormwater management programs is the lack of performance-based criteria for BMPs. As a result, BMPs are added as part of SUSMP requirements or pollution abatement efforts without any focus on the quality of the water exiting the BMPs. The Second Draft includes numeric design criteria for hydrologic control but does not include water quality-based performance criteria. One of the most effective ways to ensure the success of stormwater programs and the attainment of water quality standards, however, is to require performance-based criteria. 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 Board must include scientifically supported, performance-based design criteria in the Permit to move the Region more quickly toward attaining water quality standards for receiving waters.

The recent Geosyntec analysis of the ASCE/EPA stormwater BMP database (summary tables are included as Exhibit 1) paves the way for the development of scientifically sound water quality performance criteria. This analysis contains effluent concentration percentiles for certain parameters and BMPs. The Board should require that BMPs installed at new development and redevelopment projects perform as well or better than 75% of the BMPs in the ASCE/EPA database. The Board should require that BMPs in sub-watersheds that have no demonstrated water quality impairments (i.e., not on the 303(d) list as impaired) or that are not on the list of SUSMP development categories meet *at least* the 50^{th} percentile performance (median) for the term of this permit. No discharger can reasonably refute that it should have to meet median performance criteria.

Obviously, this proposal concentrates on performance and should be accompanied by a design storm component as well. In this situation, we believe that the SUSMP standards should apply. At a minimum, the 85^{th} percentile standard in SUSMP should be used (the 85^{th} percentile runoff event with 0.2 inches per hour intensity). However, in order to move toward attaining water quality standards, a larger design storm, such as the two-year storm, may be necessary.[2]

---

[2] Our recommendations are as follows. Volume-Based Post-Construction Structural-or Treatment Control BMPs shall be designed to mitigate (infiltrate or treat) stormwater runoff from: (1) the volume of annual runoff based on unit basin storage water quality volume, to achieve 80% or more volume treatment by the method recommended in the California Stormwater Best Management Practices Handbook – Industrial/ Commercial (1993), the Ventura Countywide Stormwater Quality Management Program Land Development Guidelines; (2) the 85th percentile 24-hour runoff event determined as the maximized capture stormwater volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87 (1998); (3) the volume of runoff produced from a 0.75 inch storm event, prior to its discharge to a storm water conveyance system; or (4) the volume of runoff produced from a historical record-based reference 24-hour

III. Low Impact Development ("LID")

Our comments on the Planning and Land Development Program of the Second Draft focus specifically on the implementation of green building approaches to reducing storm water pollution. These LID practices utilize various site design and treatment methods to maintain the natural hydrologic characteristics of developed sites; research has shown LID to be the most effective and cost-efficient means of managing stormwater and abating water pollution. In this instance, NRDC has demonstrated through extensive comments and a special technical report authored by the nation's leading stormwater expert that LID has the potential to reduce runoff in Ventura County to zero or near-zero while creating robust additional benefits for the community. These benefits include cost savings for builders and owners and considerable reductions in water demand. For example, using LID, a single restaurant with a 30-car parking lot could capture enough water to meet the needs of a family of four for almost an entire year.[3] We believe that the LID element of the Permit has the potential to solve multiple problems and help Ventura County and the State of California meet a range of resource challenges.

We urge the Board to adopt certain changes to the language of the Planning and Land Development Program in order to make its LID component more robust and to eliminate some potential loopholes. Briefly, these changes concern four current deficiencies in the Permit.

- The Permit limits the applicability of LID to new development and redevelopment projects above various threshold sizes, even though LID is adaptable to all sites.

- The Permit requires a reduction of effective impervious area ("EIA") to less than 5% of total project area, instead of the 3% standard that would best prevent the degradation of Ventura County's watersheds.

- The Permit could be interpreted by some to, in practical terms, suspend compliance with LID requirements while alternative post-construction programs are developed. The allowance for alternative programs should not enable Permittees to delay implementation of post-construction stormwater control requirements.

- The Permit contains unclear language that could undercut the intent of the Effective Impervious Area (EIA) limitation by allowing runoff to enter the storm sewer system through improperly sized vegetated areas.

---

rainfall criterion for "treatment" that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event. Flow-Based Post-Construction Structural or Treatment Control BMPs shall be sized to handle the flow generated from either: (1) a rain event equal to at least 0.2 inches per hour intensity; or (2) a rain event equal to at least two times the 85th percentile hourly rainfall intensity for Ventura County.

[3] *See* R. Horner, *Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices ("LID") for Ventura County* (February 2007) at 15 (hereinafter "Horner Report"). The prototypical restaurant studied by Dr. Horner would capture 0.88 acre-ft. of runoff per year. A typical family of four uses approximately 1 acre-ft. of water per year.

By addressing these issues, the Board will set strong and feasible guiding standards for the implementation of low impact development principles by MS4 Permittees.

A. The Permit ill-advisedly allows projects under a certain threshold size not to implement LID techniques, although all projects are capable of implementing LID techniques in one form or another.

The Second Draft of the Permit has removed the robust LID requirement of the First Draft by limiting the scope of development projects that must incorporate LID to only those projects which meet threshold size criteria. The First Draft stated: "All new development and redevelopment projects shall integrate Low Impact Development ... principles into project design."[4] The Second Draft, in contrast, contains a general "applicability" section that specifically targets only new development and redevelopment projects over certain sizes.[5] Projects falling below these threshold criteria would not be required to integrate any post-construction treatment controls such as LID.

The Second Draft's approach is unnecessary, ill-advised, and inconsistent with the MEP standard. LID is not a single prescribed method of stormwater mitigation – it is a suite of strategies, each of which can be applied individually to a site. NRDC's previous comments demonstrated that even small project sites have the space to implement LID with extraordinary results. Every site can incorporate at least some LID design principles, and indeed every site *should* incorporate LID to the maximum extent possible because LID is a proven, cost-effective, and demonstrably superior means of reducing stormwater pollution that would otherwise be discharged from developed sites.[6]

B. The Permit incorporates a 5% EIA standard, but a 3% EIA standard is needed to ensure the health of Ventura County waters.

The Second Draft of the Permit, like the First Draft, does not go as far as necessary to reduce significant adverse impacts to the biological and physical integrity of receiving waters. Scientific analyses have demonstrated that the threshold for negative effects on streams in semi-arid regions of California is 2-3% EIA,[7] not 5%, as proposed in the Permit.[8] This empirical

---

[4] Los Angeles Regional Water Quality Control Board, *Draft Ventura County Municipal Separate Storm Sewer System Permit*, NPDES No. CAS004002 (Dec. 27, 2006), Part 4.E.I.1 (hereinafter "First Draft Permit").

[5] Los Angeles Regional Water Quality Control Board, *Second Draft Ventura County Municipal Separate Storm Sewer System Permit*, NPDES No. CAS004002 (Aug. 28, 2007), Parts 5.E.II and 5.E.III.2(a) (hereinafter "Second Draft Permit").

[6] *See* Horner Report.

[7] Horner Report at A-1 to A-2.

[8] Second Draft Permit, Part 5.E.III.1(a).

reality is not open to serious disagreement. Moreover, Dr. Horner's report (submitted with our comments on the First Draft) demonstrates that our recommendation of 3% EIA can be met practicably for typical developments in Ventura County, and runoff can even be eliminated entirely for most development types.[9] Because lower EIA standards lead to improved water quality and stream health, we urge the Board to set the EIA standard at 3% in the final Permit.

C. The "Alternative Post Construction Storm Water Mitigation Programs" section of the Permit is dangerously ambiguous because it could allow Permittees to avoid compliance with the Permit or to delay implementation of effective stormwater mitigation strategies.

The Permit contains provisions that create an alternative to compliance with the Permit's onsite post-construction stormwater mitigation requirements. This alternative would allow Permittees to apply for approval of a regional or sub-regional stormwater mitigation program to take the place of the Permit's requirements.[10] The current Permit language, however, contains two problematic ambiguities.

First, the Permit states that alternative programs may "substitute in part or wholly for on-site post-construction requirements,"[11] but the Permit does not elaborate under what circumstances such partial or whole substitutions would be allowed. Without specifying the criteria by which the extent of substitution is determined, the Permit effectively invites Permittees to try to avoid the Permit's post-construction stormwater mitigation requirements entirely. The Board and Permittees should instead have clear requirements in this area. The Permit should include explicit provisions detailing how and upon what criteria partial or whole waivers of the Permit's requirements will be granted.

Second, the Permit does not sufficiently guard against delays in the implementation of post-construction control requirements which could result from the submittal of alternative program applications. Part 5.E.IV.4(g) of the Permit somewhat addresses this issue, but it is not clear how and when this provision applies. Rather than stating only that "nothing ... shall be construed to delay the implementation of post-construction control requirements,"[12] the Permit should specify that Permittees applying for alternative programs *must* implement the required post-construction controls unless and until the Board has formally approved an alternative program. Part 5.E.IV.4(g) could potentially be rewritten as follows (changes are italicized): "Nothing in these provisions shall be construed *to allow a Permittee or a coalition of Permittees* to delay the implementation of post-construction control requirements, as approved in this Order. *Permittees shall implement the post-construction control requirements detailed in this Order until the Regional Water Board has formally approved, and Permittees have begun active implementation of, an alternative regional or sub-regional stormwater mitigation program.*"

---

[9] Horner Report at 17.

[10] Second Draft Permit, Part 5.E.IV.4.

[11] Second Draft Permit, Part 5.E.IV.4(a).

[12] Second Draft Permit, Part 5.E.IV.4(g).

D. The Permit's description of how to render impervious surfaces "ineffective" is flawed because it could allow runoff to enter the storm sewer system through vegetated areas lacking sufficient infiltration capacity.

In the section on Integrated Water Quality/Resources Management Criterion, the Permit sets forth the 5% EIA standard discussed above and describes how surfaces may be rendered "ineffective" for the purposes of meeting the EIA standard.[13] The problem with the methods outlined in this section is that they would not necessarily ensure that runoff never reaches the storm sewer system. In order for surfaces to be rendered truly "ineffective," all rainwater falling on them must be infiltrated or captured and reused. The Permit, however, does not mention any sizing or infiltration capacity criteria for the methods identified (collection and storage, discharge into an infiltration trench, and drainage through a vegetated cell, surface, or swale). Without requiring that these devices have the capacity to handle the design storm, they could simply overflow into the storm sewer system without infiltration or capture. This provision should specify, instead, that in order for surfaces to be considered "ineffective," all runoff from them must be infiltrated or captured through the described methods. Otherwise, this loophole risks undermining the benefit of establishing an EIA standard in the first place.

IV. Monitoring

A. The Board should establish a complete set of minimum monitoring requirements in the Permit.

To assess MS4 impacts, the monitoring program in the Second Draft relies on current and future monitoring efforts that are taking place (or will take place) in Ventura County independent of the MS4 Permit. For instance, the bioassessment monitoring program was eliminated in the Second Draft as Board Staff contends that a future regional program will include the necessary monitoring. However, the Second Draft does not provide sufficient information on these "complementary" monitoring programs. Board Staff should compile a list of all of the monitoring that is currently underway in order for the public to evaluate whether the Permit's requirements, when combined with current monitoring efforts, will be sufficient. In general, though, the Permit must contain minimum monitoring requirements, which are necessary to assess compliance and impacts from the MS4. If another program covers some of these requirements, the discharger can work with this other monitoring program to coordinate logistical issues like cost-sharing.

---

[13] Second Draft Permit, Part 5.E.III.1.

B. The Permit's monitoring program must be adequate to determine compliance with the Permit's requirements.

The Clean Water Act requires that a Permittee undertake a self-monitoring program sufficient to determine compliance with its NPDES permit.[14] This general requirement is reflected in the Second Draft, which lists one of its monitoring goals as assessing "...compliance with effluent limitations and water quality objectives." Permit at F-1. However, as written, the Permit may leave open many opportunities for a Permittee to dispute whether required monitoring is adequate to determine its compliance with water quality standards. For ease of implementation, it is critical that clarifications be made.

Specifically, the core monitoring program requires three monitoring events per year at a total of five mass emissions stations on the main stems of the area's rivers.[15] The Board has proposed to reduce this number to only three stations for the majority of the permit cycle. This is a very small number of monitoring locations given that Ventura County covers an area of 1,873 square miles and multiple Permittees preside over each of the three main watershed management areas ("WMAs"). With so few monitoring stations, how will the Board distinguish readily among Permittees that are in compliance and those that are not? Do the Permittees agree that the results of the program, as proposed, are in fact adequate to determine which Permittee(s) are violating water quality standards?

Further, the Second Draft contains no tributary water quality monitoring requirements, which are essential for evaluating whether water quality standards have been attained in the receiving water.[16] Staff contends that the TMDL "end-of-pipe" monitoring and MAL monitoring will be sufficient to identify exceedances of water quality objectives. The Second Draft also states that "[t]he 'end-of-pipe' compliance points for the determination of compliance with the MALs are the major outfalls of discharge pipes to the receiving waters."[17] But monitoring at the outfalls which discharge stormwater from multiple sources may set the stage for arguments with Permittees regarding relative degree of responsibility. Again, how will the Board determine which MS4 is causing or contributing to an exceedance? Do the Permittees agree that the program is sufficient to allow them to determine quickly whether they are in compliance with the Permit's water quality standards requirements and then to make rapid improvements to their implementation programs?

Also, tributary monitoring serves unique and important purposes. The benefits of tributary monitoring include: (1) identifying sub-watersheds where stormwater discharges are causing or contributing to exceedances of water quality objectives; (2) prioritizing drainage and subdrainage areas where control measures need to be implemented; and (3) determining if water

---

[14] *See* 40 C.F.R. § 122.44(i)(1).

[15] Second Draft Permit at Attachment F-2.

[16] Of note, the tributary monitoring requirements in the first draft of the permit have been removed in the Second Draft.

[17] Second Draft Permit, Part 2(4).

quality objectives are achieved in the receiving water. The overall goal of the MS4 program and other regulatory programs such as TMDLs is to attain water quality objectives in the receiving water.

Moreover, the monitoring program requires that monitoring occur at 60% or more of discharges from the municipal drainage area. How many outfalls does this include? If 60% of the discharges come through one or two outfalls, this information will not be as useful to track sources from the urbanized portions of the County as a whole. Under this scenario, major tributaries may not be included in the monitoring. The Board should provide requirements for the discharger to use in selecting the specific discharges that are monitored. For instance, drainages carrying stormwater from commercial, industrial, and high-use transportation should be prioritized.

As outlined above, the extent of Permittee compliance with the Permit should be clearly discernible to the public, Permittees, and Board staff without extended analysis and argument. The program must support rapid course corrections, when needed. In order to better meet these goals, and the Clean Water Act's monitoring requirements, it is important that the Board create a more robust monitoring program.[18] There must be an increased number of required monitoring locations, including tributary monitoring locations. Additional monitoring sites must be selected to represent each individual Permittee's discharge, so that any water quality standard exceedences can be linked readily and quickly to a specific municipality.

C. The detailed nature of the Permit may hinder compliance-assurance.

In general, the Permit is extremely thorough and gives the Permittees very detailed requirements. For instance, under the Public Information and Participation Program, the Permittees are required to perform many subtasks, such as developing a strategy to educate ethnic communities and distributing education materials to pet shops. While these are potentially important tasks, how will the Board determine if Permittees have completed these actions satisfactorily? This is an example of one of numerous compliance-assurance issues that will be extremely difficult for the Board to address with its current compliance report review program.

D. The Board should revise toxicity requirements to meet the working group's recommendations.

Earlier this year, the Board convened a multi-stakeholder toxicity working group that developed the *SMBRC Technical Memorandum on Toxicity Testing of Wet and Dry Weather Runoff* ("Memorandum"). This working group was chaired by the Southern California Coastal Water Research Project ("SCCWRP") and included representatives from wastewater treatment and stormwater agencies. The objective of the SCCWRP- and stakeholder-authored Memorandum is to provide guidance to the Board for use in developing MS4 permit toxicity monitoring and reporting requirements. However, several of the current toxicity requirements in the Second Draft appear to be inconsistent with the Memorandum. For instance, the

---

[18] This is a common need – throughout the State Board's Blue Ribbon Panel Report on the feasibility of numerics in stormwater permits, the experts highlight the inadequacy of current stormwater monitoring efforts.

Memorandum recommends sampling both dry and wet weather events, but the Second Draft includes only wet weather sampling. The Memorandum also specifies that a minimum of two sensitive species (a crustacean and a sensitive invertebrate) should be used to test each sample. The Board should revise the Permit to be consistent with the Board's working group recommendations.

Further, several of the toxicity monitoring program requirements included in the Second Draft are very arbitrary and will not provide a proper determination of whether stormwater discharges are impacting aquatic life. Toxic Identification Evaluations ("TIEs"), for instance, are required only if 90% or more toxicity is found in the first year. Also, a Toxic Reduction Evaluation ("TRE") is not triggered if less than 50% of the toxic response is linked to a specific pollutant category in at least two samples or if two TREs have already been done that year.[19] These triggers are arbitrary and unsubstantiated and will not provide adequate information to assess impacts to aquatic species or to protect aquatic life in waters receiving polluted storm runoff. Thus, the monitoring requirements should be modified to contain a more protective toxicity threshold and to require TIEs and TREs when there are significant toxicity problems in receiving waters. Additionally, each TRE action should include an implementation plan with milestones for constructing specific BMPs that meet the 75th percentile performance criteria and target the pollutant of concern.

E. The Board should include bioassessment monitoring in the Permit.

Bioassessment monitoring requirements have been completely removed from the Second Draft. Staff contends that the Permittees will participate in the Southern California Regional Bioassessment Monitoring program instead. However, this monitoring program is not yet operating, so it is unclear if its requirements will adequately cover MS4 impacts. It sets a bad precedent to rely on a program that is currently not in existence, especially for watershed systems that have such tremendous biological resources. Bioassessment monitoring is critical to assess the full impacts of the discharge and should be performed on a regular basis. Ventura County has some of the best remaining biological resources in Southern California, and the impacts of stormwater on these resources must be assessed. In addition, bioassessment requirements have for years been a part of NPDES monitoring programs for dischargers – including POTWs, refineries, and power plants – so requiring bioassessment as part of the Permit's core monitoring requirements would not be precedent-setting. In order to determine the impacts of stormwater on biological resources in receiving waters, the Board must include a defined bioassessment monitoring program in the Permit as part of the "Core Monitoring" requirements.

<u>V. TMDLs</u>

A. The Permit must include numeric effluent limits based on waste load allocations ("WLAs") for <u>all</u> TMDLs in effect in Ventura County.

Federal law clearly commands that the Board integrate already adopted TMDLs into the effluent limitations of appropriate NPDES permits. Specifically, federal regulations require that:

[19] Second Draft Permit at Attachment F-4 to F-5.

> Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7.[20]

Thus, the effluent limits set by the Permit must be consistent with the wasteload allocations for those TMDLs in effect for Ventura County. Appropriately, the Ventura MS4 Permit outlines WLAs for four TMDLs: Santa Clara River Nutrient TMDL, Malibu Creek Bacteria TMDL, Calleguas Creek Toxicity TMDL, and Calleguas Creek OC Pesticides TMDL.

However, the Permit fails to include WLAs for five additional TMDLs in effect in Ventura County: Calleguas Creek Nitrogen TMDL (in effect July 13, 2003), Calleguas Creek Chloride TMDL (in effect March 2002), Santa Clara River Chloride TMDL (in effect May 4, 2005), Malibu Creek Nutrients TMDL (in effect March 22, 2003), and Calleguas Creek Metals and Selenium TMDL (in effect March 22, 2003). Thus, the Board must modify the Permit to include these numeric WLAs.

In addition, there are several TMDLs that have been adopted by the Board but are not in effect as of the date of this letter. These include five trash TMDLs for waterbodies throughout Ventura County. The WLAs in these TMDLs should be included in the Permit, if they come into effect before the Board hearing to consider this item. As these and other future TMDLs come into effect, the Board should incorporate the appropriate WLAs into the MS4 Permit.

B. The Permit must include all required actions outlined in TMDL implementation schedules.

Implementation schedules included in TMDL Basin Plan Amendments adopted by the Board require dischargers to complete various actions before the final compliance deadline. For instance, schedules may require monitoring plan submittals or the demonstration of a waste load reduction after a certain period of time. These actions are important steps in ensuring that dischargers are on-track for ultimate compliance with the waste load allocations. The implementation schedule actions that have completion dates within the term of the Ventura Permit must also be included in the Permit, as they must be enforceable requirements.

We thank the Board Members and Board Staff for this opportunity to comment on the Second Draft. More than fifteen years after urban stormwater runoff permitting took effect under the Clean Water Act, the region still struggles with the impacts of this source of pollution. This draft Permit contains the seeds of approaches that can make a significant difference in better controlling runoff. The focus on low impact development is particularly important, and it promises – with some improvements set forth above – to be highly effective. In other respects, however, such as the interpretation of MEP through MALs and actual compliance monitoring requirements, the conceptual strengths of the Permit are largely counteracted by weak implementation of these concepts in the draft Permit. These weaknesses must be corrected before the Permit is adopted.

---

[20] 40 CFR § 122.44(d)(1)(vii)(B).

If you have any questions, feel free to contact us.

Sincerely,

David Beckman, Esq.
Senior Attorney, NRDC

Mark Gold, D. Env.
President, Heal the Bay

Kirsten James, MESM
Staff Scientist, Heal the Bay

Exhibit 1

Effluent Statistics					Effluent Percentiles						
BMPID	Parameter	Count	NDCount	%ND	5th	10th	25th	50th	75th	90th	95th
Detention Basins	Cadmium, Dissolved (ug/L as Cd)	75	43	57%	0.012	0.020	0.050	0.144	0.566	1.830	2.167
Detention Basins	Cadmium,Total (ug/L as Cd)	97	29	30%	0.083	0.110	0.248	0.568	1.313	2.359	3.145
Detention Basins	Copper, Dissolved (ug/L as Cu)	152	0	0%	1.947	2.526	4.864	8.117	13.727	24.263	28.125
Detention Basins	Copper, Total (ug/L as Cu)	184	14	8%	2.870	3.697	7.180	13.016	21.922	32.357	42.223
Detention Basins	Lead, Dissolved (ug/L as Pb)	111	52	47%	0.061	0.093	0.185	1.031	3.353	5.731	7.519
Detention Basins	Lead, Total (ug/L as Pb)	146	18	12%	0.837	1.639	4.902	12.725	28.191	52.553	97.903
Detention Basins	Nitrate + Nitrite, Total (mg/L as N)	27	18	67%	0.002	0.003	0.010	0.048	0.142	0.575	1.020
Detention Basins	Nitrate Nitrogen, Total (mg/L as N)	103	10	10%	0.133	0.174	0.270	0.578	0.918	1.684	2.150
Detention Basins	Nitrogen, Ammonia Total (mg/L as N)	13	3	23%	0.016	0.019	0.029	0.048	0.098	0.208	0.289
Detention Basins	Nitrogen, Kjeldahl, Total (mg/L as N)	97	14	14%	0.436	0.542	0.781	1.242	1.951	3.162	3.918
Detention Basins	Nitrogen, Total (mg/L as N)	12	0	0%	0.528	0.575	0.775	1.272	2.431	3.856	4.495
Detention Basins	Phosphorous, Dissolved (mg/L as P)	49	12	24%	0.028	0.035	0.049	0.085	0.143	0.251	0.329
Detention Basins	Phosphorous, Total (mg/L as P)	174	20	11%	0.014	0.019	0.037	0.108	0.283	0.460	0.670
Detention Basins	Solids, Total Dissolved (mg/L)	81	1	1%	9.083	19.536	45.677	73.510	111.402	233.722	379.539
Detention Basins	Solids, Total Suspended (mg/L)	177	8	5%	2.114	3.043	9.192	21.958	43.145	76.742	117.692
Detention Basins	Zinc, Dissolved (ug/L as Zn)	153	1	1%	3.585	7.232	20.610	34.267	60.530	101.297	146.808
Detention Basins	Zinc, Total (ug/L as Zn)	207	2	1%	12.097	17.843	34.930	60.976	105.574	197.697	263.675
Biofilters	Cadmium, Dissolved (ug/L as Cd)	342	66	19%	0.079	0.096	0.199	0.200	0.200	0.303	0.464
Biofilters	Cadmium,Total (ug/L as Cd)	361	49	14%	0.081	0.149	0.200	0.206	0.424	0.840	1.258
Biofilters	Copper, Dissolved (ug/L as Cu)	399	4	1%	1.046	1.530	2.939	5.868	11.064	17.656	22.703
Biofilters	Copper, Total (ug/L as Cu)	468	9	2%	1.787	2.656	4.273	7.984	17.241	32.435	44.607
Biofilters	Lead, Dissolved (ug/L as Pb)	368	26	7%	0.293	0.471	1.000	1.000	2.959	6.677	11.700
Biofilters	Lead, Total (ug/L as Pb)	483	50	10%	0.824	1.000	1.345	4.157	14.028	43.513	66.517
Biofilters	Nitrate + Nitrite, Total (mg/L as N)	27	0	0%	0.138	0.174	0.311	0.611	0.955	1.641	2.215
Biofilters	Nitrate Nitrogen, Total (mg/L as N)	476	12	3%	0.052	0.095	0.165	0.375	0.748	1.601	2.486
Biofilters	Nitrogen, Ammonia Total (mg/L as N)	14	4	29%	0.007	0.009	0.017	0.031	0.066	0.142	0.173
Biofilters	Nitrogen, Kjeldahl, Total (mg/L as N)	395	4	1%	0.469	0.633	0.894	1.342	2.138	3.600	6.378
Biofilters	Nitrogen, Total (mg/L as N)	96	0	0%	0.128	0.205	0.396	0.643	1.560	2.329	2.855
Biofilters	Phosphorous, Dissolved (mg/L as P)	38	0	0%	0.136	0.151	0.197	0.283	0.483	1.039	1.417
Biofilters	Phosphorous, Total (mg/L as P)	539	8	1%	0.042	0.056	0.114	0.240	0.451	0.815	1.167
Biofilters	Solids, Total Dissolved (mg/L)	357	1	0%	11.444	23.210	46.397	76.845	114.831	164.080	201.933
Biofilters	Solids, Total Suspended (mg/L)	467	7	1%	1.255	3.043	8.371	20.027	49.854	115.978	233.464
Biofilters	Zinc, Dissolved (ug/L as Zn)	399	4	1%	5.000	5.000	8.732	19.485	35.696	52.821	71.794
Biofilters	Zinc, Total (ug/L as Zn)	533	51	10%	4.479	6.395	14.164	30.256	67.208	119.646	181.275

Effluent Statistics					Effluent Percentiles						
BMPID	Parameter	Count	NDCount	%ND	5th	10th	25th	50th	75th	90th	95th
Hydrodynamic Devices	Cadmium, Dissolved (ug/L as Cd)	79	32	41%	0.011	0.017	0.042	0.199	0.785	1.793	2.239
Hydrodynamic Devices	Cadmium,Total (ug/L as Cd)	88	25	28%	0.024	0.038	0.102	0.382	1.261	3.035	5.047
Hydrodynamic Devices	Copper, Dissolved (ug/L as Cu)	89	15	17%	1.074	1.409	2.961	9.580	16.630	31.985	41.695
Hydrodynamic Devices	Copper, Total (ug/L as Cu)	99	0	0%	2.791	3.340	7.462	15.409	21.659	32.301	38.550
Hydrodynamic Devices	Lead, Dissolved (ug/L as Pb)	89	35	39%	0.123	0.201	0.434	1.184	3.769	7.376	8.733
Hydrodynamic Devices	Lead, Total (ug/L as Pb)	95	8	8%	0.887	1.351	2.691	6.297	13.428	23.845	42.576
Hydrodynamic Devices	Nitrate + Nitrite, Total (mg/L as N)	42	13	31%	0.062	0.078	0.117	0.226	0.359	0.506	0.707
Hydrodynamic Devices	Nitrate Nitrogen, Total (mg/L as N)	59	2	3%	0.073	0.098	0.152	0.306	0.680	1.299	2.120
Hydrodynamic Devices	Nitrogen, Ammonia Total (mg/L as N)	69	19	28%	0.009	0.014	0.041	0.090	0.313	0.814	1.103
Hydrodynamic Devices	Nitrogen, Kjeldahl, Total (mg/L as N)	77	4	5%	0.224	0.351	0.566	1.086	1.830	3.576	5.984
Hydrodynamic Devices	Nitrogen, Total (mg/L as N)	13	0	0%	0.902	0.988	1.335	2.101	3.633	5.233	5.939
Hydrodynamic Devices	Phosphorous, Dissolved (mg/L as P)	58	19	33%	0.000	0.001	0.002	0.019	0.088	0.172	0.253
Hydrodynamic Devices	Phosphorous, Total (mg/L as P)	170	5	3%	0.011	0.023	0.067	0.148	0.270	0.926	2.612
Hydrodynamic Devices	Solids, Total Dissolved (mg/L)	198	6	3%	3.905	6.206	19.175	60.768	422.937	7951.478	22415.772
Hydrodynamic Devices	Solids, Total Suspended (mg/L)	199	14	7%	2.977	5.543	17.995	43.173	99.360	190.249	303.150
Hydrodynamic Devices	Zinc, Dissolved (ug/L as Zn)	99	18	18%	3.357	5.113	12.784	34.762	76.530	156.734	334.604
Hydrodynamic Devices	Zinc, Total (ug/L as Zn)	174	13	7%	11.341	17.793	37.092	69.089	124.178	201.430	291.030
Media Filters	Cadmium, Dissolved (ug/L as Cd)	111	74	67%	0.009	0.014	0.033	0.097	0.290	0.680	1.261
Media Filters	Cadmium,Total (ug/L as Cd)	139	80	58%	0.035	0.053	0.109	0.257	0.764	1.401	1.778
Media Filters	Copper, Dissolved (ug/L as Cu)	258	7	3%	1.344	1.971	4.050	7.064	13.178	23.449	29.351
Media Filters	Copper, Total (ug/L as Cu)	294	19	6%	1.881	2.692	5.569	9.795	19.043	35.176	54.304
Media Filters	Lead, Dissolved (ug/L as Pb)	227	117	52%	0.055	0.088	0.195	0.550	1.641	3.681	5.916
Media Filters	Lead, Total (ug/L as Pb)	251	44	18%	0.426	0.609	1.397	4.376	13.378	23.679	39.362
Media Filters	Nitrate + Nitrite, Total (mg/L as N)	35	11	31%	0.170	0.213	0.301	0.951	1.763	2.859	3.926
Media Filters	Nitrate Nitrogen, Total (mg/L as N)	232	16	7%	0.181	0.253	0.424	0.690	1.151	2.029	2.643
Media Filters	Nitrogen, Ammonia Total (mg/L as N)	38	19	50%	0.003	0.006	0.022	0.102	0.728	1.919	2.931
Media Filters	Nitrogen, Kjeldahl, Total (mg/L as N)	229	12	5%	0.352	0.464	0.855	1.491	2.303	3.779	6.796
Media Filters	Nitrogen, Total (mg/L as N)	20	0	0%	1.921	2.077	2.530	3.472	4.695	6.024	6.682
Media Filters	Phosphorous, Dissolved (mg/L as P)	90	21	23%	0.019	0.025	0.038	0.085	0.142	0.238	0.407
Media Filters	Phosphorous, Total (mg/L as P)	280	25	9%	0.018	0.040	0.075	0.129	0.230	0.394	0.566
Media Filters	Solids, Total Dissolved (mg/L)	114	0	0%	12.216	24.105	41.104	56.574	85.506	137.169	230.416
Media Filters	Solids, Total Suspended (mg/L)	358	15	4%	1.317	2.762	6.321	14.784	37.784	87.741	148.957
Media Filters	Zinc, Dissolved (ug/L as Zn)	254	15	6%	3.212	5.915	14.843	30.677	76.394	143.497	266.374
Media Filters	Zinc, Total (ug/L as Zn)	383	19	5%	2.596	4.680	14.669	35.580	103.083	281.505	436.429

Effluent Statistics					Effluent Percentiles						
BMPID	Parameter	Count	NDCount	%ND	5th	10th	25th	50th	75th	90th	95th
Retention Ponds	Cadmium,Total (ug/L as Cd)	200	89	45%	0.003	0.007	0.043	0.145	0.527	7.252	9.983
Retention Ponds	Copper, Dissolved (ug/L as Cu)	182	5	3%	1.744	2.473	3.224	4.358	5.976	9.829	12.865
Retention Ponds	Copper, Total (ug/L as Cu)	327	10	3%	1.122	1.891	3.140	5.367	8.958	28.112	49.725
Retention Ponds	Lead, Dissolved (ug/L as Pb)	153	53	35%	0.174	0.310	0.821	2.848	9.059	29.422	35.410
Retention Ponds	Lead, Total (ug/L as Pb)	404	78	19%	0.256	0.466	1.007	3.386	15.793	36.788	64.062
Retention Ponds	Nitrate + Nitrite, Total (mg/L as N)	247	18	7%	0.004	0.005	0.012	0.038	0.173	0.371	0.546
Retention Ponds	Nitrate Nitrogen, Total (mg/L as N)	142	2	1%	0.040	0.066	0.114	0.310	0.632	1.150	1.408
Retention Ponds	Nitrogen, Ammonia Total (mg/L as N)	265	21	8%	0.011	0.016	0.027	0.056	0.127	0.238	0.314
Retention Ponds	Nitrogen, Kjeldahl, Total (mg/L as N)	244	9	4%	0.463	0.577	0.772	1.043	1.571	2.258	3.202
Retention Ponds	Nitrogen, Total (mg/L as N)	239	0	0%	0.537	0.631	0.867	1.278	1.776	2.410	2.907
Retention Ponds	Phosphorous, Dissolved (mg/L as P)	204	5	2%	0.019	0.021	0.039	0.062	0.116	0.206	0.253
Retention Ponds	Phosphorous, Total (mg/L as P)	486	14	3%	0.018	0.035	0.063	0.142	0.283	0.714	1.198
Retention Ponds	Solids, Total Dissolved (mg/L)	79	0	0%	27.590	56.563	129.402	390.152	633.739	1389.317	1779.409
Retention Ponds	Solids, Total Suspended (mg/L)	469	3	1%	0.559	1.197	4.281	11.612	28.307	66.130	110.111
Retention Ponds	Zinc, Dissolved (ug/L as Zn)	158	6	4%	1.002	1.199	2.482	9.770	28.517	47.281	75.918
Retention Ponds	Zinc, Total (ug/L as Zn)	423	52	12%	1.426	2.172	7.183	19.601	37.214	70.121	121.125
Wetland Basins	Cadmium, Dissolved (ug/L as Cd)	7	4	57%	2.726	4.014	9.874	28.487	61.896	85.135	92.601
Wetland Basins	Cadmium,Total (ug/L as Cd)	50	1	2%	0.090	0.100	0.100	0.164	1.145	5.736	9.569
Wetland Basins	Copper, Dissolved (ug/L as Cu)	7	0	0%	4.772	4.956	5.538	6.522	7.389	7.724	7.793
Wetland Basins	Copper, Total (ug/L as Cu)	80	0	0%	1.087	1.578	2.257	3.091	5.404	8.409	10.310
Wetland Basins	Lead, Dissolved (ug/L as Pb)	11	1	9%	0.354	0.391	0.524	0.793	1.070	1.385	1.582
Wetland Basins	Lead, Total (ug/L as Pb)	91	0	0%	0.231	0.377	0.830	1.066	2.351	4.940	6.356
Wetland Basins	Nitrate + Nitrite, Total (mg/L as N)	144	0	0%	0.006	0.008	0.015	0.043	0.178	0.468	0.791
Wetland Basins	Nitrate Nitrogen, Total (mg/L as N)	91	4	4%	0.015	0.040	0.111	0.207	0.410	0.798	1.064
Wetland Basins	Nitrogen, Ammonia Total (mg/L as N)	188	1	1%	0.006	0.009	0.019	0.041	0.118	0.278	0.401
Wetland Basins	Nitrogen, Kjeldahl, Total (mg/L as N)	146	0	0%	0.640	0.717	0.888	1.146	1.376	1.691	2.073
Wetland Basins	Nitrogen, Total (mg/L as N)	201	0	0%	0.558	0.741	0.922	1.278	1.783	2.670	3.976
Wetland Basins	Phosphorous, Dissolved (mg/L as P)	114	0	0%	0.007	0.010	0.024	0.053	0.178	0.356	0.444
Wetland Basins	Phosphorous, Total (mg/L as P)	220	1	0%	0.014	0.024	0.040	0.070	0.183	0.405	0.522
Wetland Basins	Solids, Total Dissolved (mg/L)	25	0	0%	6.596	8.420	12.181	20.775	70.372	312.445	460.257
Wetland Basins	Solids, Total Suspended (mg/L)	211	0	0%	0.866	1.110	1.956	6.775	16.507	41.338	75.644
Wetland Basins	Zinc, Dissolved (ug/L as Zn)	7	0	0%	9.726	10.433	12.592	15.943	19.866	23.022	24.222
Wetland Basins	Zinc, Total (ug/L as Zn)	107	1	1%	8.342	9.903	12.884	19.005	40.343	124.055	227.030

Effluent Statistics					Effluent Percentiles						
BMPID	Parameter	Count	NDCount	%ND	5th	10th	25th	50th	75th	90th	95th
Wetland Channel	Lead, Dissolved (ug/L as Pb)	11	0	0%	1.425	1.674	2.751	5.129	15.298	41.726	61.601
Wetland Channel	Lead, Total (ug/L as Pb)	41	0	0%	1.008	1.079	2.308	5.387	13.481	41.883	112.900
Wetland Channel	Nitrate Nitrogen, Total (mg/L as N)	41	0	0%	0.056	0.081	0.122	0.235	0.458	0.841	1.544
Wetland Channel	Nitrogen, Ammonia Total (mg/L as N)	10	0	0%	0.030	0.036	0.062	0.132	0.338	0.810	1.087
Wetland Channel	Nitrogen, Kjeldahl, Total (mg/L as N)	33	0	0%	0.657	0.717	0.868	1.285	1.576	1.926	2.198
Wetland Channel	Nitrogen, Total (mg/L as N)	42	0	0%	0.729	0.851	1.033	1.491	1.949	3.650	9.669
Wetland Channel	Phosphorous, Dissolved (mg/L as P)	41	0	0%	0.039	0.045	0.059	0.080	0.136	0.188	0.226
Wetland Channel	Phosphorous, Total (mg/L as P)	43	0	0%	0.073	0.083	0.118	0.190	0.315	0.502	0.997
Wetland Channel	Solids, Total Dissolved (mg/L)	9	0	0%	80.579	89.337	116.846	250.169	890.815	1588.032	1806.235
Wetland Channel	Solids, Total Suspended (mg/L)	41	0	0%	3.126	4.359	8.931	19.119	75.927	322.275	992.616
Wetland Channel	Zinc, Dissolved (ug/L as Zn)	9	0	0%	6.392	7.679	10.642	22.766	105.009	236.595	291.699
Wetland Channel	Zinc, Total (ug/L as Zn)	9	0	0%	20.242	22.827	30.856	54.025	207.935	545.748	713.850