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June 21, 2012

Chair Charles Hoppin and Board Members
State Water Resources Control Board
1001 I Street, 24thFloor
Sacramento, CA 95814



Sent via Email to: commentletters@waterboards.ca.gov

RE: Comments on the Second Revised Tentative Order – Caltrans MS4 Permit (NPDES Permit No. CAS000003)

Dear Chair Hoppin and Board Members:

On behalf of Heal the Bay, we appreciate the opportunity to review and provide the following comments on the *State of California Department of Transportation (Caltrans) Municipal Separate Storm Sewer System (MS4) Permit (Revised Permit)* dated April 27, 2012. Heal the Bay is an environmental organization with over 13,000 members dedicated to improving water quality in Santa Monica Bay and Southern California coastal waters for people and marine life.

After participating in the stakeholder process for nearly two years that led to two prior draft permits, which included many positive elements, we are extremely disappointed in the radical negative changes that we see in the Revised Permit. The Revised Permit contains significantly reduced monitoring, weak post-construction requirements, and no TMDL implementation requirements, among other flaws. The revisions are primarily major steps backwards from the proposals in previous drafts of this permit, will not lead to water quality protection, and are completely unjustified. In fact, it does not appear that any changes were made in the Revised Permit based on environmental community concerns. Instead, the Revised Permit allows for economic considerations to trump environmental protection and mandates of the Clean Water Act. Of note, the Fact Sheet states that the cost estimates were “worst-case scenarios or the most restrictive interpretation of the Tentative Orders.” The State Board is completely unjustified in making substantial weakening changes to the Revised Permit for the purposes of “lower cost of compliance.” We offer suggestions below and in our past letters¹ that are critical for ensuring

¹ As most of the concerns we expressed previously have not been addressed, we incorporate two previous letters by reference – one dated March 14, 2001 drafted in collaboration with California Coastkeeper Alliance and another dated September 19, 2011 drafted in collaboration with both California Coastkeeper and the Natural Resources Defense Council.



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that water quality standards are attained – the ultimate goal of the Permit. We also support the comments submitted by California Coastkeeper Alliance on the Revised Permit.

Monitoring

The Monitoring Program should be significantly strengthened.

Caltrans' jurisdiction covers more than 50,000 miles of highways and freeway lanes throughout the state. As stated in the Revised Permit, "Discharges of storm water and non-storm water from Department properties, facilities, and activities have been shown to contribute pollutants to waters of the United States. As such, these discharges may be causing or threatening to cause violations of water quality objectives..."² The significant reduction in monitoring requirements from the last tentative draft of the permit to this draft coupled with the other monitoring program inadequacies described in our previous letters and below threatens to inhibit the ability of the data collected to truly capture the impacts of Caltrans' discharge on waterways throughout the state. Of note, within the Permit, monitoring reductions from the prior version include:

- Removal of 29 constituents from the monitoring constituent list
- Removal of requirements for programmatic stream stability assessments and a retrofit implementation schedule
- Deletion of water quality action levels
- Limited monitoring for new constituents to TMDL watersheds

The Revised Permit proposes a "tiered" approach for selecting a total of 100 monitoring locations statewide. Our interpretation of the proposal is that Caltrans will not have to monitor Tier 2 sites unless there are fewer than 100 sites in Tier 1 locations, which only consist of Areas of Special Biological Significance (ASBS) and adopted and approved TMDL monitoring sites. Also, it appears that Tier 2 locations consist of those sites where the Department has existing monitoring data, including both storm and non-storm water. The monitoring proposal is problematic for the following reasons:

1) To our knowledge, Caltrans and the State Board have not done studies to determine if the locations where they have monitoring data and that are monitored for ASBS and TMDL requirements are adequate in characterizing their runoff. This type of study should be a prerequisite in allowing Caltrans to continue to monitor in locations where they have data. How many monitoring locations does the State Board estimate fall under Tier 1? If the ASBS and

² Draft Permit dated August 18, 2011. Page 9



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TMDL programs sample 100 sites, then no additional monitoring has to be done under the Tentative Permit. The discharge from Caltrans likely impacts lakes, streams/rivers, freshwater and coastal wetlands. Thus, we strongly recommend that they be required to conduct sampling for those receiving waters as well as conduct causal assessments, if degraded conditions are present.

2) The constituents required for monitoring are very limited, and as mentioned above, have been greatly reduced in the Revised Permit. What is the justification for reducing 29 pollutants from the monitoring requirements? Are there prior studies that demonstrate the constituents proposed for monitoring are, in fact, the only pollutants found in their runoff? The reduced constituent list should be justified. Also the analyte list of pesticides should be updated as changes in pesticide use patterns occur.

3) The purpose of the “Tier 2 Monitoring Requirements” is unclear and should be clarified and expanded upon. The Tentative Permit states, “[c]orrective actions shall be implemented at the top 15 percent of sites on the Tier 2 priority list.”³ Is the purpose of Tier 2 monitoring in this Tentative Permit to determine whether Caltrans BMPs are effective? If so, how do we know if any Tier 2 sites will even be monitored under this proposed scheme? Even under the “best case” conditions, only 15 BMPs would be included statewide. This is hardly enough to make significant water quality improvement. Is the State Board suggesting that other problematic sites be ignored? What is proposed at other monitoring locations where water quality standards are exceeded?

4) It is unclear if the Tier 2 sites are the discharge locations or receiving waters or both. The Tier 1 monitoring specifies reference sites and receiving waters, but Tier 2 does not. This should be clarified.

5) The Revised Permit includes a number of provisions to further reduce monitoring as the permit is implemented. For instance, the Permit includes a provision that would allow Caltrans to immediately stop monitoring of a site if deemed in “compliance.” The Revised Permits states that “[w]hen a determination is made that a site or discharge is in compliance, the site will no longer be considered an active monitoring site pursuant to provision E.2.c.1.”⁴ With this provision, is the State Board suggesting that one sample meeting water quality standards would deem a site in “compliance?” If so, this is completely unjustified. Also, “[f]ollow up monitoring is not required where the discharge has been eliminated, or where the implemented BMP

³ Revised Permit. Page 33

⁴ *Ibid.*



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provides full retention of the 85th percentile, 24-hour rain event.”⁵ The ultimate determination of compliance should be that the discharge is meeting water quality standards -- not a “design storm” approach as proposed. We urge staff to delete this proposed provision.

TMDLs

The Permit must clearly state that numeric waste load allocations must be met for compliance purposes.

A permit issued to regulate discharges into receiving waters must incorporate existing water quality standards and TMDL WLAs. Once a TMDL is developed, effluent limitations in NPDES permits must be consistent with the WLAs in the TMDL.⁶ The Revised Permit states that “[TMDL] [c]ompliance may include, but is not limited to, implementation of BMPs and control measures ...sufficient to achieve the WLA.”⁷ Again on page 56 the Revised Permit states “[w]here a BMP-based approach is proposed, an explanation of how the proposed BMPs will be sufficient to implement applicable WLAs.” These provisions are major steps backwards from last draft permit and are inappropriate. Final numeric WLAs must be met as the sole form of compliance, which is consistent with the law and with other MS4 permits in the state, such as the Ventura MS4⁸ and Los Angeles County Draft MS4. Thus, these alternatives to “compliance” must be deleted. Regardless of BMPs used, Caltrans must meet their numeric WLAs. Thus, the Permit must clarify that any exceedance of a WLA is a violation and will be enforced.

Appendix IV should include all applicable TMDLs and TMDL compliance milestones and requirements.

In our March 14, 2011 comments, we noted that Appendix IV (TMDL Implementation Requirements) was incomplete for Region IV. Appropriately, several TMDLs that we identified

⁵ *Ibid.*

⁶ *Communities for a Better Environment, supra*, 132 Cal.App.4th at p. 1322 [citing 40 C.F.R. § 122.44(d)(1)(vii)(B)] [NPDES permits must be —consistent with the assumptions and requirements of any available waste load allocation for the discharge prepared by the State and approved by the EPA]; *see also City of Arcadia v. State Water Resources Control Board* (2006) 135 Cal.App.4th 1392, 1404 [quoting *Communities for a Better Environment, supra*, 132 Cal. App.4th at p. 1322; *Dioxin/Organochloride Center v. Clarke* (9th Cir. 1995) 57 F.3d 1517, 1520] [—When a TMDL and specific wasteload allocations for point sources have been established, any NPDES permits issued to a point source must be consistent with the terms of the TMDL and WLA.].)

⁷ Revised Permit Page 13.

⁸ According to the Ventura County MS4 Order No. R4-2010-0108, pages 14 & 88, “This Order incorporates applicable WLAs that have been adopted by the Regional Water Board and have been approved by the OAL and the U.S.EPA,” “Part 5 of this Order incorporates provisions to assure that Ventura County MS4 Permittees comply with WLAs and other requirements of TMDLs....”, and “Each Permittee shall attain the stormwater WLAs incorporated into this Order....”



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as missing from the list have been added in the Revised Permit. However, several previously adopted TMDLs are still missing in their entirety (Colorado Lagoon Toxics, Los Cerritos Metals, and San Gabriel River Metals and Selenium, Machado Lake Toxics). In addition, USEPA recently approved ten new TMDLs for Region IV, which are now in effect. Staff should evaluate these new TMDLs to identify if Caltrans is listed as a responsible party and add the TMDL to Attachment IV if this is the case.

While we appreciate that the Draft Permit requires that “Waste Load Allocations, Load Allocations, effluent limitations, implementation requirements, and monitoring requirements for the TMDLs listed in Attachment IV are specified in the adopted and approved Regional Water Board Basin Plans or in USEPA-established TMDLs, which are incorporated herein by reference as enforceable parts of this Order”⁹, we are disappointed that, with the exception of Lake Tahoe in the Lahontan Region, Attachment IV does not explicitly include all implementation milestones and requirements for the TMDLs listed. This Permit has been under development for over two years, which should have been sufficient time to include all TMDL compliance deadlines and other requirements. The Revised Permit must include all WLAs, milestones and requirements from the applicable TMDLs. “[O]nce a TMDL is developed, effluent limitations in NPDES permits must be consistent with the WLAs in the TMDL.”¹⁰ Furthermore, implementation schedules actions must be included in the Permit, as they are vital steps in ensuring that dischargers are on-track for ultimate compliance with the waste load allocations. Thus, we urge the State Water Board to work with regional boards to ensure that Appendix IV is complete. Although we believe the Clean Water Act requires this consistency, at a minimum, the Revised Permit should specify an expedited timeframe of 6 months to finalize the requirements that should be included in Appendix IV. The Revised Permit should also specify that a reopener of the permit will occur within one year to incorporate the revised Appendix IV.

Post Construction Storm Water Treatment Controls

The Permit Must Contain a Clear Numeric LID Standard.

⁹ Revised Permit Page 56

¹⁰ *Communities for a Better Environment, supra*, 132 Cal.App.4th at p. 1322 (citing 40 C.F.R. § 122.44(d)(1)(vii)(B)) (NPDES permits must be “consistent with the assumptions and requirements of any available waste load allocation for the discharge prepared by the State and approved by the EPA”); *see also City of Arcadia v. State Water Resources Control Board* (2006) 135 Cal.App.4th 1392, 1404 (quoting *Communities for a Better Environment, supra*, 132 Cal. App.4th at p. 1322; *Dioxin/Organochloride Center v. Clarke* (9th Cir. 1995) 57 F.3d 1517, 1520 (“When a TMDL and specific wasteload allocations for point sources have been established, any NPDES permits issued to a point source must be consistent with the terms of the TMDL and WLA”).



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While we support the prioritization of infiltration, harvest and re-use and evapotranspiration BMPs for post-construction requirements, the Revised Permit contains somewhat vague language for post-construction requirements that is a step backwards from previous versions of the Permit. The Permit should clearly state that BMPs shall be designed to infiltrate, harvest and re-use, or evapotranspire the *entire* storm water runoff volume from the 85th percentile 24-hour storm event. This numeric standard was more clearly stated in the August 18, 2011 version of the draft permit. Mandating a certain volume of onsite stormwater retention prevents all pollution in that volume of retained stormwater from being discharged to receiving waters. This requirement is consistent with other MS4 permits, ordinances, and regulations around the country. For example, the Regional Water Quality Control Boards for the Los Angeles, Santa Ana, and San Diego Regions have all recently adopted MS4 permits that effectively require new and redevelopment projects to retain onsite the 85th percentile storm through use of LID practices that infiltrate, harvest and reuse, or evapotranspire stormwater runoff unless technically infeasible to do so.

Infiltration, capture and reuse systems should be prioritized over flow-through LID features and conventional treatment devices.

We do not support flow-through treatment systems or conventional volume-based or flow-based storm water treatment devices as alternatives to traditional LID practices (infiltration, reuse or evapotranspiration). These requirements fail to meet the Clean Water Act requirements that the Draft Permit “shall require controls to reduce the discharge of pollutants to the maximum extent practicable.”¹¹ These other systems do not provide the same water quality and water supply benefits of LID approaches. Retaining the 85th percentile storm runoff volume onsite would prevent 100 percent of the runoff from the 85th percentile storm, and therefore, 100 percent of the pollutants in that runoff, from ever reaching receiving waters. Thus, the flow-through and treatment device options on-site should be eliminated.

Alternative Compliance Requirements should be strengthened.

In addition to the extremely weak on-site requirements, the Revised Permit creates a vague, inadequate “off-ramp” if the on-site requirements cannot be met. Specifically, the Tentative Permit states that if on-site requirements are infeasible, the Department shall prepare a proposal for alternative compliance.¹² While we agree that an “off-ramp” for infeasibility is appropriate, the Revised Permit is not clear on how infeasibility is demonstrated. The Permit must outline

¹¹ Clean Water Act Section 402 (p)(3)(B)(iii)

¹² Revised Permit Page 39



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how infeasibility will be demonstrated. To utilize alternative compliance measures, Caltrans must demonstrate that compliance with the applicable post-construction requirements would be technically infeasible by submitting a site-specific hydrologic and/or design analysis conducted and endorsed by a registered professional engineer, geologist, architect, and/or landscape architect. This will ensure that stormwater will be kept onsite to the maximum extent.

Also the request for a “proposal for alternative compliance” is far too vague. What are the criteria that will be required in these proposals? What will be the goal of these proposals? The goal of an alternative compliance program should be to attain the same water quality and hydrologic benefit that would be gained from the primary program. We urge the State Board to employ a specified program that calls for offsite treatment in the same watershed with an appropriate multiplier of *twice the amount*, if on-site infeasibility is sufficiently demonstrated. Using a multiplier will incentivize creativity to retain the water onsite. Also, there is precedent for setting such a multiplier in the Ventura County MS4 Permit.

The Permit should retain crucial Project Planning and Design acreage thresholds.

The Revised Permit significantly increases the thresholds for projects subject to post-construction treatment from the last permit proposal. Specifically, the thresholds are increased for highway projects from 5,000 square feet of new impervious surface to one acre. What is the reasoning for this major change? This is almost a tenfold difference. How many fewer projects are now estimated to fall under the post-construction requirements? The State Board should reduce the threshold so that more post-construction projects are included and more water quality benefits result.

The Permit should retain pilot retrofit requirements.

We are extremely disappointed with the deletion of the requirement for pilot Low Impact Development retrofits. The previous draft contained a requirement for Caltrans to conduct a minimum of 36 pilot LID retrofit projects statewide.¹³ It is critical that “retrofit” becomes part of the dialogue when managing stormwater pollution. Retrofitting existing development with storm water treatment controls, including LID, is necessary to address storm water discharges from existing development that may cause or contribute to a condition of pollution or a violation of water quality standards. Although retention and/or capture BMPs are required for new and redevelopment, the current rate of redevelopment will not address water quality problems in a timely manner. Thus, the State Board should include this critical program proposed in the August 18, 2011 permit. In addition, the Permit should include critical retrofit project details, such as performance criteria, sizing criteria and the size of the area to be treated.

¹³ Draft Permit dated August 18, 2011 Page 53.



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The Draft Permit Provides No Justification for Any Allowance of Waivers from Numeric Post-Construction Criteria.

Finally, under the Revised Permit's Project Planning and Design section, where a project is found to "have minimal impact to water quality," the Executive officer may lessen, or waive entirely, the treatment control requirements for that project.¹⁴ However, the CWA requires that discharges from MS4 systems "shall require controls to reduce the discharge of pollutants to the maximum extent practicable"; no basis exists to allow for such a waiver to be granted solely because a project's impact to water quality is "minimal." Allowing this waiver is completely unjustified and inappropriate. The waiver from treatment control requirements should be removed from page 38. Any discharge of pollutants must be adequately addressed, to the extent practicable, in order to comply with the CWA's requirements.

Miscellaneous Comments

- **Maintenance Program:** The deleted requirement to report the amount of waste and debris removed from drainage inlets should be restored, along with the deleted requirement to prepare and implement a storm drain system survey plan. Of note, this requirement had already been weakened by replacing quantitative measurements of trash and litter removal with estimated annual volumes.¹⁵
- **Toxicity Testing:** We support that the Permit requires the use of the Test of Significant Toxicity approach to calculate either a Pass or Fail of the effluent concentration chronic toxicity test at the IWC.¹⁶

As discussed above, we are extremely disappointed with the Revised Permit. The State Board has the opportunity to learn from the inadequacies in the current MS4 permit and make strengthening changes to ensure marked improvements in water quality. Instead, the Revised Permit proposal appears to fold to the cost of compliance. Highways and roads contribute greatly to water quality degradation. Thus, it is extremely important that this Permit include strong provisions. We urge the State Board to make the changes suggested above and in the previous

¹⁴ Revised Permit Page 38

¹⁵ Revised Permit Page 31 Section 2(a)(v)

¹⁶ Revised Permit Page 36 Section (d)



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letters submitted by Heal the Bay and California Coastkeeper Alliance, in order to move our state towards water quality standards attainment. Thank you for the opportunity to provide these comments. If you have any questions, please do not hesitate to contact us at (310) 451-1500.

Sincerely,

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