



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

JUN 20 2014

Adam Fischer  
Santa Ana Regional Water Quality Control Board  
3737 Main Street, Suite 500  
Riverside, CA 92501.

Re: Draft MS4 Permit for Orange County (Permit No. CAS618030)

Dear Mr. Fischer:

The following are EPA Region 9's comments on the draft NPDES permit (permit No. CAS618030) for discharges from the municipal separate storm sewer system (MS4) serving the portion of Orange County under the jurisdiction of the Santa Ana Regional Water Quality Control Board (Regional Board), which the Regional Board released for public comment on May 2, 2014. In an email dated January 31, 2014, we provided comments on an earlier "administrative draft" of this permit. We appreciate the opportunity to provide early input during the permit development process. However, we are disappointed that the May 2, 2014 draft permit contains problematic new provisions allowing for compliance with water-quality provisions based on Permittee submittal of draft plans (or providing a notice of intent to submit a plan) to the Executive Officer. Following below are our comments on the latest draft permit.

**A. *Total Maximum Daily Load (TMDL) Requirements***

We have concerns with the draft permit's new options for complying with permit requirements associated with approved TMDLs upon the Permittees' written notification to the Executive Officer of their intent to develop a plan to comply with applicable wasteload allocations (WLAs). Each of the TMDLs listed in Appendices B through H of the draft permit was incorporated into the Santa Ana Regional Board's 2009 Orange County MS4 Permit (R8-2009-0030), so implementation of these TMDLs should be ongoing. We'd prefer that the draft permit be revised to retain the same approach for compliance with WLAs as the 2009 permit, and as is incorporated into the San Diego Regional Board's 2013 Regional MS4 permit (NPDES Permit No. CAS0109266). It's our conclusion that basing TMDL compliance on plans limits enforceability and makes it difficult to confirm that the TMDL water quality targets are being attained. If a plan-based compliance approach is to be included, it's important for the draft permit to be revised to include a more rigorous analysis including how specifically identified BMPs will directly result in achievement of WLAs, and the expectations that interim milestones be provided to track progress towards achieving WLAs. Also, contrary to the draft permit, this option for compliance should only be available upon approval of the plan (following opportunity for public comment) by the Executive Officer.

Per Clean Water Act and federal regulations at 40 CFR 122.44 regarding TMDLs, permit language must be modified in several places to accurately describe that Permittee's discharges must comply with water quality-based effluent limits (WQBELs), not the TMDL WLAs. Specifically, we recommend/request these language changes be made within permit section XVIII – TMDL Implementation and in each of the TMDL Appendices B-H. For example, the responsible Permittees must comply with WQBELs established in this permit; those WQBELs are consistent with WLAs within approved TMDLs.

In our emailed comments of January 31, 2014, we expressed concern that compliance with WLAs (established as WQBELs in the permit as noted above) would be determined in accordance with a schedule (yet-to-be determined) where such determinations could be as infrequent as once every five years. We had recommended WLA compliance determinations at least once/year; we noted this would consistent with the implementation language in at least one TMDL adopted by the Regional Board (organochlorine compounds TMDL). The monitoring requirements of the latest draft permit (Attachment A) have been revised to require monitoring consistent with TMDL assessment periods, but do not specify in detail the monitoring frequency that would be necessary for consistency. To clarify the requirements and to avoid any misunderstandings of the TMDL requirements, we recommend that the permit either include the monitoring frequency that would be required for consistency with each TMDL, or direct the Permittee to a specific document where it could be found.

Furthermore, the permit should be revised to include action levels as part of the permits monitoring and reporting program and, if appropriate, the Permittees' water quality improvement plans. The goal of including both non-stormwater and stormwater action levels is to guide implementation efforts and measure progress towards the protection of water quality and designed beneficial uses of the state from adverse impacts caused or contributed to by MS4 discharges. Notably, action levels were included in the Riverside County MS4 permit (2010, Santa Ana Regional Board) and the San Diego Regional permit (2013).

Section XVIII.B.4 of the draft permit would allow exceedances of a WLA at a frequency that is less than or equal to a site-specific exceedance frequency found in the State's policy guide for developing the CWA section 303(d) list. If retained, this provision should be further discussed and supported in the fact sheet. Our understanding is that the exceedance frequency in the section 303(d) listing guide does not affect the applicability of approved WLAs, and would not justify the proposed exceedances that would be allowed under the permit. Absent adequate justification for section XVIII.B.4, we recommend it be removed from the permit.

The draft permit does not currently include any requirements related to TMDLs that may be approved during the term of the permit. To expedite implementation of additional controls that may be necessary for compliance with such TMDLs, we recommend the permit include a provision similar to section O of the 2012 MS4 permit

for the City of Salinas (permit No. CA0049981) issued by the Central Coast Regional Board. The Salinas permit requires development and submittal within one year of final TMDL approval of a plan for complying with newly approved TMDLs. This is preferable to waiting for the next permit renewal to incorporate newly approved TMDLs. We understand that the Santa Ana Regional Board is currently developing a TMDL for selenium for the Newport Bay Watershed; our recommended provision would expedite compliance with the selenium TMDL and any others that may be approved during the term of the permit.

In Appendix G, we recommend that the second paragraph be modified to clarify that the metals and selenium TMDLs were only promulgated by EPA, and were not developed nor adopted by the Santa Ana Regional Board. We recommend the following edits to the paragraph:

~~“The WLAs in this Appendix are based on the Toxic Pollutants (Metals and Se) TMDLs. The Toxic Pollutants TMDL has been approved by Santa Ana Regional Water Quality Control Board, the State Water Resources Control Board, the Office of Administrative Law (“OAL”) and USEPA. The Toxic Pollutants TMDL was adopted by the Santa Ana Regional Water Quality Control Board in Resolution No. R8-2003-0039. The metals and Se TMDLs were promulgated by USEPA on June 17, 2002.”~~

***B. New Development (Including Significant Redevelopment)***

Section XII.A.7 requires the Principal Permittee to submit retrofit studies. While this is a step in the right direction, it falls far short of the retrofit provisions included in the San Diego Regional Board’s Regional MS4 permit (CAS019266). We recommend incorporation of the San Diego permit’s section II.E.5.(e)(1) “Retrofitting and Rehabilitating Areas of Existing Development.” The San Diego permit requires each Co-permittee to identify areas of existing development as candidates for retrofitting, focusing on areas where retrofitting will address pollutants and/or stressors that contribute to the highest priority water quality conditions. This more comprehensive approach will better identify areas within the built environment where retrofits would result in water quality improvements. The San Diego permit also requires a strategy to facilitate implementation of projects identified as potential candidates for retrofits, which is lacking in the draft Orange County permit. Moreover, many of the potential retrofit BMPs (such as bioretention) would provide additional benefits such as groundwater recharge which would help alleviate current and future drought conditions; this factor increases the importance of an effective retrofit program.

Section XII.K discusses off-site treatment controls. We recognize that in some cases off-site projects can effectively address the post-construction control requirements for new development and significant redevelopment projects. This is particularly the case where off-site controls are located to optimize infiltration to replenish groundwater

supplies. However, it is necessary that water quality protections are in place at the site of the triggering development/redevelopment project, and the draft permit should be revised to make this explicitly clear. We recommend the Los Angeles County MS4 permit (CAS004001), which effectively addresses this issue in section VI.D.7.c.iii(7) by specifying Water Quality Mitigation Criteria that must be met for New and Redevelopment Projects that have been approved for offsite projects.

It is not clear whether regional or sub-regional biotreatment facilities would be required to treat 1½ times the capture volume required for retention facilities, as would be the case when on-site biotreatment replaces on-site retention. This requirement should be included in the permit. We further recommend that in situations where there may be a choice in using off-site retention or off-site biotreatment that the permit include a preference for retention (similar to the preference for retention over biotreatment for on-site controls).

The draft permit appears to lack any requirements for off-site mitigation when on-site LID is determined to be infeasible and regional or sub-regional facilities are not being used. We recommend that mitigation using off-site LID be required for any portion of the design capture volume for which retention or biotreatment is determined to be infeasible onsite. Such a requirement would be consistent with the 2012 Los Angeles County permit.

Finally, section XII.L of the draft permit provides for a waiver of structural controls under certain circumstances. For example, a waiver could be available if the costs are shown to disproportionately outweigh the benefits. The waiver provisions are not explained in the fact sheet and further explanation and justification should be included. Given the experience throughout California implementing LID controls pursuant to MS4 permits, which has shown the widespread feasibility of implementing LID measures in connection with new development and redevelopment projects, we're very skeptical that this waiver provision is necessary.

### **C. *Receiving Water Limitations***

In our emailed comments of January 31, 2014, we expressed support for the receiving water limitations (RWLs) language that had been included in the administrative draft. At the time, this language closely tracked State Water Board WQ Order 99-05 and the Regional Board's 2009 MS4 permit for Orange County. Unfortunately, the May 2, 2014 draft permit (section IV) includes a new provision under which a Permittee would be deemed in compliance with RWLs upon submittal of a draft plan for compliance to the Executive Officer. As an alternative to this new draft permit language, it's our preference that the permit retain the same RWLs language contained in your 2009 Orange County MS4 permit. As you are no doubt aware, at a November 2012 workshop, the State Water Board indicated it may consider revising WQ Order 99-05. The State Board has recommended that MS4 permits include a permit reopener to address potential revisions

to WQ Order 99-05. We suggest incorporation of such a reopener in the Orange County permit; section II.H.4.a of the San Diego permit provides appropriate language.

We are aware that while the State Board considers revisions to WQ Order 99-05, some stakeholders have been urging Regional Boards to develop new approaches for determining how RWLs compliance is determined. While our strong preference is to stick with the approach used in your 2009 permit, we have reviewed one alternative that we could support. During the development of the San Diego Regional Board's Regional MS4 permit, RB9 staff developed an option (referred to as Option 2) that would have made use of detailed Water Quality Improvement Plans to demonstrate measurable progress to achieve RWLs (included in the RB9 staff's Revised Tentative Order posted March 27, 2013). Under Option 2, after Water Quality Improvement Plan approval, its implementation would be the vehicle for achievement of RWLs. Ultimately at its May, 2013 hearing, the San Diego Regional Board chose not to adopt Option 2, and instead, with EPA's full support, adopted its Regional MS4 permit with RWLs language consistent with WQ Order 99-05. The Los Angeles MS4 permit also lays out a thorough, rigorous planning process for determining compliance with RWLs. However, we have gone on record as opposing this approach used by the Los Angeles Regional Board, given that the alternative compliance approach is available before the Plans are approved.

Unlike the San Diego Regional Board's staff proposal (Option 2) or the Los Angeles County MS4 permit, the draft Orange County permit does not provide necessary details on Permittee programs to demonstrate rigorous efforts to achieve RWLs. The deficiencies in the draft permit include the absence of measurable interim milestones and modeling efforts supporting assurances that BMPs will achieve RWLs. Again, our preference is to retain the RWLs language of the 2009 permit, but if a plan-based compliance approach is being seriously considered it should use the methodology developed by the San Diego and Los Angeles Regional Board staff, and should be available for compliance purposes only after plan approval.

#### ***D. Other Comments***

##### **1. Whole Effluent Toxicity (WET) Requirements**

In our emailed comments of January 31, 2014, we had recommended that the Orange County MS4 permit include WET requirements (using EPA's Test for Significant Toxicity (TST) procedure) modeled after those in the 2012 Los Angeles County MS4 permit. The Los Angeles County permit requires tests using 100% effluent and 100% receiving water. However, the Orange County permit requires tests on a series of dilutions (section F.3 of Attachment A), and the selection of these dilutions should be explained in the fact sheet. We note the dilution series in the draft permit was commonly used in the WET data analysis methods used prior to the TST and may have been inadvertently carried over from previous permits.

## **2. Monitoring Program**

The list of parameters in the monitoring program for pesticides appears incomplete (Table 4 of Attachment A), in that only a limited number of organophosphate pesticides would be sampled. We recommend the list be broadened to include a wider variety of pesticide compounds in current use, such as pyrethroids (e.g., bifenthrin, cypermethrin, esfenvalerate, gamma cyhalothrin, permethrin, etc.) and neonicotinoides (e.g., clothianidin, imidocloprid, thiamethoxam).

Section II.D of Attachment A requires monitoring at representative “MS4 outfalls” but does not provide any guidance concerning the required number of locations to be sampled, or the specific locations themselves. We recommend the permit at least clarify that representative sampling locations must be selected that would allow a compliance determination with each applicable WLA. The fact sheet also notes that the intent of the permit is largely to continue the existing monitoring program, and it appears the Regional Board has generally been satisfied with the program in previous years. Nevertheless, we recommend the fact sheet further describe the program (e.g., number and location of sampling sites, frequency of sampling) to provide the public with a better sense of the scope of the program.

Based on information contained in Orange County’s 2011-2012 Unified Annual Report, the County did not adequately compare dry weather receiving water composite sample results against the California Toxics Rule (CTR), specifically the chronic criteria, as required by section III.1(a) of the monitoring and reporting program requirements of the 2009 permit. Sampling results reported by Orange County were compared to the CTR acute toxicity criteria only. The lack of adequate sampling and/or analysis of dry weather composite samples against the chronic CTR criteria limits the County’s ability to identify trends, potential sources, and appropriate responses to exceedances of applicable water quality standards. For the new permit, the Regional Board should ensure that the County clearly understands its responsibilities on this matter.

Finally, we note that bacteria sampling (section II.I.1.c of Attachment A) is not allowed on days when rain has occurred. The basis for this condition should be explained in the fact sheet.

## **3. Public Review of Updated Monitoring Program**

Section II.B.6 of Attachment A provides that the Executive Officer will provide the opportunity for public comment on changes to the initial monitoring program which is submitted, but this opportunity seems missing for the initial submittal itself. We recommend the Executive Officer ensure such an opportunity for the initial submittal as well since it will likely be of greater interest than any changes in subsequent years.

We appreciate the opportunity to provide our views on the draft permit. If you have any questions regarding this matter, please contact Eugene Bromley of the NPDES Permits Office at (415) 972-3510.

Sincerely,

A handwritten signature in cursive script that reads "Eugene Bromley".

*for* David Smith, Manager  
NPDES Permits Office (WTR-5)

