May 29, 2008

Dr. Xavier Swamikannu
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

RE: DRAFT TENTATIVE VENTURA COUNTY MS4 PERMIT (NPDES PERMIT NO. CASOO4002)

Dear Dr. Swamikannu,

Thank you for the opportunity to comment on the draft tentative Ventura County MS4 permit. First, I would like to reiterate the comments I submitted October 15, 2007 in response to the last draft of the permit. In my reading of the current draft I did not see substantial changes made in response to those comments. I also did not see any staff response to comments on the previous draft posted on the "Ventura Municipal Permits" page on the Board web site. The current draft was not accompanied by a fact sheet or any explanation of changes, and did not track changes within the document. This makes it extremely difficult to identify new changes. Nevertheless, I assume that my previous comments were read and understood since I received no questions or requests for clarification from Board staff.

In addition to a list of specific suggestions, my prior comments focused on the BMP selection hierarchy appearing in Part 5, Section E.I.1.e, the 5% effective impervious area requirement in Part 5, Section E.III.1, and concerns regarding LID strategy implementation. In addition to reiterating those comments, I would like to add the following comments:

Part 5. Section E.I.1.e
BMP Selection Hierarchy
The section currently establishes the following BMP Selection Hierarchy**:**

(1) Low Impact Development Strategies (see the following section E.III.2).
(2) Integrated Water Resources Management Strategies.
(3) Multi-benefit Landscape Feature BMPs.
(4) Modular/ Proprietary Treatment Control BMPs.

At a minimum the last option should be changed to "Treatment Only BMPs" since there are likely to be modular and proprietary elements incorporated in management strategies that could also be considered as one or more of the other three options.

My preference is that this hierarchy be removed because it does not distinguish between mitigation approaches on the basis of water quality and quantity benefits provided by them.

Part 5. Section E.IV.6
Technical Guidance Manual Update
A date for revision of the Ventura County Technical Guidance Manual for Storm Water Quality Control Measures is not given in this section. A reasonable time frame should be specified after consultation with the permittees.

Part 5. Section G.I.5.e
Trash Excluders
This section states "Each permittee shall install trash excluders, or equivalent devices on or in catch basins to prevent the discharge of trash to the storm drain system…"

There are various end-of-pipe means of controlling trash that may be more effective and economical to

maintain than catch basin inserts and excluders. Most end-of-pipe devices are less susceptible to flooding issues and the resuspension of captured materials during peak flows since they include a peak flow bypass that is external to the treatment and pollutant storage chamber. One such system, the CDS, has been used throughout Southern California and is recognized by the Board as a full capture device. In the City of Los Angeles tens of thousands of excluders and inserts have been installed in response to trash TMDLs there. Inspection of these units where CDS systems are also installed downstream reveals that the excluders and vertical and horizontal catch basin inserts do not perform as intended without much more rigorous maintenance than has been provided. The evidence of their failure is most apparent where CDS systems are installed downstream and are catching materials by the cubic yard that are bypassing the inserts and excluders. Attached to this letter are photographic summaries of the conditions of three sites draining to large CDS units that have been retrofitted with inserts and excluders.

At a minimum, end-of-pipe full capture BMPs, like the CDS should be added to this section as an acceptable means of control. It would also be prudent to reevaluate the maintenance requirements and effectiveness of those inserts and excluders installed in the Los Angeles River and Ballona Creek watersheds in high trash loading areas prior to requiring new installations in Ventura County.

Part 5 Section H.1
Reporting Program
This section references requirements in Attachment "H". This attachment is not provided for review on the Board web site.

Part 6 Section V.6-7
Trash TMDL Provisions
For both trash TMDLs, it would be prudent to require that "full capture" BMPs be installed to treat runoff from the 1-year design storm on all new development and significant redevelopment projects in tributary areas regulated by this permit.

It is well known that the cost of retrofitting catchments with BMPs for the express purpose of TMDL compliance is far more expensive than integrating satisfactory BMPs into the site during initial development or redevelopment. In particular, the cost of retrofitting with BMPs like CDS systems that are installed downstream of multiple inlets can be an order of magnitude higher when installation of the BMP is the sole purpose of the construction activity. Exorbitant retrofit costs are the biggest objection to the widespread installation of these devices. Most projects will require some kind of treatment control to be installed anyway, so the incremental cost of ensuring that the device is a "full capture" BMP should be minimal. This also defers some of the cost of compliance from the permittees themselves.

Part 7 - Definitions
Effective Impervious Surface
This definition requires that flow from impervious areas be routed through an "intervening medium to mitigate flow volume" in order for that area to be subtracted from the total effective impervious surface area. The flow volume mitigation that this intervening medium must provide is not quantified anywhere in this permit. This is a major oversight that will lead to the design of BMPs that have no meaningful impact on runoff rates or volumes. Engineers will be encouraged to send extremely high flow rates and volumes through token vegetated areas in order to reduce their effective impervious area to 5% or less as this permit requires. Without a clear definition of how much runoff the permeable surface must be designed to infiltrate or store, meeting this requirement may offer no benefit. At worst, it may lead to accelerated erosion of overburdened landscaped areas and concentration of pollutants like oil and sediment in vegetated areas at a rate that becomes toxic to vegetation and a public nuisance.

There are also sites where infiltration is not allowable due to site constraints like existing soil or

groundwater contamination, proximity to foundations and utilities, steep or unstable slopes, expansive or low permeability soils. In these cases, flow-through treatment BMPs are typically used to reduce pollutant concentrations, and detention BMPs are integrated to moderate discharge rates. These sites have no flow volume mitigation BMPs but might otherwise meet the water quality and quantity requirements of this permit. On these sites, the 5% effective impervious area maximum is an additional requirement that offers no clear benefit as written and defined in this permit.

To examine the effect of a more thorough definition exposes the infeasibility of the 5% EIA requirement. Specifying any runoff volume reduction requirement to be applied on all sites would render many sites with infiltration restrictions undevelopable. If no volume reduction is intended by this standard, it should be clear what the intended benefit of this requirement is. Alternative approaches that provide the same or better water quality and quality benefit that is intended by this standard should also be allowed.

Part 8
Section M
This section prohibits bypass. Virtually all stormwater BMPs have some bypass inherent to their designs which effectively divert runoff from the treatment facility. Typically the water quality flow rate or volume that BMPs are designed to mitigate is a small percentage of the peak flow rate or volume that a catchment system is designed to accommodate. Runoff exceeding the water quality flow rate or volume is usually bypassed. This seems to directly contradict this provision which defines bypass as “the intentional diversion of waste streams from any portion of a treatment facility”.

Conclusion
Thank you for reading these comments. If you have any questions, please feel free to contact me. I look forward to the next draft of this permit**.**

Sincerely,

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