Comments Received on draft Ventura County MS4 Permit
December 27, 2006

From: G. Scott McGowen, Chief Environmental Engineer
State of California Department of Transportation

To: RWQCB-LA

Date: March 7, 2007

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENVIRONMENTAL ANALYSIS, MS 27
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 653-7507
FAX (916) 653-7757
TTY (916) 653-4086

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March 7, 2007

Dr. Xavier Swamikannu
Storm Water Permitting
Los Angeles Regional Water Quality Control Board
320 4th Street, Suite 200
Los Angeles, CA 90013
By email: XSwamikannu@waterboards.ca.gov

RE: Draft MS4 NPDES Permit for the Ventura Countywide Storm Water Program

Dear Dr. Swamikannu:

The California Department of Transportation (Department) appreciates the opportunity to comment on the Draft NDPES permit for the Ventura County Storm Water Program. This permit does not pertain to State Highways; however, we have an interest, because portions of this permit may be referenced in our Statewide Storm Water Management Plan (SWMP).

As you know, the Department has broad experience implementing storm water controls throughout the state. Our research program investigating storm water issues is possibly one of the most comprehensive in the nation. We also began implementing a statewide storm water runoff characterization program in 1996. Consequently, in addition to experience in implementing and evaluating storm water controls, we have obtained ample data on our typical roadway runoff. We note that the permit references our best management practice (BMP) descriptions and guidance documents.

The proposed Ventura Countywide permit is innovative, in that it introduces municipal action levels (MALs), which have not been used previously for municipal runoff in the State. In this draft permit, the MALs are used to determine if maximum extent practicable (MEP) pollutant controls are being implemented. In other words, they define the technology-based minimum measures necessary for storm water management. Although we understand your ultimate goal, we believe this use of the MALs is not appropriate, at this time, for the following reasons:

- *Inconsistent relationship between numeric levels of pollutants in runoff and control measures* – Based on our statewide monitoring of runoff, it is clear that pollutant concentrations vary by orders of magnitude. Caltrans implements a consistent program throughout the state, yet extreme variability is evident in the runoff concentration. Much of this variation is obviously independent of pollution controls such as standard BMPs for existing roadways. The variation is affected by such factors as proximity to open land (dust), traffic volume, traffic controls (e.g., stops, access ramps), traffic congestion, age of roadway, period between storms, strength and duration of storms, etc.

The variation in runoff is more likely to be related to one of these independent factors rather than the successful implementation of BMPs. Therefore, we have not seen any technical basis for linking a definition of MEP to any specific concentration of pollutants in the runoff.

The MALs in the permit were obtained by multiplying median values (based on nationwide Phase I MS4 monitoring data) with the coefficient of variance. [i] The permit specifies that after permit year 3, two or more exceedances of a MAL will create a presumption that inadequate implementation of measures to reduce the pollutant(s) to the MEP. "The Permittee is then required to augment measures to reduce the discharge of the pollutant(s) to not violate the MEP."

In the following table, we compared a selection of MALs, as well as the median data on which the MALs are based, with our monitoring results.

Comparison of California Statewide Monitoring Data with Municipal Action Levels
(Note: This table does not include all MALs)

Pollutant	**Municipal Action Level**	Median (from permit)	Caltrans Median 2000-2001, ***Urban*** [1]	Caltrans Median 2000/01-2002/03 ***Statewide*** [2]	Caltrans Range [2]
Total suspended solids *mg/L*	**106.2**	59	160	59.1	1 - 2988
COD mg/L	**58.3**	53	-	-	27 - 260 *(3)*
Copper (total) *ug/L*	**32**	16	39	21	1.2 - 270
Zinc (total) *ug/L*	**232**	116	260	111	5.5 - 1680
Lead (total) *ug/L*	**30.6**	17	64	12.7	1 - 2600

[1] Caltrans data from *2000–2001 Annual Data Summary* for 230 sites.
[2] Caltrans data from *Discharge Characterization Study Report* (Nov. 2003) for 635 sites.
[3] COD whole storm data from *1998–1999 Annual Data Summary* for 20 sites.

As shown, in any given year, even the median values may exceed the MALs. In addition, the high range may exceed the MAL by almost two orders of magnitude. These exceedances do not necessarily indicate any lack of performance by the permittee but are rather representative of the natural variability in storm water runoff.

- *Incorrect emphasis on technology-based controls rather than water quality-based controls (TMDLs)* – Increasingly, implementation of storm water controls will be driven by TMDLs. This is particularly true for structural controls. The TMDL process focuses on those waterways where water quality is impaired. We believe this emphasis is correct, and that permittee efforts should be directed toward TMDL compliance.

In addition, we would like to note that the State Board's Storm Water Panel on Numeric Limits ("Blue Ribbon Panel") found that numeric limits were not appropriate for municipal runoff. For municipal discharges, the panel concluded:

[i] The permit notes that since the MALs are based on the median, which includes the variability of the sample results, the maximum value for the coefficient of variation has been set at 2.0.

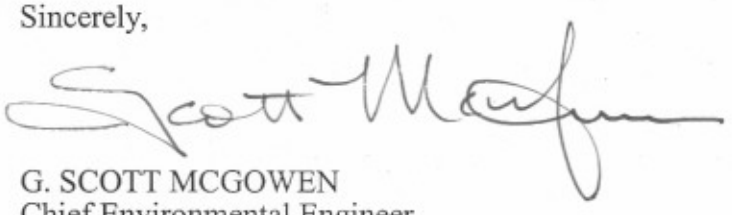
> It is not feasible at this time to set enforceable numeric effluent criteria for municipal BMPs and in particular urban discharges. However, it is possible to select and design them much more rigorously with respect to the physical, chemical and/or biological processes that take place within them, ... Depending on the pollutants and parameters of concern and BMP choices, it is very likely that treatment trains of structural BMPs will be required in many cases.
>
> — *The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities*, June 19, 2006

The panel also proposed *Action Levels* to identify "bad actor" catchments (e.g., dissolved copper at 100 ug/l). The panel's report discusses very specific approaches for developing action levels and identifying appropriate BMPs.

In conclusion, we note that CASQA is preparing a *Guidance Manual on Assessing Stormwater Program Effectiveness*, which may present a more appropriate approach for evaluating MS4 performance.

Thank you for this opportunity to submit our comments. If you have any questions, please contact Keith Jones at (916) 653-4947.

Sincerely,



G. SCOTT MCGOWEN
Chief Environmental Engineer

c: Bruce Fujimoto, SWRCB, bfujimoto@waterboards.ca.gov