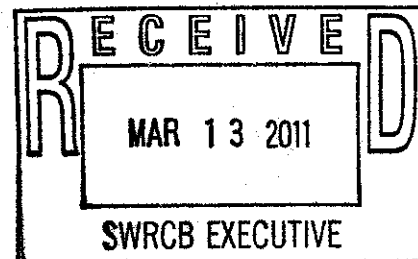




California Stormwater Quality Association
Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation

March 13, 2011

State Water Resources Control Board
Attn: Jeanine Townsend
Clerk to the Board
1001 I Street 24th Floor
Sacramento, CA 95814



Subject: Comment Letter - Caltrans MS4 Permit

Ms. Townsend:

On behalf of the California Stormwater Quality Association (CASQA¹), we would like to offer our input regarding the Tentative Order (TO) that was issued on January 7, 2011, to the state of California Department of Transportation (Caltrans) for the reissuance of their National Pollutant Discharge Elimination System (NPDES) Statewide Stormwater Permit.

CASQA welcomes this effort to review the Tentative Order and to provide constructive feedback to the State Water Resources Control Board (State Water Board). We are pleased that the Tentative Order is, in general, reasonable and well balanced, and seeks to support and enhance the existing stormwater program that Caltrans has developed. Nonetheless, we do have some specific comments and *recommendations* related to the water quality monitoring, streambed analysis, TMDL compliance, and development design portions of the Tentative Order.

The prescribed level of monitoring activity may be unnecessarily burdensome and ineffective in supporting Caltrans' management of its program.

Monitoring and Discharge Characterization Requirements (E.2.c - Page 24)

D-1

CASQA's overarching concern within the monitoring provisions of the TO is that there are no guiding management questions presented that the monitoring program is intended to address, instead, the TO simply prescribes a requirement for extensive and intensive characterization monitoring. This monitoring will be time consumptive, very costly and, without guiding management questions, may not result in supporting the stormwater program.

The TO requires Caltrans to conduct the following monitoring activities:

1. Characterization of Discharges

- a. Review the Characterization Study. Investigate any identified sources of pollutants

¹ CASQA is composed of stormwater quality management organizations and individuals, including cities, counties, special districts, industries, and consulting firms throughout California. Our membership provides stormwater quality management services to more than 22 million people in California. CASQA was formed in 1989 to recommend approaches for stormwater quality management to the State Water Resources Control Board.

- and eliminate any illegal connections/illicit discharges and implement Best Management Practices (BMP) programs.
- b. Conduct characterization monitoring of slope lateral drains at a minimum of 5 sites per year
2. Discharge Monitoring Program
 - a. Sampling Locations
 - i. Designate a pool of 1,000 candidate effluent sampling sites (candidate pool);
 - ii. Sample a minimum of 100 sites from the pool in the initial year (sample pool);
 - iii. Sites not meeting the criteria specified in the TO for continued monitoring can be dropped – sites with toxicity or exceedances of a water quality objective (those that meet the criteria specified within the TO) must be sampled the following year;
 - iii. Add a minimum of 50 new sites to the sample pool each year
 - b. Sample (three) stormwater and (two) non-stormwater discharges per site
 - c. Analyze constituents in Attachment II
 - d. Conduct acute and chronic toxicity analyses with three species – TIEs when required by the Regional Water Board
 3. Receiving Water Monitoring Program
 - a. Conduct receiving water monitoring for those sites within the Discharge Monitoring Program that meet the criteria for continued sampling
 4. Prepare a Long Term Monitoring Program
 5. Conduct Additional Monitoring as Required by the Regional Boards (either through the TMDLs or otherwise)

CASQA is recommending that the monitoring requirements be carefully considered and developed in a manner that is consistent with the *Model Monitoring Program for Municipal Separate Storm Sewer Systems in Southern California* document that was developed by the Stormwater Monitoring Coalition led by the Southern California Coastal Water Research Project (SCCWRP). This document advocates for each water quality monitoring program element to have a clear objective and a series of management questions that the monitoring elements are seeking to answer. Creating monitoring requirements in this manner will ensure that the monitoring informs decisions regarding the management and implementation of the Caltrans stormwater program. Instead of prescribing a specific level of effort, monitoring requirements should be crafted to allow Caltrans to best determine how it will evaluate long-term trends, characterize discharges, and identify pollutant sources amongst other monitoring objectives.

CASQA recommends that the monitoring program be restructured so that it is question driven and focused on decision-making points so that there is the greatest benefit to the program. In addition, the monitoring program should be adaptive, not just additive, so that it can be modified based on early answers to some of the monitoring questions. The monitoring program should also identify how each of the elements function together to provide a comprehensive monitoring program.

Consistent with our comments above, we recommend that the following program elements be re-evaluated to provide clarification where necessary and to ensure that the monitoring supports and informs the implementation of the stormwater program:

- Characterization of Discharges
The purpose of this monitoring element is not stated in the TO and is unclear as is the intended use of the information, especially since this monitoring element seems to be comprised of two efforts: Characterization Study and Slope Lateral Drains.
- Discharge Monitoring Program
The TO needs to clearly identify the technical and/or statistical justification for a monitoring program this extensive. This will allow the stakeholders to have a meaningful conversation about the value of the monitoring program and relative costs.
- Monitoring Constituent List
Attachment II, the Monitoring Constituent List, identifies almost 50 constituents/field parameters that must be analyzed for most sites. CASQA has estimated that, depending upon the need to conduct a Toxicity Identification Evaluation (TIE), the analytical cost per site per event will range from \$5,000 - \$21,000. Thus, for the first year alone, just for the Discharge Monitoring Program, the cost for monitoring the first 100 sites (for all 5 events) will range from \$2,500,000 - \$10,500,000. The monitoring constituents should be based on the Characterization Study that was previously conducted.
- Discharge Monitoring Program/Receiving Water Monitoring
The approach that is used within both the discharge and receiving water monitoring programs to determine if additional sampling is necessary is fundamentally flawed because the WQO was developed for the receiving water, not the discharge and paired sampling is necessary in order to determine if a water quality exceedance has occurred.

The Tentative Order Defines the Point of “Compliance” As Meeting Receiving Water Quality Criteria/Objectives Instead of Implementing BMPs in an Iterative Process Pursuant to the SWMP.

Within the water quality monitoring program provisions, the Tentative Order defines the point of “compliance” in several places as meeting receiving water quality criteria/objectives at the point of discharge. The use of the word compliance in these cases (as defined below) may be misconstrued and used to imply that Caltrans is out of compliance with their permit when, in fact, they are not. CASQA’s general concern with the language identified below is that it is inconsistent with the receiving water limitations language, appears to circumvent the iterative process, and begins to establish the water quality objectives as numeric effluent limits (NELs).

Examples of the implications of this language include:

- D-2 → • Incident Reporting – Non-Compliance and Potential/Threatened Non-Compliance (E.2.b.6 - Page 24)

The Incident Report Form (Attachment I) inappropriately identifies the following as field non-compliance:

- Lack of BMP(s) or failure or ineffective implementation of existing BMP(s) in place that resulted in a discharge of pollutants to the receiving water.

As currently written, this line item applies too broadly to the stormwater program and may be misconstrued that an exceedance of a defined standard is automatically the result of a lack of BMPs or failure to implement BMPs in general (with no clear and accountable cause and effect linkage).

CASQA recommends that this line item be narrowed to include those facilities and activities that Caltrans is directly responsible for such as construction sites and municipal activities.

- Monitoring data indicates an exceedance of a defined standard. Defined standards include TMDL Waste Load Allocations (WLA), Regional Board numeric limits or objectives, and California Ocean Plan prohibitions.

Although the monitoring data may indicate that there is an “exceedance” of a defined standard at the point of discharge, the exceedance itself does not constitute non-compliance with the permit requirements and should not be misconstrued as such on the Incident Report Form. In fact, Provision E.2.c.3) c) – the Receiving Water Limitations Compliance - already includes a process for Caltrans to comply with upon determining that a discharge may be causing or contributing to an exceedance of a water quality standard. It is the response and actions that are taken that are the point of compliance, not the exceedance in and of itself. Therefore, this is a duplicative and conflicting requirement.

In addition, an exceedance of a TMDL WLA does not necessarily indicate non-compliance or threatened non-compliance with the permit either since many TMDL implementation plans clearly indicate that the WLAs are often not expected to be met until several years later (sometimes beyond the permit term) or are expected to be met through the use of iterative BMPs (consistent with the TMDL implementation plan).

Lastly, CASQA understands that, although the Lahontan Regional Water Quality Control Board’s Basin Plan contains numeric effluent limitations for stormwater discharges to surface waters in the Lake Tahoe Hydrologic Unit, the reissued stormwater permit will no longer require compliance with those numeric effluent limits since the TMDL WLA will be incorporated into the permit once the TMDL is approved by the State Water Board and EPA².

CASQA recommends that this line item be deleted from the form.

- Monitoring Results Report (E.2.c.2) g) iii - Page 29

D-3

This provision is inconsistent with the Receiving Water Limitations and implies that Caltrans would be out of compliance with the permit for exceedances of water quality objectives.

² Personal communication with Robert Larsen, TMDL/Basin Planning Unit, Lahontan Regional Water Quality Control Board

CASQA recommends that this provision be modified so that the MRR is consistent with the receiving water limitations and includes a summary of sites requiring continued monitoring as well as identification of BMPs implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance(s).

The Tentative Order Should Clearly Identify When the Hydromodification Requirements Apply and Be Flexible to Allow for Modifications Based on Site Specific Conditions

Although we believe that the Tentative Order may go beyond the authority of the Clean Water Act by regulating the quantity of the discharge as well as the physical structure of the receiving water, we recognize, nonetheless, that most of the municipal stormwater permits include hydromodification provisions. As a result, we are going to focus our comments on the technical merits of the current provisions instead of the legal arguments. Examples of language that we seek clarification and/or modification of include:

- Hydromodification Requirements (E.2.d.1) b) – page 34

D-4

It is not clear which projects the hydromodification requirements within this section refer to. It seems that all projects that add one or more acres of impervious area that do not discharge to one of the following are required to conduct this analysis.

- Discharge directly to a tidally-controlled water body or
- Discharge to a completely lined or armored channel that outlets to a tidally-controlled water body or
- Discharge to an irrigation or water supply channel

Projects far removed from waters that could be affected by hydromodification appear to be covered by this requirement. The proximity of the new impervious area to the water body needs to be considered in the implementation of this requirement.

CASQA recommends that this provision be limited to projects that add one or more acres of impervious area within a specified proximity of a water body (e.g., within ¼ mile of a receiving water). However, further discussion on this is warranted.

Projects throughout the state will include inland areas where projects may discharge to significant stretches of concrete lined channels that do not drain to tidal areas for which it would make sense to include within the exemption categories. The TO is unclear on whether the analysis is required for new impervious areas that do not have discharge points into a receiving water, such as projects that sheet flow or infiltrate or projects that discharge into an MS4.

CASQA recommends that the following additions and modifications to exempted categories of projects:

- *Discharge to a completely-lined or armored channel that outlets to a tidally-controlled water body or channel that is engineered, hardened and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected*

- *Discharge in a manner that does not result in a discharge to a receiving water or*
- *Discharge into a MS4 where the discharge is commingled with discharge from other land uses*

The TO does not establish what is to be done in cases where the result of the level 1 analysis yields an unstable existing condition. This may occur in cases where the stream has been degraded prior to the proposed project or in cases where the stream is naturally unstable. It is noted in the Federal Highway Administration guidance referenced for the stability assessment methodology that many streams in the Pacific Region are naturally unstable (page 53).

D-5

CASQA recommends that the language be modified to clearly indicate that if the stream course is determined to be unstable because of pre-existing conditions that no further analysis is required.

- Stream Crossing Design Guidelines to Maintain Natural Stream Processes (E.2.d.1) c) – page 37

Item c (iv) requires that natural channel materials be maintained at road crossings. However, in some cases it may not be possible to maintain the natural materials for safety, structural integrity, or because the natural materials may have become historically contaminated.

D-6

CASQA recommends that the provision indicate that the natural channel materials will be maintained to the extent feasible, but that alternative materials may be warranted in some cases.

Item c (vi) does not define which stream crossing the on-going stream analysis will be required. As written, the TO implies all crossings will need to have a biennially (every two year) level 1 assessment conducted in perpetuity. This is an onerous and cost prohibitive requirement. Over time the stability of a stream will be affected by many factors beyond the influence of the stream crossing of a particular project. A reasonable post construction study period should be established for these analyses should be included in the permit requirements.

D-7

CASQA recommends that this provision either allow for a prioritization process that focuses on new stream crossings or be limited to all new stream crossings. Either way the analysis should only be required for a specified amount of time.

The Tentative Order should provide flexibility for Caltrans to address pollutant specific TMDL Compliance Plans for statewide application.

Caltrans is subject to numerous TMDLs (see Attachment IV of the TO), which means it is addressing multiple pollutants in multiple waterbodies. The TO requires that Caltrans prepare a TMDL Compliance Plan for each TMDL. This will lead to considerable redundancy and a bookkeeping exercise at its worst. A much more efficient and effective approach for Caltrans is for the Department to develop pollutant specific compliance plans that are applied statewide and

that may be adjusted for a watershed specific requirement. This type of approach would lead to a more robust and consistent approach to TMDL implementation. Such an approach is also consistent with the State Water Board's recent effort to develop a statewide trash TMDL. The TO approach may work well for municipalities that discharge to one or two impaired water bodies but for Caltrans that discharges to many waterbodies the TO approach is an incredible amount of work.

D-8

→ ***CASQA recommends that Provision E.4 be modified to allow the development of pollutant specific TMDL compliance plans that are applied statewide to waterbodies listed for the specific pollutant. The statewide compliance plan should also allow for modifications to reflect specific TMDL requirements for different waterbodies. Provision E.4 should also allow for the development of multiple pollutants compliance plan in those cases where the Department wants to pursue a more comprehensive and holistic approach to TMDL compliance.***

The Tentative Order should not require re-design of projects that have completed project design and/or have completed environmental review processes.

In our comment letter on the Construction General Permit (CGP), CASQA noted that for projects, which are not yet in active construction, but have completed the design phase and/or have completed the environmental review processes (e.g. NEPA, CEQA assessments and local planning approvals), redesign to address new permit requirements would likely be prohibitively costly and likely to jeopardize existing regulatory approvals. We recommend that the Board re-evaluate the following provision:

- Project Planning and Design (Section E.2.d.)

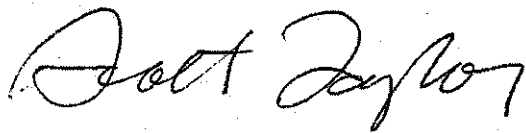
The TO needs to clarify what is meant by "completed the design phase." In the absence of clarification, a project that has completed the 90% design phase on the effective date of the order and consequently be required to re-design, or attempt to obtain a waiver from the appropriate Regional Board. Such a requirement will affect project schedules, may trigger additional CEQA/NEPA documents, and potentially jeopardize funding sources that often have time constraints.

D-9

→ ***CASQA recommends that the TO include language to the effect that projects that can demonstrate that design was initiated prior to the implementation date of the revised order and has been completed, or regulatory reviews (e.g. NEPA, CEQA, 401 Certification) have been completed or local planning approvals have been received should be exempt from the need to redesign to meet the requirements of the new permit.***

In closing, we hope that our comments will assist you in identifying additional improvements to the Tentative Order. Please feel free to contact me at (760) 603-6242 if you have any questions or would like to discuss this further.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Taylor". The signature is written in a cursive, flowing style.

Scott Taylor, Chair
California Stormwater Quality Association

cc: Bruce Fujimoto, State Water Board
CASQA Executive Program Committee
CASQA Board of Directors