Construction Industry Coalition on Water Quality

June 26, 2012

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

RE: Tentative Order No. 2012-XX-DWQ NPDES No. CAS000003. National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit Waste Discharge Requirements (WDRS) for State of California Department of Transportation.

Ms. Townsend, Chair Hoppin and Members of the Board:

On behalf of the more than 3,000 member companies of the Construction Industry Coalition on Water Quality (CICWQ), we would like to thank the California State Water Resources Control Board (State Water Board) for the opportunity to offer comments on the California Department of Transportation (Caltrans) Storm Water Permit (the Permit or Tentative Order).

I. Introduction

CICWQ is an education, research, and advocacy 501(c)(6) non-profit group representing builders and trade contractors, home builders, labor unions, landowners, and project developers. Our membership is comprised of members of four major construction and building industry trade associations in southern California: The Associated General Contractors of California, Building Industry Association of Southern California, Engineering Contractors Association, and Southern California Contractors Association, as well as the Engineering and General Contractors Association in San Diego and United Contractors located in San Ramon. Collectively, members from these associations build much of the transportation, public and private infrastructure, and land development projects in California. Members of all of the above-referenced organizations are affected by the Caltrans Permit, as are thousands of construction employees and builders working to meet the demand for modern infrastructure and housing in California.

Our comments on the Tentative Order reflect our commitment to protect water quality while at the same time preserve our member's business viability in this difficult economic time. CICWQ's membership has invested substantial resources developing sound approaches for post-construction site stormwater management based on the application and iterative use of best management practices (BMPs). Accordingly, our comments to the State Water Board reflect an industry commitment to selecting and using appropriate BMPs given a project's individual and watershed characteristics.

II. Comments on the Tentative Order

In general, we remain concerned that the State Board is imposing a regulatory burden on Caltrans that takes millions of dollars of funding away from the agency's primary mission to build and maintain public roadways and directs those resources to complying with the Tentative Order requirements. Despite limited pull back of monitoring requirements in a very few instances, the Tentative Order creates new and additional expenditures for stormwater monitoring that appear to bear no relationship to improving water quality. For example, it appears that Caltrans is being asked to fund a disproportionate amount of water quality monitoring within Areas of Special Biological Significance, and the number and breadth of monitoring requirements continues to be excessive, and without justification. And the Tentative Order appears to give wide discretion to local Regional Boards to place additional regulatory burdens on Caltrans beyond that contained in the Tentative Order.

CICWQ recognizes the State Board has made some corrections in the permit content and requirements. However, several specific areas require improvement in our opinion to address the unique needs of Caltrans and the citizens of California who use public transportation infrastructure. These areas are addressed as follows:

1. The Low Impact Development Best Management Practice Requirements for Transportation Projects are Unsupported for Application at all California Locations.

The Tentative Order mandates the application of Low Impact Development (LID) Best Management Practices (BMPs) for all roadway projects greater than one acre. This includes presumably a comprehensive engineering analysis of the application of soil infiltration, harvest and use, and evaporative LID BMP systems first, followed by consideration of flow-based LID BMPs (i.e. biofiltration or biotreatment systems), and then consideration of other flow- or volume-based water quality treatment technologies. While CICWQ supports the evaluation and use of all types of LID BMPs and other water quality treatment technologies in managing post-construction runoff from land development projects, we cannot support the mandatory consideration and application of certain LID BMPs for roadway construction projects at all times in all locations in California.

For roadway projects, we believe it is poor policy and a misuse of public resources to require the detailed engineering analysis and potential selection and use of stormwater runoff harvest and use or evaporative systems to manage any portion of the 85^{th} percentile, 24-hour storm event. We recognize, that when technically feasible, soil infiltration systems are a cost-effective stormwater runoff management option. However, there are many limiting factors that must be considered when using soil infiltration LID BMPs, and we encourage the State Board to more clearly define in the Permit and implementing guidance documents, specifically what technical limitations exist when

evaluating and using infiltration best practices (for example, consideration of the geotechnical stability of the roadway and right of way area through increased infiltration of surface runoff). Many other infeasibility factors are known to exist (these can be found and described in a number of recently adopted Phase I MS4 permits in California), and these should be identified and defined for proper application of soil based infiltration systems managed by Caltrans.

Harvest and use and evaporative-type LID BMPs are generally unsuitable for the roadway environment managed by Caltrans for several reasons. First, these two types of LID BMP categories are intended for application at land development projects involving the construction of buildings, not roadways. Roadways managed by Caltrans by their nature have restricted rights of way and space for placement of harvest and use systems. Whether located adjacent to or within/underneath the road bed surface, harvest and use cisterns or tanks are impractical, an operation and maintenance burden, and potentially dangerous should major spills or unexpected discharges occur. Imagine the impact and cost of having to shut down an entire freeway or major California highway if a harvest and use cistern was contaminated with gasoline or other fuels because of an accident.

Because evaporative systems are designed primarily for roof top areas, their consideration in the Tentative Order should be removed. And, if sufficient space for evaporation of runoff directly adjacent to a roadway was available, it is much more space efficient, cost effective, and practical to install LID BMP soil infiltration systems in these areas, or combine soil infiltration with soil biofiltration to achieve the intended infiltrative and evaporative result. Only in very rare circumstances, if ever, would an evaporative LID BMP system be available to a roadway designer; a project would require a very large adjacent area upon which to direct storm water runoff and allow sufficient time for storage and eventual evaporation. The common application of evaporative LID BMPs is installation of a green roof, which is unsuitable for road projects. Therefore, in our opinion, Caltrans will be challenged to ever encounter a situation related to a roadway project where stormwater runoff evaporation makes any practical sense. So requiring engineering evaluation of evapotranspiration of the 85th percentile 24-hour storm event is impractical and unnecessary.

From a water quality standpoint, both harvest and use and evaporative systems are intended primarily for management of roof top runoff, which is unlike surface runoff from roadway areas. Roof runoff requires little pretreatment other than gross solid and debris screening. Harvest and use systems can be designed to manage surface runoff, but the pretreatment needs and potential additional treatment of the water harvested must be carefully considered, and then rigorous on-going operation and maintenance requirements must be met for proper working order and long term reliability.

Moreover, reliable demand for harvested water must be provided in order for harvest and use systems to be an effective means to manage all or a portion of the 85th percentile, 24-hour storm event. Unless sufficient capacity in a cistern or tank for runoff collection is regenerated quickly (given the back to back nature of storm events in

California) runoff can bypass the cistern and be directly discharged with no treatment provided. In contrast, both soil infiltration and biofiltration systems are much more suitable for application into the roadway environment given their common solids pretreatment design, the fact that they are suitable for a wide range of pollutants of concern, including those generated by roadway use, and the fact they can be designed to manage a larger volume of runoff than cistern systems.

CICWQ urges the State Board to require that all roadway projects greater than 1 acre, if shown to be technically and economically feasible, install soil infiltration or biofiltration LID BMPs to the maximum extent practicable, and if these two types of systems are technically and economically infeasible, then require installation of conventional volume-based or flow-based storm water treatment devices for the remaining volume of runoff not managed in soil-based infiltration or biofiltration LID BMPs.

2. Clarify Infeasibility Factors and Include Economic and Technical Feasibility Consideration when Conducting LID BMP Selection Processes, and Consider LID BMP Installation Cost-benefit Analysis.

On page 38 and 39 of the Tentative Order it is stated that "Other BMPs may be used only after landscape and soil-based BMPs are determined to be infeasible. The Department shall also consider other effective storm water treatment control methods or devices for Department approval." The definition of infeasible is vague and should be further clarified. In addition, we strongly suggest that both technical and economic feasibility be simultaneously considered when evaluating and selecting any stormwater management best practice, to ensure that the pollutant removal benefit of such a BMP is commensurate with the cost to implement that practice.

3. Eliminate "Alternative Compliance with Treatment Sizing Criteria", found on page 39 of the Tentative Order.

Caltrans has a limited physical area within and adjacent to road rights of way to install LID BMPs. Should soil infiltration or biofiltration LID BMPs prove to be technically and economically infeasible, then Caltrans should be required to install treatment controls to the maximum extent practical, thus meeting its compliance obligation, without having to "mitigate" or manage the remaining runoff volume at some off-site location. Unlike other municipal agencies responsible for stormwater management, Caltrans is not in any position to establish such projects or work proactively with the myriad of agencies that would theoretically be necessary to develop an off-site mitigation project. Such a provision appears to penalize Caltrans for the nature of its roadway system, and force the agency into cooperative arrangements for which its mission is not intended.

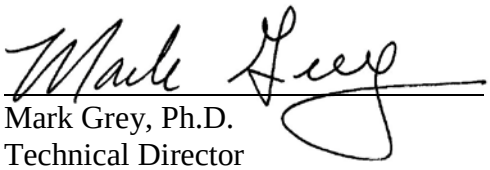
4. Revise the Receiving Water Limitation Language Consistent with the Suggestions Made by the California Stormwater Quality Association

We support here and incorporate by reference the comments made by the California Storm Water Quality Management Association dated June 26, 2012 regarding the State Board's undercutting of the iterative process, and the immediate liability the State Board is placing upon Caltrans with respect to the potential for certain discharges from the Caltrans system to appear to cause an exceedance of receiving water quality limits. We urge the State Board to accept CASQA's comments and proposed language for the Receiving Water Limitations.

III. Concluding Remarks

CICWQ membership and its coalition partners are in the forefront of water quality regulation, providing to water quality regulators practical ideas that are implementable and that have as their goal clean water outcomes. If you have any questions or want to discuss the content of our comment letter, please feel free to contact me at (951) 781-7310, ext. 213, (909) 525-0623, cell phone, or mgrey@biasc.org.

Respectfully,



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