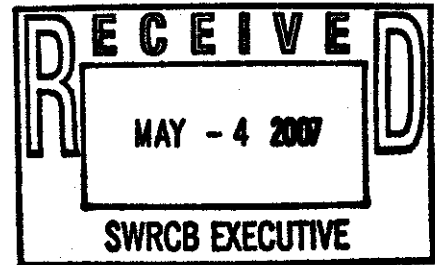


**Construction General  
Permit – Stormwater  
Deadline: 5/4/07 5pm**



May 4, 2007

**VIA EMAIL ([commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)) AND FACSIMILE ((916) 341-5543)**

California State Water Resources Control Board  
Attn: Ms. Song Her, Clerk to the Board  
P.O. Box 100  
Sacramento, CA 95812-0100

Re: Comment Letter—Preliminary Draft Construction General Permit

Dear Ms. Her:

The California Chamber of Commerce (“CalChamber”) appreciates this opportunity to comment on the State Water Resources Control Board’s (“SWRCB” or “Board”) Preliminary Draft Construction General Permit (the “Preliminary Draft”), dated March 2, 2007.

The CalChamber’s members include over 15,000 California businesses, including hundreds of companies regulated under the State Board’s Construction General Permit (the “CGP”). An important objective of the CalChamber is to ensure that the laws and rules relating to stormwater, construction site runoff, and surface water and ocean water quality are based upon good science and sound economic analyses so that our society can continue to enjoy economic prosperity based upon the prudent protection, use and enjoyment of these water resources and to sustain the quality of life benefits that result from maintaining high quality waters of the State for the range of beneficial uses. Accordingly, the CalChamber has a very strong interest in encouraging reasonable and cost-effective approaches to control of stormwater discharges from construction sites.

We appreciate the work of the State Board and believe the Preliminary Draft can provide a point of departure for further investigation of ways to improve the existing program for regulating stormwater from construction sites. Nevertheless, we believe the Preliminary Draft has some significant shortcomings that the Board should recognize and take into account as it moves forward. We offer these comments in the spirit of assisting the Board as it progresses from the current informal proceedings to a formal tentative draft permit.

## **I. SUMMARY STATEMENT**

The CGP governs water quality at all major construction sites throughout the State of California and, therefore, has the potential to impose significant burdens on new projects, development and infrastructure. The existing CGP issued in 1999 has proven to be protective of water quality when implemented properly and was upheld by Judge Lloyd Connelly in a June 2005 decision resolving litigation against the Board brought by various environmental groups.<sup>1</sup> The March 2 Preliminary Draft proposes to reverse some of the core underpinnings of the 1999 CGP, which the Board vigorously defended in litigation, placing a material burden on the agency to explain why these reversals in policy are warranted, how these reversals will result in water quality benefits, and how those benefits are commensurate with the increased burdens on the regulated community, including not only the private sector, but the public sector and major public works projects.

The March 2 Preliminary Draft proposes to increase regulation of construction sites dramatically, through a variety of new permit provisions that are not present in any construction stormwater permit anywhere in the Nation. The Board should navigate such uncharted territory carefully, subjecting the permit to the scrutiny called for by such novel initiatives, and providing material justification as to the need for, and possible efficacy (if any) of, these proposed measures.

At this early stage, we mark the following points for the Board's consideration as it revises the permit and plans for future formal proceedings on the permit:

- (1) *The Board Should Confirm the Informal Nature of the CGP Proceedings to Date.* As a preliminary matter, the Board should confirm, as expeditiously as possible, the informal nature of the CGP proceedings to date. We understand the Board has opted to take an informal approach, intended to help the agency develop a formal draft permit which the agency will release in the future, at which time formal permit proceedings will commence. As such, in this letter we focus on certain overarching issues more from a policy and implementation perspective, than from a legal perspective, in the spirit of assisting the Board with the development of a formal draft permit.
- (2) *The Preliminary Draft Suggests that the Regulation of Stormwater from Construction Sites Has Been a Failure, when in fact the Reality Is One of Notable Success.* There are many examples of excellent stormwater management at California construction sites. The challenge for the State Board is to bring about more uniform performance of existing best practices – not to scrap the current program which has proven effective when implemented properly. The Board should not rely on last year's Storm Water Panel Report<sup>2</sup> to conclude that Best Management Practices ("BMPs") cannot be used to

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<sup>1</sup> San Francisco Baykeeper, et al. v. California State Water Resources Board, Case No. 99CS01929, Ruling on Submitted Matter (Cal. Super. Ct. Sac. Div. May 18, 2005) (hereinafter, the "Connelly case").

<sup>2</sup> Storm Water Panel Recommendations to the California State Water Resources Control Board: The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated With Municipal, Industrial, and Construction Activities (June 19, 2006) (hereinafter, the "Panel," and the "Panel Report").

effectively manage stormwater at construction sites. That report contained unsolicited and unfounded expressions of opinion critical of the State's current stormwater program. Those observations were not based on a survey of actual practices, or any field work whatsoever, and strayed from the Panel's charge. The Panel Report made no mention of the many fine examples of effective stormwater management under the current CGP, nor does the Report mention the California Environmental Quality Act, through which water quality mitigation has been occurring throughout the State for many years. These omissions, and the continued absence of any survey of actual practices, should lead the Board to be skeptical of the Report's unfounded opinions on the current program's effectiveness.

- (3) *The Preliminary Draft Provides No Basis for the Board to Reverse Its Prior Finding that Numeric Effluent Limits at Construction Sites Are Infeasible.* From 1999 to 2005, the Board vigorously defended its 1999 determination that numeric limits at construction sites are infeasible -- a determination upheld in the Connelly case. Now, the Board proposes to reverse its own finding, apparently on the basis of the 2006 Panel Report, which was principally a literature survey, and no substitute for the technical studies necessary to support technology-based numeric limits. The Board should consult the well-established pattern and practice of the United States Environmental Protection Agency ("EPA") to inform the development of any such limits, and the determination of their feasibility. For example, when developing technology-based numeric limits, EPA goes to great lengths to conduct an in-depth study of the industry, makes case studies of selected sites in the industrial category, committing substantial resources to field evaluation, and testing, of actual performance. In contrast, the Board has undertaken no analogous efforts to support the numeric limits proposed in the Preliminary Draft.
- (4) *Numeric Effluent Limits Are Not Required By The Clean Water Act, Technically Feasible, Or Cost-Justified.* EPA is the nation's leader in setting numeric limits, having developed, during the course of the past three decades, over 50 national, technology-based, numeric effluent limit guidelines for various industries. EPA also has many years of experience with evaluating the feasibility of numeric limits for stormwater discharges, and has opted to impose such limits only in very limited and discrete contexts. Accordingly, when EPA expresses a clear preference for *non*-numeric effluent limits in stormwater permitting, the Board should pay close attention. The March 2 permit documents make no attempt to address the myriad factors that have prevented EPA from setting numeric stormwater limits for construction sites; the Preliminary Draft is inconsistent with the results of EPA's many years of expert deliberation on the subject. Numeric stormwater limits are not required by the federal Clean Water Act; and the Board has not made the case that they are technically feasible or cost-justified.
- (5) *The Board Previously Rejected Dramatically Expanded Stormwater Sampling and Analysis at Construction Sites as Not Required by Law and Unlikely to Yield Useful Information; the March 2 Permit Documents Call for Such Expansive Monitoring but Provide No Basis for the Board to Reverse Its Prior, Judicially Upheld Findings.* Despite the fact that the Board in the Connelly case argued that extensive stormwater sampling and analysis is not required by the federal Clean Water Act, the Board now proposes a dramatic expansion of such monitoring. On the basis that stormwater quality is so highly

and inherently variable, the Board previously determined that such monitoring, especially at construction sites with ever-changing conditions, is unlikely to yield useful information. While field testing for bulk parameters can have utility in spotting problem conditions, and thus may be worth the cost and effort, the comprehensive monitoring proposed in the Preliminary Draft is not a productive use of resources, and, according to the Board's own prior findings, is unlikely to produce useful information or commensurate water quality benefits.

- (6) *The Board Should Focus on Improving the Implementation of Best Management Practices ("BMPs") through Design Standards and Maintenance Obligations.* The program for prevention and reduction of stormwater pollution at construction sites can be improved by tightening the BMP-based provisions of the existing CGP. Design standards for BMPs could be established to promote more uniform performance and to provide criteria for BMP selection, and maintenance obligations could be made clear and enforceable on a more routine basis. Such approaches will help ensure that the next CGP makes meaningful further water quality gains. By contrast, a fundamental paradigm shift in the CGP towards numeric effluent limits and untested and unwarranted technology such as Advanced Treatment Systems would be imprudent, and certainly is unwarranted based on any information provided to date by the agency.
- (7) *The Potential Impact of Construction on Downstream Channel Erosion and Scour Is a Nonpoint Source Issue that Is Ill-Suited for the CGP Program, and Is Outside Its Scope.* The March 2 permit documents indicate that the Board is concerned that stormwater volumes and velocities which occur after construction is completed will be greater than those which existed prior to construction. According to the Board, this so-called "hydromodification" may propagate downstream, altering stream channels through scour, erosion and other adverse impacts. This is a classic nonpoint source issue, one that is ill-suited for a command and control permit like the CGP, as recognized by case law and existing California regulations placing channel erosion outside the scope of the NPDES permit program. The Board should consider leaving this issue to the land-use planners and to the area-wide drainage programs required of local jurisdictions under regional public storm drain permits, where such issues can be studied and mitigated pursuant to local land use law, regional drainage programs, and the California Environmental Quality Act, employing various approaches.
- (8) *A Formal Public Comment Period, and Potential Hearings, on Stormwater Plans Is Unnecessary and Not Required by Law.* The Preliminary Draft calls for most construction site operators to prepare a Stormwater Pollution Prevention Plan, or SWPPP, satisfying various detailed, prescriptive elements specified in the permit. During these permit proceedings, the Board surely will provide the public with every opportunity to comment on the required contents of the SWPPP. It is unnecessary for every SWPPP prepared pursuant to the final permit to undergo a separate and special public review process. This is an invitation for administrative gridlock and project opponent mischief as thousands of SWPPPs are prepared every year in the State; the resources to handle a public process specific to these plans are not available, nor would commitment of them to such review be a good use of these resources. Simply making the SWPPPs publicly available through electronic posting on the agency's web site prior to the beginning of

construction will give all interested parties ample opportunity to raise through various existing, readily available, and effective means any concerns over the adequacy of BMPs described in any particular SWPPP.

## II. DISCUSSION

### A. The Board Should Confirm that the Proceedings on the CGP to Date Do Not Constitute Formal Permit Proceedings.

On March 2, 2007, the State Board posted the Preliminary Draft on its web site, and, on March 7, issued a notice entitled, “REISSUANCE OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION [sic] SYSTEM GENERAL PERMIT FOR DISCHARGES OF STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (CONSTRUCTION GENERAL PERMIT),” scheduling workshops for April 17 and 20 on the Preliminary Draft, and setting a deadline for written comments.<sup>3</sup> The workshop notice provides no reference to the authority under which it is being held, but indicates that, although “[b]oard members will also attend the workshop, . . . this will not be a formal hearing.” Rather, “[t]he workshops are informal meetings.”<sup>4</sup>

The release of the March 2 Preliminary Draft was the first action of the State Board with respect to the CGP since last summer, when the State Board held workshops regarding the Panel Report, prepared by a panel commissioned by the State Board to examine the feasibility of numeric limits in stormwater permits, including, specifically, the CGP. The notice for the April 2007 workshops refers to the Panel Report and states that: “The State Water Board is incorporating suggestions from the Panel report into the Draft Construction Permit.”<sup>5</sup> While the notice also recognizes the Panel’s “reservations and concerns” regarding numeric limits at construction sites, the Preliminary Draft incorporates a number of permit strategies raised by the Panel including not only numeric limits, but also Active Treatment, action levels, heavy monitoring, and hydromodification.<sup>6</sup>

When issuing general stormwater permits like the CGP, the State Board’s historical practice has been to utilize the informal adjudicatory procedures of the California Administrative Procedures Act (“APA”). The APA provides a procedure to object to the election of informal procedures by an agency and request a formal adjudicatory hearing. We understand that the Board has not yet commenced the adjudicatory procedures of the APA with respect to the CGP, but that it intends to do so once it has a draft tentative permit ready for public notice, review and

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<sup>3</sup> Notice of Public Workshop, State Water Resources Control Board, Reissuance Of The National Pollutant Discharge Elimination [sic] System General Permit For Discharges Of Storm Water Associated With Construction Activities (Construction General Permit). Found at: [http://www.swrcb.ca.gov/stormwtr/docs/constpermits/const\\_pubwkwshop.pdf](http://www.swrcb.ca.gov/stormwtr/docs/constpermits/const_pubwkwshop.pdf) (last accessed on May 4, 2007).

<sup>4</sup> Id. at 1 and 3.

<sup>5</sup> Id. at 2.

<sup>6</sup> Id.

comment. Because the current proceedings are informal, our understanding is that, at this time, we are not obligated to request (or not) formal adjudicatory procedures, and that there is no exhaustion requirement associated with the May 4, 2007 comment deadline. We submit this letter without waiver of our right and opportunity to submit comprehensive legal and factual comments during the future formal proceedings, and our right to request, or not, formal adjudicatory process at that time.

However, the State Board has drawn a direct connection between the workshops on the Panel Report and on the Preliminary Draft, on the one hand, and CGP reissuance, on the other. Given the importance of this permit to our members and us, and their and our status as Real Parties in Interest with respect to permit reissuance, we request the Board to confirm our understanding as to the nature of the ongoing CGP proceedings. We also would like to know how the Board intends to proceed in light of our comments, and the previous comments we submitted on the Panel Report, as we have gone to considerable lengths to provide constructive input into this process.

**B. The Preliminary Draft Suggests that the Regulation of Stormwater from Construction Sites Has Been a Failure, when in Fact the Reality Is One of Notable Success.**

The March 2 permit documents indicate that the Board believes that the employment of BMPs to manage stormwater effluent has been unsuccessful, referring to the finding of the Panel that “[l]imited field studies indicate that traditional erosion and sediment controls are highly variable in performance, resulting in highly variable turbidity levels in the site discharge.”<sup>7</sup>

The reliance in the March 2 permit documents on the Panel Report is misplaced, as a thorough evaluation of the current regulatory program would reveal that it has been quite successful. In large part as a result of the implementation and progressive improvement of BMPs under the current program, the potential pollutant load to receiving waters from construction stormwater has dropped significantly since the early 1990s—when the CGP, and Municipal Separate Storm Sewer System (“MS4”) programs, were brought on line. Over this time period, increasingly sophisticated and effective BMPs have been implemented by many regulated parties either as part of Stormwater Pollution Prevention Plans (“SWPPPs”) adopted pursuant to the CGP, or in compliance with programs administered by municipalities in connection with their MS4 permits. Under these programs, BMPs typically must be tailored to address pollutants of concern, must be maintained, and are periodically reviewed and revised to address changing site conditions or regulatory requirements. The California Environmental Quality Act (“CEQA”) also has been a principal driver of water quality improvement at construction sites. CEQA requires lead agencies and project proponents to identify and mitigate to the extent feasible the negative impacts on water quality from new projects. As a result, project proponents must implement BMPs—either as project design features or as mitigation measures—that are tailored to site-specific water quality issues.

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<sup>7</sup> Fact Sheet for Water Quality Order 2007-XX-DWQ at 7. Found at: <http://www.swrcb.ca.gov/stormwtr/docs/constpermits/factsheet070302.pdf> (last accessed on May 3, 2007).

Contrary to the potential implications of the Panel Report, a BMP-based approach to stormwater management at construction sites can, and does, work. Best practices in erosion and sediment control are protective of water quality, as can be seen at numerous sites throughout the State. Before finding otherwise, the Board would need to undertake a statewide, on-the-ground field review, and make an informed evaluation of empirical data as to the current program's effectiveness. To yield meaningful policy recommendations, the effectiveness of the current BMP-based approach would have to be compared with the likely real-world effectiveness and the marginal costs and benefits of the proposed alternative regulatory approaches in the March 2 permit. The Panel undertook no on-the-ground study or comparative analysis of this nature, and the Panel Report's critical observations about the current program appear to reflect only the panelists' qualitative, general opinions and, in some instances, apparent bias. Those opinions are neither empirically-based nor balanced, and do not provide substantial evidence for the Board to move toward numeric limits and Active Treatment Systems, on the putative basis that the BMP-based approach is a failure—especially given the technical complexity of the stormwater problem, the significant investments that have been made in the existing system, and the major costs that would likely accompany any such shift.

This is not to say that the current stormwater program cannot be improved, a point to which we return below. But given the significant investment that parties are making in BMPs, and the impressive results that have been achieved, the Panel Report's generalized criticisms—for example, that BMPs are not well matched to water quality problems or that they commonly are maintained only for aesthetic purposes (see Panel Report, at 4)—do not present an accurate or balanced picture of the current program's effectiveness. If the Board wishes to replace the BMP-based approach, it needs to establish the predicate foundation itself, and cannot defer to the Panel which provides no substitute for the agency's burden to see for itself. We believe that any meaningful examination of actual practices will show the effectiveness of properly planned and designed BMPs.

C. The Preliminary Draft Provides No Basis for the Board to Reverse Its Prior Finding that Numeric Effluent Limits at Construction Sites Are Infeasible.

When adopting the current CGP, the State Board found that:

It is not feasible at this time for the SWRCB to establish numeric effluent limitations. . . . Therefore, the effluent limitations contained in this General Permit are narrative and include the requirement to implement appropriate BMPs.<sup>8</sup>

This determination was challenged in court by various environmental groups, during which litigation the State Board defended the reliance of the permit on BMPs, and the absence of any numeric effluent limits, stating in pertinent part: "The State Board properly determined that it is scientifically impracticable to establish a numeric standard for storm water sampling at

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<sup>8</sup> National Pollutant Discharge Elimination System (NPDES) General Permit For Storm Water Discharges Associated With Construction Activity (General Permit) Water Quality Order 99-08-DWQ, State Water Resources Control Board at 40.

construction sites.”<sup>9</sup> After Judge Connelly upheld the Board, the Board opposed further litigation on the issue by petitioners, stating in court papers:

[T]he court found substantial evidence supporting the State Board’s conclusion that numeric limitations were not feasible due to the variability of storm events and pollutant constituents and concentrations in storm water runoff.<sup>10</sup>

The Board referred to the “significant technical and scientific barriers” in setting numeric limits for construction sites, explaining:

Numeric water quality-based effluent limitations are expressed in terms of concentration and mass. . . . [S]torm water discharge flow is determined by rainfall, which is highly variable and intermittent, and falls at unpredictable rates and quantities onto sites that have varying geographic, geologic, and vegetation characteristics. Discharges often lack definable outflow points, leaving the property as sheet flow. For instance, consider a construction site over the course of a particular storm event. The rate at which rain falls varies over the course of the storm, and rain that falls onto the site combines with storm water that runs onto the site. Storm water does not run off the construction site at any defined, measurable outflow point (such as a pipe), but potentially runs off in multiple directions, where it combines with runoff from other sites. In an arid state such as California, there may be only a few storms per year that generate runoff, and the volume of runoff in separate storms may vary greatly. Due to these variables, it is difficult to calculate the precise rate and volume of storm water discharged, and consequently to calculate pollutant mass and concentration, in a scientifically valid manner.<sup>11</sup>

Judge Connelly upheld the Board’s determination regarding numeric limits and the inappropriateness of comparing numerical results from sampling and analysis with any such limits, stating:

The scientific and technical difficulties of obtaining and analyzing storm water discharge samples that accurately reflect the impact of the discharges on water

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<sup>9</sup> Opp’n. Mot. For Order Enforcing Writ of Mandate at 5, S.F. Baykeeper et al. v. State Water Res. Control Bd. No. 99CS01929 (Cal. Super. Ct. Dec. 17, 2004). (emphasis in original).

<sup>10</sup> Respt.’s Memo. of Points and Auths. in Support of Mot. for Discharge of Writ at 3, S.F. Baykeeper et al. v. State Water Res. Control Board, No. 99-CS-01929. (Cal. Super. Ct. Sac. Div. Dec. 9, 2004).

<sup>11</sup> Opp’n. Mot. For Order Enforcing Writ of Mandate at 5, S.F. Baykeeper et al. v. State Water Res. Control Bd. No. 99CS01929 (Cal. Super. Ct. Dec. 17, 2004).



quality of receiving waters would . . . preclude use of the sampling results as numeric water quality-based effluent limitations.<sup>12</sup>

Despite this prior history, and in apparent reliance on the Panel Report, the Preliminary Draft includes various numeric effluent limits for construction site runoff.<sup>13</sup> The Board's decision to include these limits is inconsistent with not only with Board precedent, but also EPA precedent and guidance. EPA has developed more than 50 national, technology-based, numeric effluent limit guidelines for many different categories of industrial discharges. However, EPA has opted to impose numeric limits in stormwater permitting only in very limited and discrete contexts, none of which are relevant to the CGP.

1. As Board Precedent Indicates, Stormwater Is Qualitatively Different From Other Discharges And Is Not Susceptible To Numeric Limits.

Numeric effluent limits generally are feasible and appropriate for publicly owned treatment works and major industrial process wastewater effluents because the flows discharged from those sources are relatively constant, and the pollutant load in these wastewaters is generally predictable, consistently within range of a median or average value, and typically characterized by a normal (bell-shaped) or lognormal (positively skewed) frequency distribution curve. These manageable flow volumes and predictable pollutant loads lend themselves to capture and treatment via various technologies which, in turn, produce a consistent treated wastewater effluent. Under such circumstances, one can have a high degree of confidence that effluent concentrations will not exceed a prescribed limit, as long as the treatment unit is designed and operated properly. Accordingly, it is feasible to calculate appropriate numeric limits and compliance with such limits is possible.

Stormwater discharges are qualitatively and dramatically different. Stormwater volumes are highly unpredictable and are largely dependent on weather. Stormwater quality is highly variable, typically characterized by intermittent extreme values that are much higher than the vast majority of concentrations.<sup>14</sup> These extreme-value distributions are much different than the bell-shaped curve of a normal distribution, or even than a lognormal distribution. Extreme and highly variable stormwater flow volumes, together with uncertainty regarding stormwater quality, make stormwater treatment an inexact science—not one generally capable of consistent, reproducible results. As the Board has explained, “[t]he inherent variability of storm water discharges also make numeric effluent limitations and end-of-pipe treatment impractical. The frequency, duration and magnitude of storm events and the constituents; concentrations,

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<sup>12</sup> San Francisco Baykeeper, et al. v. California State Water Resources Board, Case No. 99CS01929, Ruling on Submitted Matter, at 11 (Cal. Super. Ct. Sac. Div. May 18, 2005).

<sup>13</sup> See Draft CGP at 10-11.

<sup>14</sup> “Extreme values” are values that are mathematically markedly different from the general population of values—in other words, outliers. When used in this context, the term “extreme” does not connote risk to human health or the environment. In fact, “extreme values” can be so isolated and episodic, and might be relevant to such a small quantity of water, that they may be toxicologically irrelevant.

mechanisms, persistence and effects of runoff are poorly understood.” (State of California, State Water Resources Control Board, Order No. WQ 91-03 at 52.)

Absent the ability to capture vastly divergent stormwater volumes and to treat highly variable stormwater quality to a consistent and reproducible result, strict compliance with numeric limits is neither feasible nor prudent. To support a claim of feasibility, such results must be capable of being repeated at all regulated sites (*i.e.*, many thousand sites), under dramatically divergent conditions, influenced by a myriad of site-specific and climatic factors. Attempting to avoid this complexity by setting numeric limits to some first-year statistical measure—such as median concentration or even 90<sup>th</sup> percentile concentration—is a recipe for failure given the extreme-value nature of stormwater.

The Board itself has recognized this fact. In an earlier SWRCB decision, the Board stated:

In order to obtain a realistic chance of compliance with numeric effluent limitations, dischargers would have to install some kind of end-of-pipe treatment technology. However, few such technologies have been investigated or developed for discharges of storm water and urban runoff. Available treatment technologies are limited because storm waters involve high volume, intermittent flows from a large number of outfalls. Physical treatment works generally necessitate interception and transport of storm sewer flows to central locations and require extensive land area for gravitational settling basins.

*Id.* at 51. Although the Board in prior precedent left open the possibility of applying numeric limits at a later time when it was “appropriate and proper,” that time has not yet come. *Id.* It is still the case that “available treatment technologies are limited,” and that stormwater treatment works will require “large land areas to contain high volume, variable storm flows.” *Id.* at 51-52.

2. The Clean Water Act Does Not Require Numeric Effluent Limitations For Stormwater Discharges; EPA Consistently Has Rejected Such Limits.

The federal EPA has made clear that the Clean Water Act does not require the use of numeric effluent limits for stormwater discharges. EPA regulations provide that National Pollutant Discharge Elimination System (“NPDES”) permits may rely on BMPs to control or abate pollutant discharge where authorized under Clean Water Act Section 402(p) for stormwater discharges, where numeric effluent limitations are infeasible, or where reasonably necessary to achieve effluent limitations and standards and carry out the purposes of the Act. 40 C.F.R. §

122.44(k)(2)-(4). As the Board acknowledged in the Connelly case, “a finding it is infeasible to establish numeric effluent limitations is not the *sine qua non* of use of BMPs.”<sup>15</sup>

EPA consistently has rejected the application of numeric effluent limits to stormwater discharges for the vast majority of industrial sources. As a general matter, EPA has explained that it is both technically difficult and expensive to develop numeric limits for stormwater because—as discussed above—such discharges “are highly variable both in terms of flow and pollutant concentrations, and the relationships between discharges and water quality can be complex.”<sup>16</sup> In both the current and recently proposed Multi-Sector General Permits (“MSGP”) for Industrial Activities, EPA applied numeric effluent limits only to coal pile runoff and five other discrete categories of runoff.<sup>17</sup> For all other discharges covered by the MSGP, EPA requires BMPs that are non-numeric “flexible requirements for developing and implementing site specific plans to minimize and control pollutants in storm water discharges associated with industrial activity.” 65 Fed. Reg. at 64,759.

In its proposed effluent limitation guideline for stormwater discharges from construction activities (subsequently withdrawn), EPA specifically rejected numeric effluent limits:

The stochastic nature of rainfall and runoff makes verification of the design standards difficult. In some cases, the nature of local rainfall and runoff characteristics make it difficult to even design BMPs to a specified performance level. In addition, site-specific soil conditions greatly influence the amount of sediment mobilized during runoff events, and the soil settling characteristics greatly influence the performance of sediment controls. Designing an entire suite of erosion and sediment controls for a site to perform to a specified level would likely require use of a computer model, which could add significant costs with little assurance of increased effectiveness. Similarly, monitoring to verify attainment of numerical requirements can be very difficult . . . with little demonstrated results. As a result, EPA did not consider numeric

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<sup>15</sup> Respt.’s Memo. of Points and Auths. in Opp’n to Writ of Mandate at 9, S.F. Baykeeper et al. v. State Water Res. Control Board, No. 99-CS-01929. (Cal. Super. Ct. Sac. Div. March 31, 2000).

<sup>16</sup> Questions and Answers Regarding Implementation of an Interim Implementation Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits, 61 Fed. Reg. 57,425, 57,426 (Nov. 6, 1996).

<sup>17</sup> See Final Reissuance of NPDES Storm Water Multi-Sector General Permit for Industrial Activities, 65 Fed. Reg. 64,746, 64,761 (Oct. 30, 2000); Proposed 2006 Multi-Sector General Permit For Stormwater Discharges Associated With Industrial Activity (MSGP) § 1.4.1 (“Proposed 2006 MSGP”), available at [http://www.epa.gov/npdes/pubs/msgp2006\\_all-proposed.pdf](http://www.epa.gov/npdes/pubs/msgp2006_all-proposed.pdf).

pollutant control requirements a viable option.<sup>18</sup>

Likewise, in a decision regarding a challenge to the Board's stormwater regulatory program, the Board stated:

The petitioners contend that the Clean Water Act, and regulations and court decisions interpreting the Act, require the inclusion of numeric effluent limitations in NPDES permits for the discharge of storm water from a municipal separate storm sewer system. We have reviewed these authorities, and also opinions we have received from EPA, and conclude that numeric effluent limitations are not legally required.

(State of California, State Water Resources Control Board, Order No. WQ 91-03 at 30.)

3. Technology-Based Numeric Limits for Construction Sites Are Technically Infeasible And Are Not Cost-Justified.

As explained above, the extreme variability in stormwater flows and pollutant concentrations renders the attempt to set defensible technology-based, numeric limits a long-term and uncertain journey. To our knowledge, there is no California precedent for setting such limits on the basis of extreme-value influent (flow and concentration) distributions. Even if those distributions were well defined—which they are not—and even if treatment technologies could be found to provide consistent and reproducible effluent quality, any such technology would have to be designed to handle a certain amount of stormwater volume. Thus, any such limit could be applicable only up to a specific design storm event.

Before considering the development of numeric limits, the Board should be fully aware of the exceptional costs and practical difficulties that exercise would involve. Development of such limits for the CGP would be analogous to setting national effluent limitation guidelines (“NELGs”); to be technically (and perhaps legally) defensible, such limits for construction site stormwater would have to be developed through a similarly rigorous process. When developing numeric limits, EPA makes case studies of selected sites in the relevant industrial category, committing resources to field evaluations of actual performance. Here, the Board has made no analogous efforts to support the numeric limits proposed in the Preliminary Draft. We believe that only after the searching process prescribed by law, and followed by EPA, can the Board incorporate technology-based limits into the CGP.

NELGs are determined based on the identification of best conventional pollutant control technology (“BCT”) for conventional pollutants (*i.e.*, biological oxygen demand, total suspended solids, pH, fecal coliform, and oil and grease) and best achievable control technology (“BAT”) for toxic and other pollutants. See 33 U.S.C. §§ 1311(b)(2), 1314(b)(2) & (4). Determining BAT requires EPA to evaluate available technology in light of a number of factors, including:

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<sup>18</sup> Effluent Limitations Guidelines and New Source Performance Standards for the Construction and Development Category, 67 Fed. Reg. 42,644, 42,658 (June 24, 2002).

the age of equipment and facilities involved, the process employed, engineering aspects of the applications of various types of control measures, process changes, non-water quality environmental impacts (including energy), and such other factors as EPA deems appropriate. 33 U.S.C. § 1314(b)(2)(B); see also 40 C.F.R. § 125.3(d)(3). BCT determinations require EPA, in addition to considering the BAT factors, to subject candidate technologies to a complex two-part test to determine whether such technologies are reasonable in light of implementation costs.<sup>19</sup>

Even for discharges that (unlike stormwater) are readily susceptible to numeric limits, the process of developing a NELG is long and costly. In order to develop a NELG,

EPA typically (i) gathers extensive information on the industry (through questionnaires, wastewater sampling, literature reviews, and other methods); (ii) performs detailed statistical analyses of this information; (iii) develops sets of proposed control options for the industry; (iv) estimates the effluent reductions, costs, economic impacts, and environmental effects of those options; (v) shapes the options into a proposed set of limits; (vi) explains the proposed limits in a *Federal Register* publication and additional supporting documents; (vii) reviews comments on the proposed limits; and (viii) incorporates those comments into a final regulation (again with considerable supporting documentation). From start to finish, this process often takes five years or more.<sup>20</sup>

The standard-setting process would be significantly more technically difficult, time-consuming, costly, and vulnerable to legal challenge for stormwater discharges, which do not lend themselves to numeric effluent limits, technology-based or otherwise. In addition, as the Panel has pointed out, there currently is not even a reliable database describing discharges and BMP performance necessary to assess currently available technologies. Panel Report, at 19. In light of these difficulties, coupled with the low likelihood that numeric limits would achieve significant marginal water quality benefits (compared with what can be achieved through iterative improvement of BMPs), the Board should be skeptical regarding any suggestion in the Panel Report that numeric limits are feasible or appropriate for construction stormwater discharges. At a minimum, significant further inquiry—with full public participation and expert advice from persons versed in the practical regulatory challenges of setting numeric limits—would be necessary before taking any step in this direction.

**D. The Board Is without a Basis to Reverse Prior Findings that Dramatically Expanded Stormwater Sampling and Analysis Will Not Generate Useful Information and Is Not Required by Law.**

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<sup>19</sup> 33 U.S.C. § 1314(b)(2)(B); see also 40 C.F.R. § 125.3(d)(2); Best Conventional Pollutant Control Technology; Effluent Limitations Guidelines, 51 Fed. Reg. 24,974 (July 9, 1986)(explaining EPA’s methodology for determining BCT).

<sup>20</sup> The Clean Water Act Handbook 24 (Mark A. Ryan, ed. 2003).

In the Connelly case, the Board defended the sampling and analysis provisions of the *existing* CGP as follows:

The Permit's sampling and analysis requirements . . . are the most rigorous in the nation, and go far beyond the requirements of the Clean Water Act and its implementing regulations.<sup>21</sup>

The Preliminary Draft proposes to replace these “most rigorous” monitoring requirements with a much more aggressive regime that requires sampling “from each drainage area within one business day after the initial ½ inch of measured precipitation from a storm event, and every one inch thereafter.”<sup>22</sup> The compounds that must be tested include: pH, turbidity, total petroleum hydrocarbons, pollutants identified in the Pollutant Source Assessment, various other parameters when Active Treatment is being used, and parameters added by a Regional Board.<sup>23</sup>

Although the Board argued in the Connelly case that extensive stormwater sampling and analysis is not required by the federal Clean Water Act, the Board is now dramatically expanding already vigorous stormwater monitoring requirements. In Connelly, the Board explained various reasons why stormwater sampling at construction sites is either not required or of little use, pointing to the “delay involved in waiting for laboratory results when immediate corrective action during the storm event is needed,” and the fact that extensive monitoring is “too costly making housing unaffordable with little or no environmental benefit.”<sup>24</sup> The Board explained:

Common sense, of course, suggests that it would be difficult to grab water samples from all of the small dribblets of runoff that might be leaving the construction site[.] . . . Common sense also suggest[s] that Board reliance on visual inspection of water turbidity at the site, as well as sediment track left from flow, is more practicable and accurate.<sup>25</sup>

In the Connelly case, the Court acknowledged that sampling and analysis of stormwater effluent was not *per se* required by the Clean Water Act, and repeatedly referenced the difficulties associated with storm water discharge monitoring. San Francisco Baykeeper, et al. v. California State Water Resources Board, Case No. 99CS01929, Ruling on Submitted Matter, at 11 (Cal. Super. Ct. Sac. Div. May 18, 2005). The Court found that “[t]he scientific and technical difficulties of obtaining and analyzing storm water discharge samples that accurately reflect the

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<sup>21</sup> Opp'n. Mot. For Order Enforcing Writ of Mandate at 1, S.F. Baykeeper et al, v. State Water Res. Control Bd. No. 99CS01929 (Cal. Super. Ct. Dec. 17, 2004).

<sup>22</sup> Draft CGP at 61.

<sup>23</sup> Id.

<sup>24</sup> Respt.'s Memo. of Points and Auths. in Support of Mot. for Discharge of Writ at 4-5, n.6, S.F. Baykeeper et al. v. State Water Res. Control Board, No. 99-CS-01929. (Cal. Super. Ct. Sac. Div. Dec. 9, 2004).

<sup>25</sup> Respt.'s Opp'n to Petitioners' Request for Judicial Notice at 6, S.F. Baykeeper et al. v. State Water Res. Control Board, No. 99-CS-01929. (Cal. Super. Ct. Sac. Div.).

impact of the discharges on water quality of receiving waters would . . . preclude use of the sampling results as numeric water quality-based effluent limitations.” Id.

The comprehensive monitoring proposed in the Preliminary Draft is not required by law; the Board previously found that, given the inherent variability in stormwater quality, such sampling is unlikely to generate useful information or commensurate water quality benefits. Therefore, the monitoring proposed is unlikely to be a productive use of resources, which would more appropriately be applied to ensuring the integrity of BMPs.

**E. The Board Should Focus On Improving The Implementation Of Best Management Practices Through Design Standards And Maintenance Obligations.**

We agree with the Storm Water Panel’s indication that significant improvements can be made in designing and implementing BMPs. As discussed above, many regulated parties in California have demonstrated that it is possible to design, implement, and consistently maintain sophisticated BMPs that yield impressive results in terms of improving water quality. These leaders have proven that the iterative BMP approach can work. Rather than embarking on a costly effort to develop numeric effluent limits with highly uncertain benefits, the Board should focus its efforts on the establishment of design standards and maintenance obligations that will bring all regulated parties up to the high standards achieved by others. That approach offers the greatest prospects for a cost-effective path towards continuing improvement of stormwater quality at construction sites.

**F. The Potential Impact of Construction on Downstream Channel Erosion and Scour Is a Nonpoint Source Issue that Is Ill-Suited for the CGP Program, and Is Outside Its Scope.**

In enacting the federal Clean Water Act, “Congress made a clear and precise distinction between point sources, which would be subject to direct Federal regulation [under NPDES permits], and nonpoint sources, control of which was *specifically reserved* to State and local government through the section 208 process.” (D.C. Cir. 1982.) Nat. Wildlife Federation v. Gorsuch 693 F.2d 156, 176. The 208 process to which the D.C. Circuit referred is the Clean Water Act statute authorizing areawide waste management plans, which were the precursors to Section 319 nonpoint source plans, authorized under 1987 amendments to the Act. EPA long ago identified “downstream bank erosion due to decreased sediment load or variable water releases” as nonpoint source pollution not subject to the NPDES program. Id. at 177. The hydromodification standards of the Preliminary Draft, which attempt to regulate under NPDES downstream bank erosion, are contrary to the “clear and precise distinction” made by Congress between point source discharges and nonpoint source pollution.

In Nat. Wildlife Federation v. Gorsuch, the court upheld EPA’s interpretation of the Clean Water Act that downstream erosion of a stream channel caused by water releases from an upstream dam was not a condition regulated under NPDES. Id. at 156. Rather, the U.S. Court of Appeals for the D.C. Circuit concluded that:

[D]ownstream bank erosion due to decreased sediment load or variable water releases, saltwater intrusion due to reduced flow,

and pollution of the reservoir itself would be nonpoint source pollution.

(Emphasis added.)

The upstream actions that resulted in “scouring the downstream channel” was not the addition of a pollutant to a navigable water and was not subject to a NPDES permit, but may be regulated under Clean Water Act Section 208 plans. *Id.* at 177. In addition, the court agreed with EPA’s position that nonpoint source was defined by Section 304(f)(2)(F) of the Clean Water Act to include “changes in the movement, flow, or circulation of any navigable waters or ground waters, including changes caused by the construction of dams, levees, channels, causeways, or flow diversion facilities.” *Id.* Section 304(f)(2)(F) is persuasive authority that, even where the in-stream changes in the flow regime (i.e., hydromodification) arise from upstream construction, the effect is a nonpoint source matter – not one for the NPDES program.

Whether flows different from pre-development conditions causing downstream erosion constitute the “discharge of pollutants” under the Clean Water Act was at issue in *Missouri ex rel. Ashcroft v. Department of Army* (8<sup>th</sup> Cir. 1982) 672 F.2d 1297. In that case, the channel capacity of a river was overwhelmed by releases from a dam, resulting in soil erosion of the streambanks below the dam. *Missouri, supra*, 672 F.2d at 1299-1300, 1303-04. The court held that “soil erosion caused below the dam . . . did not constitute the ‘addition’ of a pollutant from a ‘point source.’” This result recognizes, as does EPA, that water *per se*, regardless of what constituents are in it, is not within the Act’s definition of “pollutant.” “EPA does not consider flow to be a pollutant . . .” 65 Fed. Reg. 43586, 43619 (July 13, 2000). Streambank erosion and hydromodification are phenomena that occur as a result of the erosive forces of water *per se*.

In addition, Congress addressed the need to manage downstream erosion when in 1987 it created a program for certain pollution issues not covered by NPDES because they are not the addition of pollutants from a point source.<sup>26</sup> The congressional debates regarding Section 319 indicate that “eroding streambanks” were understood to be part of the new Section 319 program, as opposed to the preexisting NPDES program. 132 Cong. Rec. 31962 (Oct. 15, 1986). During the debates, Congressman Hammerschmidt referred to the \$400 million that Congress made available to the states under Section 319, and stated, “with \$400 million we aren’t going to control all erosion. We are going to give the States the incentive to begin to manage nonpoint source pollution from all sources, including eroding streambanks and sheet runoff from fields.” *Id.*

Although the March 2 Preliminary Draft does not recognize the distinction between point and nonpoint sources, the State’s Nonpoint Source Program Strategy and Implementation Plan, 1998-2013 (“PROSIP”) does, classifying hydromodification, and streambank and shoreline erosion, as nonpoint source. PROSIP was designed to “provid[e] a single unified, coordinated statewide approach to dealing with NPS pollution.”<sup>27</sup> The Plan clearly treats hydromodification

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<sup>26</sup> See 33 U.S.C. § 1329; CWA § 319 (Nonpoint source management programs).

<sup>27</sup> The State’s Nonpoint Source Program Strategy and Implementation Plan, 1998-2013 (“PROSIP”) at iv. Found at: <http://www.coastal.ca.gov/nps/prosipv1.pdf> (stating that the



as a nonpoint source, identifying hydromodification as one of six NPS categories.<sup>28</sup> In addition, the PROSIP explains that the inclusion of a hydromodification management measure in the Plan for streambank and shoreline erosion, “does not imply that all shoreline and streambank erosion must be controlled; the measure applies to eroding shorelines and streambanks that constitute an NPS problem in surface waters.”<sup>29</sup> In addition, even one of the State’s Basin Plans defines “channel erosion” as a nonpoint source and states explicitly that “by definition, nonpoint sources . . . are exempt from the federal NPDES permitting program.”<sup>30</sup>

In sum, there is a “clear and precise distinction” between point source sediment discharges into waters of the United States and nonpoint source in-stream erosion. This distinction was crafted by Congress when it designed the nonpoint source and area-wide programs (Sections 319 and 208), and has been recognized by the courts. Therefore, the hydromodification standards of the Preliminary Draft, which propose to regulate under NPDES downstream, nonpoint source streambank erosion and nonpoint source changes to the flow regime, are not appropriate for a command and control permit like the CGP. Such matters should be left to the local jurisdictions which can address stream channel modification under the California Environmental Quality Act, local land use law, and regional public storm drain programs.

**G. A Formal Public Comment Period, and Potential Hearings, on Stormwater Plans Is Unnecessary, Is Not Required by Law, and Has the Potential to Disrupt Orderly Land Use Planning.**

The current permitting process allows a CGP applicant to receive a permit after the State Board has processed the application and Notice of Intent.<sup>31</sup> The applicant subsequently develops a Stormwater Pollution Protection Plan (“SWPPP”) before construction begins. SWPPPs are publicly available under Section 308(b) of the Clean Water Act (“CWA”).<sup>32</sup> The Water Boards may impose additional SWPPP requirements or revisions and commence enforcement

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Program Plan adopts 61 management measures “as goals for six NPS categories (agriculture, forestry, urban areas, marinas and recreational boating, hydromodification, and wetlands/riparian areas/vegetated treatment systems”).

<sup>28</sup> Id.

<sup>29</sup> Id. at 148.

<sup>30</sup> See The Water Quality Control Plan for the San Diego Basin, at 4-66. Found at: <http://www.swrcb.ca.gov/rwqcb9/programs/Chapter%204%20Implementation.pdf>

<sup>31</sup> California State Water Resources Control Board, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction Activity (General Permit) Water Quality Order 99-08-DWQ (Aug. 27, 2004) (“Aug. 2004 General Permit Order”), Checklist for Submitting a Notice of Intent, *available at* <http://www.waterboards.ca.gov/stormwtr/docs/finalconstpermit.pdf> (last visited May 1, 2007).

<sup>32</sup> 33 U.S.C. § 1318(b).

activities.<sup>33</sup> In addition, members of the public may enforce SWPPP requirements by initiating informal discussions with dischargers, requesting State Board review of a Regional Board's action or failure to act, or bringing a citizen suit under section 505 of the Clean Water Act.<sup>34</sup>

The existing permit program has worked efficiently and effectively, allowing for timely construction planning while ensuring multiple avenues for public participation and enforcement. Securing coverage under the CGP typically is one of the last steps before project groundbreaking, and comes only after all land use entitlements, including clearance under the California Environmental Quality Act, have been secured. By then, the project design and configuration is set, and the Regional Boards have been provided with an opportunity during the entitlement phase to comment on any Environmental Impact Report for the project.

The March 2 Preliminary Draft would modify the CGP coverage process significantly, and require an applicant to submit a completed Stormwater Pollution Prevention Plan ("SWPPP") with the permit application and Notice of Intent. The Preliminary Draft would direct the Regional Boards to publicly post the SWPPP and commence a formal 90-day public review period and subsequent ambiguous hearing and approval process:

Based upon the public comments and Regional Water Board review of the permit application submittal, Regional Water Boards may take actions that include, but are not limited to: rescinding permit coverage, requiring public hearings or formal Regional Water Board permit approvals, requesting discharges to revise their SWPPP and Monitoring Programs within a specified time period, or take no action.<sup>35</sup>

We are concerned that the Preliminary Draft's requirements for a formal 90-day public review process and subsequent, potential SWPPP hearings, risk upsetting long-followed land use and CEQA practices, by potentially subjecting projects to scrutiny on project design elements (e.g. building footprint, area coverage, landscape and hardscape elements) well after those decisions lawfully have been made, and well after the potential for Regional Board comment already has been provided (as a Responsible Agency under CEQA). These concerns are heightened because of the proposed hydromodification standards, which clearly are intended to affect and influence, whether directly or indirectly, project design elements. Further, the

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<sup>33</sup> Aug. 2004 General Permit Order, Waste Discharge Requirements (WDRS) for Discharges of Storm Water Runoff Associated With Construction Activity at 7, found at: <http://www.waterboards.ca.gov/stormwtr/docs/finalconstpermit.pdf> (last accessed May 1, 2007).

<sup>34</sup> See 33 U.S.C. § 1365(b); 23 Cal. Water Code § 13320(a); 23 C.C.R. § 2050(a); California State Water Resources Control Board, Instructions for Filing Water Quality Petitions, found at [http://www.swrcb.ca.gov/wqpetitions/wqpetition\\_instr.html](http://www.swrcb.ca.gov/wqpetitions/wqpetition_instr.html) (last accessed May 1, 2007)

<sup>35</sup> California State Water Board, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities (Mar. 2, 2007) ("Preliminary Draft"), at Section XIII.2., found at [http://www.waterboards.ca.gov/stormwtr/docs/constpermits/order\\_permitattach.pdf](http://www.waterboards.ca.gov/stormwtr/docs/constpermits/order_permitattach.pdf) (last accessed May 2, 2007).

Board's procedural proposals may result in significant, unnecessary delays in the construction of private and public projects throughout the State, without commensurate benefit to water quality. The additional bureaucratic layer invites increased red tape and creates substantial uncertainties in project planning, but fails to offer any apparent benefit.

We support an open permitting process and do not oppose the Preliminary Draft's provisions for submitting SWPPPs to Regional Boards, or mandating the public posting of SWPPPs. Indeed, web site posting of SWPPPs will provide an immediate, timely opportunity for members of the public to access and review the SWPPPs. Implementing a program of formal waiting periods and subsequent SWPPP hearings will, however, unreasonably increase the permitting process from approximately a week to a matter of months or more. In light of the thousands of CGP applications submitted each year, we are concerned that existing administrative resources are insufficient to accommodate a 90-day comment period and the number of hearings that may ensue; we do not believe that these additional administrative burdens are warranted, as these agency resources could be applied much more productively to working with dischargers and interested parties through currently available mechanisms to ensure more uniform achievement of best field practices at construction sites. Finally, the March 2 permit documents appear to acknowledge that the proposed overhaul of CGP process is not required by the Clean Water Act—a point with which we concur—raising the important question of how these dramatic process changes, which largely seem counterproductive, and which do not seem connected to any reasonable expectation of water quality improvement, are valid and proper under state law.

### **III. CONCLUSION**

We appreciate the Board's consideration of our comments, and we look forward to the opportunity to further engage in the public dialogue on the CGP. In particular, we are available to work with the Board with respect to enhancements to sediment and erosion control design standards and maintenance obligations, so that best practices are more uniformly achieved and enforceable. We believe that the Board's energies would be well applied in such a direction, and that such enhancements provide great promise in effecting further water quality progress on a program that already has achieved laudable pollution reduction, and is marked by many instances of exemplary performance. Please do not hesitate to contact the undersigned at (916) 444-6670 should the Board have any questions whatsoever, or if we can be of any further assistance.

Sincerely,



Valerie Nera  
Policy Advocate  
California Chamber of Commerce