



**Ventura Countywide  
Stormwater Quality  
Management Program**

Public Comment (11/16/10 Wrkshp)  
Policy for Toxicity Assessmnt  
Deadline: 1/21/11 by 12 noon

Participating Agencies

January 21, 2011

Camarillo

Via Electronic Mail

County of Ventura

Charles R. Hoppin, Chairman and Members  
State Water Resources Control Board  
c/o Jeanine Townsend  
Clerk to the Board

Fillmore

State Water Resources Control Board  
1001 I Street, Sacramento, CA 95814  
[commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

Moorpark

**Subject: Comment Letter - Policy for Toxicity Assessment and Control**

Ojai

Dear Chairman Hoppin and Members:

Oxnard

The Ventura Countywide Stormwater Quality Management Program (Program) would like to take this opportunity to provide comments regarding the Draft Policy for Toxicity Assessment and Control dated October, 2010 (Draft Policy). The Draft Policy is intended to supersede the toxicity control provisions of the Policy for the Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) and all toxicity testing provisions in Regional Water Quality Control Plans (Basin Plans). As currently drafted, the Draft Policy will apply to discharges from municipal separate storm sewer systems (MS4) regulated by Phase I and Phase II national pollutant discharge elimination system (NPDES) permits.

Port Hueneme

San Buenaventura

Santa Paula

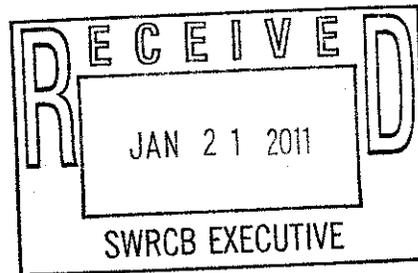
Simi Valley

The City has a strong interest in the Draft Policy for both its implications on the Ventura County MS4 NPDES permit and its use in TMDLs. The Program has been actively involved with the implementation of the Toxicity TMDL in the Calleguas Creek Watershed which is successfully reducing toxic conditions in the watershed. We are providing comments on the Draft Policy to help facilitate the work that has already been done in the watershed.

Thousand Oaks

Ventura County  
Watershed Protection  
District

As an active participant in the Calleguas Creek Watershed TMDL implementation management committee, the Program also supports the comments submitted by the management committee and other watershed dischargers and has developed these comments to reflect concerns specific to MS4 dischargers and not repeat the technical arguments presented in those letters.



The Program supports the goal of the SWRCB to develop a consistent statewide policy for toxicity that adequately protects the receiving environment, including declaring samples toxic when they are indeed toxic and non-toxic when they are not toxic. However, we feel that the Draft Policy as written has significant technical and policy flaws that prevent it from achieving these goals. We also feel that the Draft Policy should recognize that identification of the pollutants causing toxicity can be challenging and resource intensive. Thus, we believe the fundamental principal that the State should consider in establishing a toxicity policy is to address the discharges that cause persistent toxicity. Single exceedances of toxicity objectives should not be used to direct our limited resources as is currently done by the Draft Policy.

In addition to this fundamental principal, we have identified several specific concerns with the Draft Policy as outlined below.

1. The Draft Policy does not adequately consider the implications of setting numeric objectives for toxicity on stormwater dischargers.
2. The Draft Policy creates a fundamental shift in the current approach to the regulation of stormwater as the SIP does not apply to stormwater discharges<sup>1</sup>. The Draft Policy clearly brings stormwater into the SIP and with its multiple cross references to the wastewater implementation provisions may result in the application of numeric effluent limits to stormwater discharges.
3. The variable nature of stormwater runoff presents unique challenges to accurately characterizing water quality and potential receiving water impacts. This is especially true for toxicity monitoring where the science required to characterize stormwater toxicity is lacking and wastewater derived methods are not applicable. The Draft Policy does not adequately address these challenges.

Fundamentally we feel that the Draft Policy was developed to address wastewater toxicity concerns and stormwater specific issues have not been sufficiently addressed or evaluated. As a result, we feel that stormwater discharges should not be included in the Draft Policy until these issues are resolved. However, we recognize that the development of consistent toxicity monitoring provisions may be valuable for furthering the development of toxicity implementation procedures. As a result, we have identified an alternative approach to address the identified concerns with the Draft Policy as follows:

1. Replace the numeric objectives with a consistent statewide narrative objective.
2. Include an explicit statement that the intent of the policy is to only establish monitoring requirements for stormwater dischargers at this time.

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<sup>1</sup> As noted on Page 3, footnote 1 of the SIP, the SIP does not apply to the regulation of stormwater discharges.

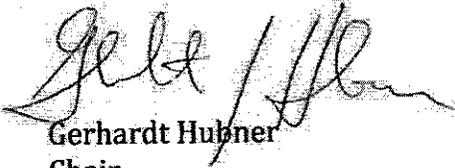
Charles R. Hoppin, Chairman and Members of SWRCB  
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3. Identify that stormwater specific implementation procedures will be evaluated during future revisions to the policy and wastewater implementation procedures outlined in the Draft Policy will not be used to implement the narrative toxicity objectives in the interim. The stormwater specific provisions will include the identification of action levels for guiding an iterative process for identification of the constituents causing persistent toxicity and implementation of control strategies to reduce the causes of persistent toxicity.

The attachment provides more detailed recommendations for changes to the Draft Policy. In addition, we support the comments and mark up of the Draft Policy submitted by CASQA.

We appreciate your consideration of our comments. If you have any questions about the comments, please contact Gerhardt Hubner at (805) 654-5051 or via email at [Gerhardt.Hubner@Ventura.org](mailto:Gerhardt.Hubner@Ventura.org)

Sincerely,



Gerhardt Hubner  
Chair

**Ventura Countywide Stormwater Quality Management Program  
Comments on the Draft Policy for Toxicity Assessment and Control**

**Numeric Objectives for Chronic Toxicity are Inappropriate and Problematic for Stormwater Dischargers**

As outlined in the CCW MOA letter, there are a number of reasons why numeric toxicity objectives are not necessary. In addition to the issues identified in that letter, we feel that there are a number of reasons why numeric objectives are problematic for stormwater discharges in particular.

The variable nature of stormwater runoff presents unique challenges with regard to accurately characterizing water quality and potential receiving water impacts. Stormwater discharges vary significantly in type, quantity and quality. Discharges are extremely dynamic and transient. Additionally, the sources of runoff and contaminants are diffuse and variable. These qualities are recognized in the Draft Staff Report and are key to the selection of alternatives of how to address stormwater discharges. These characteristics are significantly different from a continuous wastewater discharge for which most of the Draft Policy analysis was conducted.

When evaluating the type of objective to develop for the policy, the Draft Staff Report did not even consider the impact of selecting a numeric objective on dischargers other than wastewater dischargers. Under Issue 1C: Objective Type, the Draft Staff report repeatedly references the SIP, which is not applicable to stormwater dischargers, and NPDES wastewater permits and point source WDRs. MS4 dischargers are not discussed and the implications of a numeric objective for these types of discharges are not evaluated. The alternatives discussion identifies the potential issues with numeric objectives for wastewater dischargers, but not other types of discharges in determining which alternative to select. However numeric objectives will also have potentially significant impacts on agricultural and stormwater dischargers, 303(d) listing decisions, and TMDL development that make the use of a consistent narrative objective a more appropriate alternative.

Under Issue 1D, the Draft Staff Report determines that the application of numeric effluent limits is infeasible for a number of reasons, including the findings of the Blue Ribbon Panel report. However, the Draft Staff Report does not recognize that the same reasons that make the application of numeric effluent limits infeasible apply to the use of numeric objectives, especially for dischargers subject to toxicity TMDLs. In particular, the following statement on page 45 of the Draft Staff Report justifies the use of numeric objectives for toxicity. "Numeric toxicity objectives are an efficient regulatory tool when expressed as effluent limits because the measurement of compliance is clearly defined." The Draft Policy does not consider how clarity as to the measurement of compliance is defined when numeric effluent limits are not feasible or utilized, as is the case for non-wastewater discharges and 303(d) listings.

Although the Draft Policy does not require numeric effluent limitations for stormwater dischargers, by establishing a statewide numeric toxicity objective, the Draft Policy is ultimately making stormwater dischargers potentially subject to numeric limits through the 303(d) listing and TMDL development process. The ability of stormwater dischargers to meet the proposed numeric objectives in a cost-effective manner consistent with the Blue Ribbon Panel report remains in question and is not addressed or evaluated in the Draft Staff Report.

Developing a numeric toxicity objective removes the flexibility to appropriately address and control toxicity in stormwater discharges. However, the use of a narrative objective, combined with action levels that trigger an iterative implementation approach for identifying and controlling toxicity, would still achieve the goals of the Draft Policy and address the identified concerns with a numeric objective. As a result, we request that the use of narrative objectives be more fully evaluated and identified as the preferred alternative.

#### **Requested Changes:**

Replace the numeric objectives in the Draft Policy with a clear narrative objective.

#### **Policy Represents a Fundamental Shift in the Regulation of Stormwater Discharges**

The Draft Policy creates a fundamental shift in the current approach to the regulation of stormwater as the SIP does not apply to stormwater discharges<sup>2</sup>. The Draft Policy does not provide a rationale or justification for this significant policy change and contains a number of inconsistencies and references that may result in the application of numeric effluent limits to stormwater discharges. Our comments on these inconsistencies are provided below.

#### ***The Intent of the Applicability of the Draft Policy to Stormwater is Unclear***

The Draft Policy and the Staff Report for the Draft Policy provide numerous contradictory statements regarding the applicability of the Draft Policy to discharges of stormwater. These contradictions center on the intent to require *monitoring* of stormwater discharges for toxicity or *compliance* with the numeric objective. This is a key distinction as monitoring requirements involve data collection that could inform management actions whereas compliance with the objective subjects stormwater dischargers to mandatory minimum penalties (MMPs) and third party law suits, despite best efforts (MEP) to control toxicity. The Blue Ribbon Panel, as convened by the State Board, in their final report noted that the development of enforceable numeric effluent

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<sup>2</sup> As noted on Page 3, footnote 1 of the SIP, the SIP does not apply to the regulation of stormwater discharges.

limits were not feasible<sup>3</sup> and the inconsistencies in the Draft Policy should not have this unintended result.

The Draft Policy is unclear as to its applicability to stormwater in the following ways:

### **Contradiction in the Establishment of Numeric Effluent Limits for Stormwater Dischargers**

The Staff Report examines three alternatives for the requirements for stormwater in Issue 1D. The alternatives considered are:

Alternative 1. No Action

Alternative 2. Require NPDES permits for MS4 and individual and industrial storm water dischargers to include numeric effluent limitations for chronic toxicity.

Alternative 3. Require MS4 and individual and industrial storm water dischargers to include chronic toxicity monitoring.

The Staff Report selects chronic toxicity monitoring requirements (Alternative 3) over establishing numeric effluent limits (Alternative 2) as the preferred alternative as it "...provides a feasible alternative to numeric effluent limitations and increases protections for aquatic life beneficial uses." Yet the intent of the monitoring alternative is unclear as it also states it does not preclude establishment of numeric effluent limits:

*"Nevertheless, this option will not preclude the Water Boards from establishing numeric effluent limits for toxicity in Phase I and Phase II MS4 permits, and individual industrial storm water permits if is deemed appropriate."*

Futhermore, the Draft Policy states that it is not the Policy's intent to require establishment of numeric effluent limits for toxicity in permits for Phase I and Phase II MS4 dischargers and individual and industrial storm water dischargers. The Staff Report goes to great length to acknowledge the difficulty in establishing numeric effluent limits for stormwater and even notes that efforts to address numeric limits would likely be ineffective. However, the Draft Policy at page 13 grants discretion to Regional Board's to apply numeric effluent limits in permits. This discretion is in contradiction with the recommended alternative (i.e. alternative 2 - requirement of chronic toxicity monitoring) in the Staff Report.

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<sup>3</sup> Storm Water Panel recommendations for the California SWRCB regarding "The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Constructions Activities, June 16, 2006.

## **Contradiction in the State Water Board's Goals for the Project in the Staff Report**

The project description of the Staff Report for the Draft Policy states:

*"The State Water Board's goals for this project are to have Regional Water Boards convert the Policy's WET objectives into effluent limitations in order to: protect aquatic life beneficial uses; provide regulatory consistency; provide a basis for equitable enforcement; and fulfill the requirements of State Water Board Resolution No. 2005-0019."*

As noted above, the Staff Report selects the chronic toxicity monitoring requirements over establishment of numeric effluent limits as the recommended alternative. However, the stated goal of the project, to convert the objectives into effluent limitations, contradicts the recommended approach for stormwater.

### **Recommended Changes:**

Include an explicit statement that the intent of the policy is to only establish monitoring requirements for stormwater dischargers at this time.

***Allowing State Board and/or Regional Boards to Impose More Stringent Requirements without Criteria to Justify Such Requirements Contradicts the Establishment of Statewide Objectives to Protect Beneficial Uses and/or the Statewide Consistency of Objectives for Toxicity***

The Draft Policy will supersede the SIP. Yet, the Policy also states that the State Water Resources Control Board or Regional Water Quality Control Boards may impose more stringent requirements than those contained in the Policy, where appropriate. These two statements appear contradictory and should be clarified.

By superseding the SIP, the Policy establishes water quality objectives that protect the aquatic life beneficial uses of waters of the United States and surface waters of the State. By superseding conflicting Basin Plan provisions, the Policy ensures statewide consistency. If more stringent requirements are imposed, then those provisions would be in conflict with the Draft Policy, resulting in a conclusion that either (1) the Draft Policy itself fails to establish water quality objectives to protect beneficial uses or (2) statewide consistency is not appropriate and it is therefore not necessary for the Policy to supersede conflicting Basin Plan provisions.

### **Recommended Changes:**

Modify the Draft Policy language to clarify that the Policy will supersede existing conflicting Basin Plan provisions and remove language allowing discretion by State Water Resources Control Board and/or Regional Water Quality Control Boards to establish more stringent limits.

***Draft Policy does not adequately address the implementation of the policy for stormwater dischargers***

The Draft Policy is structured to prescribe implementation procedures separately for non-storm water NPDES permittees and point-source waste discharge requirement (WDR) enrollees (Part A), storm water dischargers (Part B), and dischargers regulated exclusively under the Porter-Cologne Water Quality Control Act (Part C).

However, the Draft Policy cross-references the traditional point source (i.e., wastewater dischargers) provisions (Part A) in several instances in the stormwater provision (Part B). Of particular concern are the multiple cross-references to the compliance determination section for wastewater dischargers<sup>4,5</sup>.

The Draft Policy as noted previously gives considerable discretion to the Regional Boards to either apply the compliance provisions that have been developed specifically for wastewater dischargers. Such an approach does not adequately consider the inherent differences between wastewater and stormwater discharges. The Program is concerned that the application of a compliance framework designed for wastewater dischargers will lead to the inappropriate and/or inconsistent regulation of stormwater. As a result, a separate implementation approach for stormwater needs to be developed to avoid wastewater provisions being applied to stormwater discharges.

Given the technical challenges with addressing toxicity in stormwater (as highlighted in the next section), it is premature to define implementation procedures for stormwater dischargers. We feel that specific provisions can only be developed after these technical challenges have been addressed. As a result, we feel that the Draft Policy should be modified to clarify the intent to develop stormwater specific provisions and avoid application of the wastewater provisions in the interim. Additionally, we feel that the policy should recognize that the implementation procedures and compliance determinations will be based on conducting toxicity monitoring and using the data to inform stormwater management actions in an iterative process.

**Recommended Changes:**

Modify the Draft Policy to include language that explicitly states that stormwater specific implementation procedures will be evaluated during future revisions to the policy after technical issues surrounding toxicity monitoring and evaluation for

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<sup>4</sup> Part III, Section B-1 states: *The applicable Water Board also has the discretion to apply the provisions established in Part III, Section A-7, or other remediation efforts.*

<sup>5</sup> Part III, Section B-3 states: *Identification or confirmation of the most sensitive test species to be used for storm water monitoring, in accordance with the provisions established in Part III, Section A-1, shall also be included as a required component of a SWMP in addition to appropriate remediation measures such as those established in Part III, Section A-7.*

stormwater discharges have been resolved. Note that the stormwater specific provisions will include the identification of action levels for guiding an iterative process for identification of the constituents causing persistent toxicity and implementation of control strategies to reduce the causes of persistent toxicity. Clarify that wastewater implementation procedures outlined in the Draft Policy will not be used to implement the narrative toxicity objectives in the interim.

Additionally, modify Part III, Section B, in the following ways:

1. In Section B.1., delete all text after the first sentence.
2. In Section B.2., delete the following sentence: "The applicable Water Board also has the discretion to apply the provisions established in Part III, Section A-7, or other remediation measures as appropriate."
3. In Section B.3., delete the following text from the last sentence: "in addition to appropriate remediation measures, such as those established in Part III, Section A-7."
4. In Section B.4., fix the citation. There is no Part II, Section B-3 of the policy.

### **Technical Challenges with Applying the Draft Policy to Stormwater**

As discussed above, we feel that a number of technical issues will need to be addressed before the Draft Policy can include stormwater provisions other than monitoring requirements. A summary of these technical issues is included here.

#### **Toxicity Test Methods**

The variable nature of stormwater runoff presents unique challenges with regard to accurately characterizing water quality and potential receiving water impacts. The standard EPA whole effluent toxicity (WET) test methods were developed for continuous point source wastewater discharges and do not take into account the specific issues pertaining to stormwater. The validity of the WET method for use on stormwater samples has never been evaluated. Indeed, the existing EPA WET methods (EPA 2002a-c and EPA 1995) were not designed to assess the extremely dynamic and transient nature of stormwater runoff. Technical issues include continuously exposing test organisms to samples for durations longer than actually occurs during a storm event (i.e., using a chronic toxicity test to characterize a short-term event that typically lasts no more than 24 hours). Thus, the test data often are an overestimate of toxicity because the exposure duration typically does not correspond to the actual duration of the stormwater pulse.

#### **Accelerated Monitoring - Wet Weather**

Part B of the Draft Policy requires stormwater dischargers to conduct both dry weather and storm event monitoring. Through the cross-reference to Part A, stormwater dischargers would be required to conduct accelerated monitoring<sup>6</sup> if a

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<sup>6</sup> At a minimum, six, five concentration chronic WET tests, conducted at approximately 2 week-intervals, over a twelve week period

test results in a "fail." Storm events are episodic in nature and represent acute (not chronic) conditions, making the accelerated monitoring prescribed in the Draft Policy not appropriate for storm event monitoring. The inapplicability of accelerated monitoring for storm events demonstrates the inherent difference between the regulation of stormwater and wastewater and the need to develop stormwater-specific compliance determination provisions.

### **Recommendation Summary**

In summary, we feel that the Draft Policy has potentially significant implications for the regulation of toxicity in stormwater discharges and we feel that modifications are necessary to address the concerns identified in our comment letter. We request that the Draft Policy be modified to:

1. Replace the numeric objectives with a consistent statewide narrative objective that supersedes the existing toxicity objectives in Basin Plans.
2. Include an explicit statement that the intent of the policy is to only establish monitoring requirements for stormwater dischargers at this time.
3. Identify that stormwater specific implementation procedures will be evaluated during future revisions to the policy and wastewater implementation procedures outlined in the Draft Policy will not be used to implement the narrative toxicity objectives in the interim. The stormwater specific provisions will include the identification of action levels for guiding an iterative process for identification of the constituents causing persistent toxicity and implementation of control strategies to reduce the causes of persistent toxicity.
4. Remove the discretion for Regional and State Boards to apply numeric effluent limits to stormwater dischargers.