

THE CITY OF SAN DIEGO

July 25, 2007

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Phil Hammer San Diego Regional Water Quality Control Board 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4340

Subject: Total Maximum Daily Loads for Indicator Bacteria, Project 1 – Beaches and Creeks in the San Diego Region

Dear Phil:

The City of San Diego appreciates the opportunity to comment on this project. The City has been an active participant in this project since the first public workshop in the winter of 2004. Please consider the comments in this letter to be in addition to the comments made by the City on this Total Maximum Daily Load (TMDL) project and the Chollas Creek Dissolved Metals TMDL in letters dated May 29, 2007, April 9, 2007, September 25, 2006, September 18, 2006, February 3, 2006, and April 16, 2004.

The City wishes to express our support for the Regional Board staff commitment to develop a Basin Plan amendment to address loading from natural bacteria sources. The City has great interest in this amendment and plans to actively participant in its development. Additionally, the opportunity for all watersheds to prepare an integrated approach addressing all pollutants in the form of a comprehensive compliance schedule is greatly appreciated.

#### **Reasonably Foreseeable Means of Compliance**

The City continues to request that the Regional Board explicitly acknowledge that treatment and/or diversion (e.g., infiltration) of storm water will be required in order to produce storm water discharges with zero indicator bacteria as required by the final Wasteload Allocations. Unlike the Chollas Creek Dissolved Metals TMDL which acknowledged this reasonably foreseeable means of compliance, the staff response for this TMDL (page S-201) states that in some cases structural BMPs may not be necessary. Does this response apply only to discharges which have no anthropogenic-related bacteria sources in the drainage area? Analysis of water quality samples collected in the city reveal that 79% of the samples contain detectable levels of indicator bacteria (DNA analysis is required to determine whether the source of this bacteria is anthropogenic). Detection limits vary, but it is reasonable to assume that some of the remaining 21% of samples contain indicator bacteria in excess of the zero Wasteload Allocation.

Please describe the empirical basis for the statement on page R-67 of the Environmental Analysis



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which describes how structural controls may not be required for residential areas (i.e., is there an example of how a discharger has achieved a zero Wasteload Allocation for indicator bacteria in dry and wet weather with non-structural controls?).

How would the Regional Board staff expect dischargers to show compliance with the zero Wasteload Allocation given that the detection limit of standard laboratory analytical procedures are greater than zero?

#### **Compliance Schedule**

The June 25, 2007 draft technical report modified the Final Dry Weather Fecal Coliform and Enterococcus compliance schedule. This change is inconsistent with the previous Regional Board staff position which was based on an acknowledgement that, while it is feasible for dischargers to comply with final Wasteload Allocations within 17 years, it is infeasible for dischargers to comply with these final Wasteload Allocations within 10 years. Please describe the rationale for the change, anticipated impacts to dischargers, and feasibility of compliance.

### **Design Storm**

The City continues to request the Regional Board provide a design storm or an allowable exceedence frequency. Regional Board staff has declined to do so, indicating that providing such a number is not required by CEQA. This response misses the mark in that the issue here is not necessarily CEQA compliance but needed guidance on how large to build treatment and diversion facilities. For example, on page R-76 of the Environmental Analysis, treatment systems in Dana Point and Encinitas are described, including their costs. Based on the capacities noted (1,000 gallons per minute and 150 gallons per minute) these facilities appear to have been designed only for dry weather. Please describe whether these facilities (assuming they operate correctly) would by themselves result in compliance with the TMDL in terms of size and effectiveness on the downstream beach. If they wouldn't, please describe a facility of a size and capacity comparable to that which would be needed to comply with the proposed TMDL. Without guidance on this issue, it is impossible for dischargers to know with certainty how to comply with the TMDL. It is not reasonable to expect dischargers to be able to design or build treatment or infiltration facilities with enough capacity to comply with a final zero Wasteload Allocation during a storm of infinite size.

Page S-162 of the Regional Board's responses to comments states that "[d]esignating a design storm criteria for structural BMPs in the NPDES requirements to implement these TMDLs is reasonable". Page S-120 indicates that the storm water permit may not be amended to incorporate the TMDL until it is renewed. The last storm water permit, Order 2001-01, was effective for almost six years before it was renewed. Guidance on this issue is needed much sooner in order to comply with the 10-year interim milestones in the TMDL.

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### **Best Management Practices (BMPs) Locations**

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The City continues to request that the Regional Board acknowledge its own requirement that Wasteload Allocations must be achieved prior to discharge of runoff from storm drain outfalls. The issue here is not whether the Regional Board's 401 certification program can permit BMPs in receiving waters but whether BMPs built in receiving waters can result in compliance with the TMDL. Regional Board staff deleted the term "prior to discharge[d]" from pages 13 and 122 of the Technical Report (note that comparable language was not deleted from page S-168 under the "Tributary Rule" discussion); however, this change does not appear to be of any effect given the July 23, 2007 correspondence from John Robertus to Chris Zirkle which reiterates the prohibition on using the loading capacity of receiving waters to convey or assimilate waste. Coupled with Regional Board staff's admission that, "generally speaking, where an outfall exists, receiving waters extend upstream to the outfall location" (page S-169), it is apparent that treatment and infiltration facilities need to be built above storm drain outfalls. Given the propensity for indicator bacteria to re-grow even in treated storm water effluent, storm water will either have to be infiltrated (in locations where slope stability is not an issue) or treated immediately above outfalls on land that is privately owned and currently developed.

Page S-163 indicates that in-stream structural BMPs may be reasonable provided that they are consistent with the beneficial uses of the creeks and the natural aquatic ecosystem characteristics of the creek. Please provide examples of BMPs that fit these criteria and also achieve the Wasteload Allocations of the TMDL.

Attached is a series of graphics which represent specific scenarios for Regional Board staff to determine, on a case by case basis, whether infiltration below storm drain outfalls would lead to compliance. When evaluating these graphics, please make the assumption that 1) these facilities could be permitted, 2) they are designed with adequate capacity, 3) they function properly, and 4) they reduce pollutant loading to the levels required by the TMDL. The graphics show specific storm drain outfall and propose infiltration facility sites in the 32<sup>nd</sup> Street Canyon in the City of San Diego. Would either the "Mouth of Canyon" or "Base of Canyon Wall" option result in compliance with the TMDL given that both options would result in using receiving waters to convey waste between the outfall and the infiltration facility? We encourage Regional Board staff to visit this site in the field prior to responding to this question and would be happy to facilitate a site visit if requested.

#### Enforcement

<u>The City continues to request that the Regional Board provide specificity on how compliance</u> <u>will be evaluated</u> in terms of the number of Notices of Violation and/or fines that dischargers would be subject to if compliance is not obtained (e.g., one fine per outfall per day, one fine per tributary, a certain dollar amount per gallon). Given the difficulty that dischargers will encounter in trying to comply with the TMDL, it is only fair to offer dischargers a basis for considering cost/benefit consequences during their implementation planning. July 25, 2007 Phil Hammer Page 4

### **Delisted Water Body Segments**

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The approved 2006 303(d) list removed beaches from the Miramar Reservoir and Scripps Hydraulic Areas for bacteria, with the exception of the Children's' Pool; however, they are still included in this TMDL. The Water Quality Control Plan for the San Diego Region 9 does not provide the ability to list pollutants by seasonal variations. The City of San Diego requests that these beaches be removed from this TMDL and be compliant with the State Water Board's Water Quality Control Policy for Addressing Impaired Waters, or provide an interpretation of State Water Board Resolution 2005-0050 which authorize the above referenced policy.

Additional comments follow on the attached pages. If you have any questions, please contact Ruth Kolb at (619) 525-8636 or at <u>rkolb@sandiego.gov</u>.

Sincerely,

Chris Zirkle

Deputy Director

CZ/ rk

Attachment: 1. Graphics 2. Additional Comments

Enclosures:

- 1. Correspondence dated May 29, 2007
- 2. Correspondence dated April 9, 2007
- 3. Correspondence dated September 25, 2006
- 4. Correspondence dated September 18, 2006

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- 5. Correspondence dated February 3, 2006
- 6. Correspondence dated April 16, 2004

cc: R.F. Haas, Deputy Chief Operating Officer, Public Works Mario Sierra, Director, General Services Ruth Kolb, Storm Water Specialist, Storm Water Division File

# **32<sup>nd</sup> Street Canyon** Treatment/Infiltration Above Outfalls

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## 32<sup>nd</sup> Street Canyon Treatment/Infiltration at Canyon Mouth Option

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# 32<sup>nd</sup> Street Canyon Treatment/Infiltration at Base of Canyon Wall Option

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## 32<sup>nd</sup> Street Canyon Canyon Mouth Option Detail

 In this example, runoff is captured by a headwall and piped to a subsurface infiltration pit.

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- The gold area represents the footprint of the pit; located to avoid impacts to receiving waters and sewer lines.
- Water upstream of the headwall may not meet the WLAs



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## **32<sup>nd</sup> Street Canyon** Base of Canyon Wall Option Detail

In this example, runoff is intercepted at the base of the canyon wall, below the storm drain outfall but before it reaches the main channel in the canyon.

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 Water upstream of the headwall may not meet the WLAs.

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### ADDITIONAL COMMENTS

1. With regard to the discussion of where Wasteload Allocations need to be met (i.e., above or below outfalls, and the discussion of using receiving waters to convey or assimilate waste,) please clarify the graphics on page R-67 and R-70 of the Environmental Analyses. These graphics show, respectively, sandbags and treatment wetlands in what appear to be Waters of the State.

2. With regard to achieving the zero Wasteload Allocation in any size storm, is there data to suggest that the facilities shown on page R-67 or R-70 would lead to compliance with this TMDL?

3. With regard to the impacts of diverting dry weather flows on existing wetland vegetation, please provide the basis for the statements on pages R-32 and S-185 that impacted plants would likely be non-natives.

4. With regard to the contention on page S-185 that the elimination of dry weather flows can enhance future restoration opportunities, it is true that the removal of non-natives can facilitate enhanced growth of natives. However, if the diversion of water results in the elimination of hydrophytic non-natives, wouldn't the same diversion also reduce the area in which hydrophytic natives could thrive?

5. The City believes that achieving zero indicator bacteria at its beaches involves much more than eliminating indicator bacteria from its storm water discharges because of regrowth in receiving waters and because of bacteria which is generated at the beaches by birds and "dog beaches". Please address the reasonable foreseeability that dischargers will need to eliminate the wracklines upon which birds feed and excrete waste (along with the potential impacts to sensitive bird species and grunion) as well as the potential need for dischargers to prohibit dogs on beaches (along with the potential recreation impacts).

6. Pages S-180 and S-184 of the Regional Board's Responses to Comments critique the City's 2006 "Weston Report" by estimating the acreage required for treatment facilities based on the assumption that three-foot deep detention basins would be required upstream of the treatment works. The Weston Report uses as the basis for this three-foot depth the admittedly arbitrary criteria based on the need to obtain a dam permit to build deeper detention basins which would reduce the acreage required. However, it is the Regional Board's obligation under CEQA to disclose the reasonably foreseeable alternative means of compliance and the environmental impacts thereof, not the City's.

7. If the Regional Board finds the Weston Report to accurately represent a reasonably foreseeable means of compliance but for the three-foot detention basin depth (or with regard to the location/sizing of treatment facilities), the Regional Board should discuss an amended scenario and the environmental impacts thereof.

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8. Please describe how a bacteria loading at the "critical point" (modeled as being above the tidal prism, approximately one mile from the nearest beach in the San Diego River) is related to achieving receiving water standards at the beaches at the base of the river. This assumption is the foundation of the TMDL, the proposed Waste Load Allocations, and BMPs requirements.

9. The draft technical report states that the Enterococcus for the creeks is designed to protect the downstream beach. This scenario is commendable; however, it does not address the fact that Chollas Creek has no downstream beach. Usage at the mouth of Chollas Creek is restricted by the Department of Defense and entry into the area is not allowed due to national security reasons. Therefore, the City recommends that the Regional Board establish a different goal/requirement for the Chollas Creek watershed.

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