



California Regional Water Quality Control Board

Central Coast Region



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August 1, 2008

Mr. Cameron Benson
Creeks Restoration/Clean Water Manager
City of Santa Barbara
PO Box 1990
Santa Barbara, CA 93102-1990

Dear Mr. Benson

WATER BOARD STAFF COMMENTS ON THE CITY OF SANTA BARBARA'S MAY 2008 DRAFT STORM WATER MANAGEMENT PROGRAM

On June 2, 2008, the Central Coast Water Quality Control Board (Water Board) received the City of Santa Barbara's (City) Draft Storm Water Management Plan (SWMP). Water Board staff has reviewed the May 2008 draft SWMP and we find the City has been responsive to our communications regarding water quality issues. We also recognize the City's effort to provide greater context for the stormwater program and we believe the document is improved considerably by this additional information.

We have identified several improvements that the City must make for us to recommend approval of the SWMP. We present them here and encourage you to respond prior to the Water Board's final review and consideration of public comment. In addition to specific issues identified in the attached Draft Table of Required Revisions, we have one overarching concern with the SWMP, discussed below.

Effectiveness Assessment

MS4s are required to annually assess the appropriateness and effectiveness of their BMPs. You must include measurable goals in your SWMP that indicate the effectiveness of individual control measures (BMPs) and the SWMP as a whole (for measurable goal guidance see: <http://cfpub1.epa.gov/npdes/stormwater/measurablegoals/index.cfm>). The City's BMPs and/or measurable goals do not always have adequate measures of effectiveness to meet this requirement. Effectiveness assessment discussions in the SWMP are often excluded or do not provide appropriate detail to be evaluated effectively.

It is important to assess BMP and program effectiveness so that your program evolves and improves over time. MS4s must adequately address effectiveness assessment in their SWMPs by including the following components to establish measurements of effectiveness. MS4s must also report the results of effectiveness assessments annually.

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1. Assessment of program effectiveness in terms of achieving permit requirements and measurable goals.
2. Assessment of program effectiveness in terms of protecting and restoring water quality and beneficial uses.
3. Identification of quantifiable effectiveness measurements for each BMP, including measurements that link BMP implementation with improvement of water quality and beneficial use conditions.
4. Emphasis on assessment of BMPs specifically targeting primary pollutants of concern.
5. Incorporation of the effectiveness assessment process outlined in CASQA's *Municipal Stormwater Program Effectiveness Assessment Guide* (www.casqa.org).
6. Identification of a range of quantifiable effectiveness measurements that collectively address outcome levels 1-4, as defined in the *Municipal Stormwater Program Effectiveness Assessment Guide*, to be used during annual effectiveness assessments.
7. Identification of quantifiable effectiveness measurements that address outcome levels 5 and 6, as defined in the *Municipal Stormwater Program Effectiveness Assessment Guide*, to be used during long-term effectiveness assessments (e.g., every three to five years).
8. Identification of the steps that will be taken to revise the SWMP and optimize BMP effectiveness, when effectiveness assessments identify BMPs or programs that are ineffective or can be improved.

To the extent that these components are already included in your SWMP or are readily available for inclusion, you are expected to keep them in the SWMP or incorporate them. However, if you cannot develop each of the above components prior to approval of your SWMP, you must include a BMP for development and implementation of an Effectiveness Assessment Plan during the first implementation year. You will be expected to address each of the items identified above in the Effectiveness Assessment Plan. An example of the type of language you should include in the SWMP for such a BMP follows:

"An Effectiveness Assessment Plan will be developed during the first implementation year and used to conduct the effectiveness assessment included in the annual reports. The plan will describe the actions that will be taken to assess the effectiveness of the SWMP in meeting regulatory requirements and improving water quality and beneficial use conditions. The plan will address: identification of the processes to be used to conduct effectiveness assessments and improve BMP implementation; identification of quantifiable BMP and program effectiveness measurements; establishment of links between BMP implementation and improvement in water quality and beneficial use conditions; and assessment of BMP implementation in terms of regulatory compliance, changing awareness, changing behavior, pollutant load reductions, and runoff and receiving water quality."



Furthermore, we have included some comments regarding effectiveness assessment for specific BMPs in the attached Table of Required Revisions. We expect these comments to be addressed in the final SWMP to the extent practicable, with the understanding that a segment of the comments may best be addressed during the development of the Effectiveness Assessment Plan.

Specific Comments

We expect the City to make the modifications listed in the attached Draft Table of Required Revisions. Please address all revisions where appropriate.

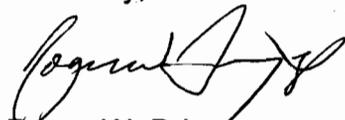
The following sequence describes an optimal process for final review of the SWMP:

Water Board staff will:

- 1) Post the attached draft Table of Required Changes on August 1, 2008 on the same webpage where the SWMP is posted for the 60-day public comment period.
- 2) At the close of the 60-day public comment period on August 23, 2008, Water Board staff will review comments received on the SWMP from the public, including comments from the City describing their changes to the SWMP.
- 3) Water Board staff will prepare a final Table of Required Changes and a final recommendation on the adequacy of the SWMP.
- 4) If we recommend approval of the SWMP, that approval will be conditioned on the City making the required changes by a date certain.

If you have questions regarding this matter, please contact **Brandon Sanderson** at (805) 549-3868, or bsanderson@waterboards.ca.gov.

Sincerely,



Roger W. Briggs
Executive Officer

cc: (by electronic mail)
Cameron Benson, City of Santa Barbara
Autumn Malanca, City of Santa Barbara
Kira Redmond, Santa Barbara Channelkeeper
Hilary Hauser, Heal the Ocean

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TABLE of REQUIRED REVISIONS
Santa Barbara Draft SWMP November 2008 – November 2013

Acronyms:

- BMP - Best Management Practice
- MG - Measurable Goal
- SWMP - Storm Water Management Plan
- SWPPP - Storm Water Pollution Prevention Plan
- POCs - Pollutants of Concern

Item Number	SWMP Section	Subject	Problem	Required Revisions
1	4.1.1	BMP Selection Community-Based Social Marketing	<p>The Public Education and Outreach BMPs rely heavily on information campaigns that utilize education and advertising to encourage behavior change. While these efforts can be effective in creating public awareness and in changing attitudes, numerous studies show that behavior change rarely occurs as a result of simply providing information.</p> <p>One particularly promising approach to public education is community-based social marketing. Community-based social marketing is based upon research in the social sciences that demonstrates that behavior change is most effectively achieved through initiatives delivered at the community level which focus on removing barriers to an activity while simultaneously enhancing the activities benefits. More information on community-based social marketing is available at: http://www.cbsm.com/. The techniques of community-based social marketing should be considered when developing and implementing your public education and outreach program.</p>	Include a BMP that commits to assessing community-based social marketing strategies, and incorporating them into your program where appropriate.

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2	4.3.1	Implementation Of Existing Programs	Many current programs and activities outlined in the narrative section that address illicit discharges (e.g., EHS business inspections) are not listed as BMPs. These programs should be included as BMPs for the City's IDDE program.	Include existing programs as BMPs in Table 4.3 with appropriate measurable goals and effectiveness assessments.
3	4.3.1.4	Improper Statement	<p>The SWMP states, "It is important to note that "illicit" does not mean "illegal." Not every illicit discharge is necessarily a prohibited illegal discharge. The following list identifies some of the most common sources of illicit Discharges in the City:"</p> <p>This statement may be misinterpreted for many of the illicit discharge sources listed are indeed prohibited and therefore illegal (e.g., Mobil cleaner wastewater, and improper paint and oil disposal).</p>	Please edit the statement appropriately so that it is not misinterpreted.
4	4.3.1.4	Sanitary Sewer Operations	Lacks appropriate BMPs to effectively prohibit illicit discharges to the MEP.	<p>Include a BMP to audit sanitary sewer operation and maintenance to ensure no spills.</p> <p>Track sanitary sewer overflows and implement corrective measures to eliminate discharges to the MS4.</p>
5	4.3.1.4	Hazardous Waste Cleanup	Lacks appropriate BMPs to effectively prohibit illicit discharges.	Include BMPs to ensure spill response measures and updated staff training to address discharges to the MS4.
6	Table 4.3 BMP 3.4	Water Distribution System	The Order No. for General Low Threat Discharge Permit is outdated.	Update Order No. 01-119 to Order No. R3-2006-0063 on page 48 and in Table 4.3.

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7	4.3.3 & 4.3.4	Effectiveness Measurement	Many of the MGs do not provide for effectiveness measurement of the IDDE program and BMPs as required in the annual report.	See above general statement on Effectiveness Measurement. The SWMP must provide effectiveness assessment. For example, the City could provide response cards to complainants that provide them with resolution to complaint, direct call number for continued discharge, and program evaluation survey. This can be used as effectiveness measurement for many of the BMPs in the IDDE program. The City must also provide periodic reviews of program implementation such as BMPs 3.2c, 3.3, 3.7, & 3.11.
8	4.4.1	Clarification	Statements throughout this section are inconsistent. Statements must be made clear to include both erosion and sediment controls. For example, section 4.4.1.2 states, " <u>Sediment</u> control BMPs and other good housekeeping practices..." and section 4.4.1.5 "Inspection and Enforcement of <u>Erosion</u> Control BMPs", " <u>Construction</u> measures to be onsite..." (Underlines added for clarification).	Edit sections accordingly to include both erosion and sediment control language and for consistency.
9	4.4.1.5	Inspection Checklist	This section does not clearly state if an inspection checklist has been developed to assist inspectors on identifying correct implementation and maintenance of water quality control measures (including erosion, sediment, and non-storm water controls).	Include a BMP or MG that provides for the development of an inspection checklist. If already developed please add to BMPs and provide copy of checklist as an attachment to the SWMP.
10	BMPs 4.3	Inspection Tracking	Water Board staff requires that developer and	Include BMPs or MGs to track and

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	and 4.5	And Enforcement	contractor firms be tracked throughout City construction projects to ensure compliance with water quality regulations regardless of individual construction site activities. Non-compliance identification must be followed-up with inspections and elevated enforcement for construction sites with same development and/or contractor firms.	enforce against individual development and/or contractor firms that are identified as repeat offenders.
11	4.5	Riparian And Wetland Setbacks	Many of the Land Use Policies provide 25-foot minimum setbacks for protection of creeks from storm water pollutants.	As stated in our February 15 letter, the City must commit to protecting all riparian areas, wetlands, and their buffer zones by establishing a minimum of 30-foot setbacks for riparian areas and wetlands. The City must establish more substantial setbacks where necessary, based on habitat degradation, water quality, and land management practices. Include a BMP that establishes and maintains a minimum of 30-foot buffers for all riparian areas, wetlands, and their buffer zones or update existing programs and policies to reflect this requirement.
12	4.5	Hydromodification Controls and Criteria	The City has proposed hydromodification controls and criteria in the form of stormwater design guidelines and requirements. The specific hydrologic criteria for volume and rate control are not based on a technical assessment of the impacts of urbanization on the watershed or that justifies their effectiveness. As such, Water	The City must add a BMP stating how and when the City will determine the appropriateness of the interim criteria. The City should base this determination on actual assessment of the impacts of urbanization on the watershed

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			Board staff views them as “interim hydromodification criteria.”	and the effectiveness of the interim control measures in controlling those impacts. An adequate technical assessment would evaluate the following: - Downstream affects (stream stability); - Adequacy of buffer zone requirements; - Extent of application of interim criteria (e.g., number of projects to which criteria were applied); and - Specific performance and monitoring data for installed hydromodification control Infrastructure.
13	4.5	Long-Term Watershed Protection	The City must commit to providing long-term watershed protection. The city has provided examples of its efforts of watershed protection through land use policies, plans, ordinances, guidance manuals, and BMPs. However, the City must provide more detail and evidence that these will achieve desired watershed conditions.	The City must include a BMP stating how and when the City will 1) develop quantifiable measures that indicate how the City’s watershed protection efforts achieve desired watershed conditions, 2) evaluate the existing watershed protection efforts (the referenced land use policies, plans, ordinances, guidance manuals, and BMPs), and 3) adapt or change the existing efforts if warranted.
14	4.6	Portable Toilets	Human waste is a major pollutant source for bacteria in many of the creeks within the City. There are no measurements provided to determine if portable toilets are providing	The SWMP must provide BMPs and/or MGs that are able to determine or track the use of portable toilets and that can show

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			significant reduction in creek waste from human use.	the effectiveness of toilets significantly reducing creek waste from human use.
15	Table 4.6 BMP 6.19	Measurable Goal & Effectiveness Measurement	The BMP description identifies annual inspections of municipal operation facilities. However, the MG does not state how many facilities will be inspected annually. The SWMP must state approximately how many inspections will be performed annually to evaluate if the MG has been met.	Revise MGs for this BMP to include the development of an inspection schedule and estimation of how many facilities will be inspected annually.
16	4.6	Waterfront & Airport SWMP Operations	There is no commitment by the City to ensure that Waterfront and Airport program operations are in compliance with their individual SWMPs and that programs are consistent with the City's blanket SWMP.	The City must commit to inspecting and evaluating these individual programs annually. Provide a BMP or MG in the SWMP that ensures that inspections will be conducted annually.
17	5.3.3.5	Waterfront IDDE	<p>a) The SWMP lacks detail for IDDE implementation. The SWMP does not state how discharge violations will be tracked to determine repeat offenders and subsequent elevated enforcement.</p> <p>b) The Waterfront must effectively prohibit illicit discharges. The SWMP states, "fines <u>can</u> be imposed..." The SWMP must say <u>will be imposed</u> for repeat offenders. (underlines added)</p>	<p>a) Include tracking mechanism for violations.</p> <p>b) Edit accordingly</p>
18	5.3.6.2	Waterfront SWPPP General BMPs	The SWMP states that the Waterfront District's SWPPP <u>encourages</u> the use of EPA-approved biodegradable soaps and disinfectants for boat washing. Discharges from washwater containing soaps and disinfectants are considered unauthorized non-storm water discharges and are prohibited by the industrial and municipal	Revise SWMP and SWPPP to contain correct language. BMPs must be developed in the SWMP and SWPPP to eliminate washwater containing soaps and disinfectants. A BMP must be included in the SWMP that will

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			general permits and must be eliminated immediately. The SWMP and SWPPP must state that EPA-approved biodegradable soaps and disinfectants are <u>required</u> for boat washing and must be regulated appropriately.	provide a strategy to regulate the use of non-biodegradable soaps and disinfectants.
19	6.3.1.2	Airport Outreach And Education	<p>a) No detail is provided on what specific type of educational materials will be distributed to tenants. Educational materials should be targeted to tenant activities and pollutants of concern for the airport area including Goleta Slough.</p> <p>b) The airport must also be able to evaluate the effectiveness of its programs in the annual report. Educational campaign must provide quantifiable targets of its audience to be reached in its MGs.</p>	<p>a) Include description of educational materials.</p> <p>b) Provide percentage or other appropriate measure of target audience to be reached annually.</p>
20	6.3.3	SWMP Revision	Referenced SWPPP is currently being revised by Airport. SWMP statements are invalid and need updating.	The SWMP must provide the proposed schedule for revision and finalization of the SWPPP, and must state the SWMP will be revised within 60 days following completion of the SWPPP. The revised SWMP must consider and address previous comments made by stakeholder groups.
21	6.3.3	Tenant Lease Agreements	Section lacks detail and commitment to prohibit illicit discharges with words such as can, most, and typically.	<p>The City must enforce illicit discharge prohibitions on all tenants through lease agreements. Edit language accordingly.</p> <p>The Airport must state what specific steps it takes once illicit connections or discharges</p>

Item Number	SWMP Section	Subject	Problem	Required Revisions
				are detected and what actions occur once a tenant is in default of lease terms.