



Linda S. Adams
Agency Secretary

California Regional Water Quality Control Board

Central Coast Region



Arnold Schwarzenegger
Governor

Internet Address: <http://www.waterboards.ca.gov/centralcoast>
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401-7906
Phone (805) 549-3147 - FAX (805) 543-0397

August 12, 2008

Ms. Stacy L. Lawson
Senior Environmental Coordinator
City of Lompoc
P.O. Box 8001
Lompoc, CA 93438-8001

Dear Ms. Lawson:

WATER BOARD STAFF COMMENTS ON DRAFT STORM WATER MANAGEMENT PROGRAM SEPTEMBER 2008 – SEPTEMBER 2013

On May 23, 2008, the Central Coast Water Quality Control Board (Water Board) received the document entitled City of Lompoc Draft Storm Water Management Program (SWMP) September 2008 – September 2013. Water Board staff has reviewed the May 23 draft SWMP and we have identified several improvements that the City must make for us to recommend approval of the SWMP. Several specific issues are identified in the attached Table of Required Revisions.

Effectiveness Assessment

MS4s are required to annually assess the appropriateness and effectiveness of their BMPs. The City's BMPs and/or measurable goals do not always have adequate measures of effectiveness to meet this requirement (for measurable goal guidance see: <http://cfpub1.epa.gov/npdes/stormwater/measurablegoals/index.cfm>). 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. For SWMPs to adequately address the issue of effectiveness assessment, they are expected to include the following components:

1. Assessment of program effectiveness in achieving permit requirements and measurable goals.
2. Assessment of program effectiveness in 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 an effectiveness assessment process comparable to that outlined in CASQA's *Municipal Stormwater Program Effectiveness Assessment Guide*.
6. Identification of a range of quantifiable effectiveness measurements that collectively assess effectiveness in terms of regulatory compliance, changes in knowledge and awareness, changes in behavior, and pollutant load reductions, to be used during

California Environmental Protection Agency



Recycled Paper

Item No. 9 Attachment No. 5
City of Lompoc SWMP
October 17, 2008 Meeting

annual effectiveness assessments. The *Municipal Stormwater Program Effectiveness Assessment Guide* includes useful examples and guidance for assessing effectiveness using these parameters.

7. Identification of quantifiable effectiveness measurements that collectively assess effectiveness in terms of runoff and receiving water quality, to be used during long-term effectiveness assessments (e.g., every three to five years). The *Municipal Stormwater Program Effectiveness Assessment Guide* includes useful examples and guidance for assessing effectiveness using these parameters.
8. Identification of the steps the City will take to revise the SWMP and optimize BMP effectiveness, when effectiveness assessments identify BMPs or programs that are ineffective or need improvement.

To the extent that these components are already included in your SWMP or are readily available for inclusion, we expect you to keep them in the SWMP or incorporate them. However, we do not expect the SWMP to fully address each of the above components prior to approval. As an alternative, you must include in your SWMP a BMP for development and implementation of an effectiveness assessment strategy. We expect the effectiveness assessment strategy to address each of the items identified above.

An example of the type of language you should include in the SWMP for such a BMP follows:

"The City will develop an effectiveness assessment strategy during the first full implementation year and submit it as an update to the SWMP with the first annual report. The effectiveness assessment strategy will be used to conduct effectiveness assessments included in the annual reports, starting with the second annual report. Overall, the strategy 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 strategy will specifically 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."

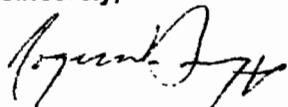
In addition to the above items the City must make the modifications in the attached Table of Required Revisions. The following sequence describes an optimal process for final review of the SWMP:

Water Board staff will:

- 1) Post the attached draft Table of Required Changes on August 12, 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 Dominic Roques at (805) 542-4780, or droques@waterboards.ca.gov.

Sincerely,



Roger W. Briggs
Executive Officer

cc: (by electronic mail)
Kira Redmond, Santa Barbara Channelkeeper
Hilary Hauser, Heal the Ocean

S:\Stormwater\Stormwater Facilities\Santa Barbara Co\Municipal\City of Lompoc\Comments\Final Table of Changes 2008-2013 SWMP.doc



TABLE of REQUIRED REVISIONS
Lompoc Draft SWMP September 2008 – September 2013

Acronyms:

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

Item Number	SWMP Section	Subject	Problem	Required Revisions
1	Section 1.3	Pollutants of Concern (POCs)	The General Permit states that POCs found in urban runoff include sediments, non-sediment solids, nutrients, pathogens, oxygen-demanding substances, petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons (PAHs), trash, and pesticides and herbicides. Though Lompoc has a full suite of land uses that are typically the sources of these pollutants, the SWMP identifies only sediment, oil and grease, and trash and floatables as POCs.	Revise the SWMP to include a list of potential pollutants based on land use activities in the City. Identify the BMPs that address the pollutants. (See Santa Maria SWMP and City of Goleta draft SWMP for examples).
2	BMP 3.3.3 MG 3.4.3	Education in Schools	The City's commitment to the goals of education and awareness is unclear without: a) Descriptions or examples of materials the City will use in schools. b) The percentage of school-aged children and grade level of students that will be targeted for education. c) Consistent description of what the	Clarify BMP and MG with the following: a) Examples of types of materials to be provided (e.g., coloring book, flyer, toy). b) Number of targeted students expressed as a percentage of total student population in Lompoc, and grade level of students targeted. c) Define "education program" and use it consistently in text and table.

Item Number	SWMP Section	Subject	Problem	Required Revisions
			BMP is (e.g. "program" and "material" used interchangeably).	
3	BMP 3.3.12 MG 3.4.12	Business and Industrial Informational Consultations	The City's commitment to focusing on identified pollutants such as winery facility wash-off and trash is unclear. It is also unclear whether the City will conduct informational consultations if not requested by businesses.	Revise the BMP to indicate the following: 1. City's annual commitment to conduct requested consultations for years 1 to 5, 2. Commitment to conduct a minimum of 5 consultations whether or not requested by businesses, 3. Commitment to prioritize and conduct consultations with businesses and industries that are known or suspected sources of POCs, 4. The method the City will use to identify enterprises that are suspected sources of POCs.
4	Section 3.0 Public Education	Community-based Social Marketing	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. 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	Include a BMP that commits to assessing community-based social marketing strategies, and incorporating them into your program where appropriate.

Item Number	SWMP Section	Subject	Problem	Required Revisions
			<p>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.cbem.com/. The techniques of community-based social marketing should be considered when developing and implementing your public education and outreach program.</p>	
5	Section 4.2.2	Non-Storm Water Discharges Exempt under General Permit	<p>This section does not provide adequate detail (no BMPs or MGs included) for the City's proposed evaluation of exempt non-storm water discharges to determine if they have the potential to be significant sources of pollutants.</p>	<p>Add BMPs and MGs, including a schedule for the evaluation of non-stormwater discharges identified as exempt under the General Permit. (See City of Santa Barbara's SWMP pg. 47 for example)</p>
6	BMP 4.3.3	Master Storm Drain Map	<p>Maps included in Appendices A, C and H contain information that would be better integrated into a single map identifying City boundaries, stormdrain outfalls to surface waters, and agency responsible for operation and maintenance of stormdrain facilities.</p>	<p>Amend the BMP to include, as part of map updates, labeling of facilities owned and maintained by the City and the County within City limits. Also depict the segment of Miguellto Channel between the City boundary and its outfall to Santa Ynez River for completeness.</p>
7	BMP 4.3.5 MG 4.4.5	Surveys for detecting illicit discharges	<p>Deferring surveys for illicit discharge detection until Year 3 of the permit cycle is inappropriate in a City where such discharges are known to occur. SWMP does not identify actions that would be taken to address illicit discharges.</p>	<p>Amend BMP and MG to conduct surveys beginning in the first year of program implementation. Identify actions the City would take upon identifying an illicit discharge.</p>
8	BMP 4.3.9 MG 4.4.9	Public Information on Illicit Stormwater	<p>The BMP and MG are unclear regarding the three methods for</p>	<p>Amend BMP and MG to include the following: 1. Target number of contacts among general</p>

Item Number	SWMP Section	Subject	Problem	Required Revisions
		Discharges	providing education about illicit discharges. The BMP does not indicate the target audiences (i.e. business, general public) comprising the proposed 200 contacts per year.	<p>public, City employee, and business audiences,</p> <ol style="list-style-type: none"> 2. Total number of businesses to be contacted annually, 3. Percentage of businesses contacted annually, 4. Specific methods for providing education
9	BMP 5.3.1 MG 5.4.1	Street Sweeping	The effectiveness measurement for sweeping fails to measure pollutant load reduction.	Amend MG to include more appropriate measure of BMP effectiveness (e.g., pounds of sweepings per year).
10	BMPs 7.4.9 – 7.4.11	Hydromodification Control/Low Impact Development	The Draft hydromodification control standards are not supported by technical findings. Any proposed control standards, including numeric criteria for volume and rate control, will require a review by Water Board staff based on technical findings to determine the standards' adequacy. The City has 12 months from the date of their enrollment under the General Permit to develop and adopt interim hydromodification control standards with Water Board approval. Inclusion of the draft standards in the SWMP is not appropriate at this time.	Remove the BMPs and replace with a BMP stating the following or equivalent: Within one year of enrollment under the General Permit, the City will have adequate development review and permitting procedures to impose conditions of approval, or other enforceable mechanisms, to implement quantifiable measures (numeric criteria) for hydromodification control.
11	Section 7.0 New and Re-Development	Interim Hydromodification Criteria	The SWMP does not include a schedule or approach to develop criteria.	Include a schedule and steps for developing the criteria, including a period of no less than three (3) weeks to allow for Water Board staff's review of the proposed criteria. If the City fails to develop alternative criteria acceptable to the Water Board, the City will be subject to the interim criteria as stated in the Executive Officer's February 15, 2008 letter.
12		Hydromodification	The SWMP does not describe the	Add a BMP stating how and when the City will

Item Number	SWMP Section	Subject	Problem	Required Revisions
		Management Plan	process to develop the City's Hydromodification Management Plan.	<p>develop long-term hydromodification criteria and control measures based on an assessment of the impacts of urbanization on the watershed and that determines the effectiveness of those control measures. An adequate technical assessment would consider the following:</p> <ul style="list-style-type: none"> - Hydrograph modification (volume, duration, and rate); - A wide range of flow events (e.g., 1- to 10-year return period) and/or continuous flow modeling; - Limits on imperviousness; - Evaluation of downstream affects (stream stability); - Estimate buffer zone requirements; and - Estimate water quality impacts. <p>The assessment should result in:</p> <ul style="list-style-type: none"> - Numeric criteria for runoff rate and volume control for development and redevelopment projects; - Numeric criteria for stream stability impacts for development and redevelopment projects; - Identification of areas within the City where these criteria must be met; - Specific performance and monitoring criteria for installed hydromodification control infrastructure; - Riparian buffer zone requirements; and - Appropriate hydromodification controls measures such as LID concepts, on-site hydrologic and water quality controls, in-

Item Number	SWMP Section	Subject	Problem	Required Revisions
				stream controls, and/or regional facilities to meet future development conditions.
13		Project Design Approval	The City's review process for new and re-development projects is described briefly on p. 53 of the SWMP. The description lacks adequate detail to know whether the process could conclude without evaluation of specific stormwater management BMPs proposed.	Modify the section in the BMP that describes the City's development project review/approval process for completeness and to be consistent with the following or add a BMP equivalent to the following: The City will insure that applications are only deemed complete if they include appropriate post-construction BMP selection, sizing, and siting.
14		Long-Term Watershed Protection	The City must commit to providing long-term watershed protection. The City must provide examples of its efforts to protect watersheds through land use policies, plans, ordinances, guidance manuals, development project review procedures, and BMPs, and provide detail and evidence that these will achieve desired watershed conditions.	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 existing watershed protection efforts, including: land use policies, plans, ordinances, guidance manuals, development project review procedures, and BMPs; and 3) adapt or change the existing efforts if warranted.