



Linda S. Adams  
Agency Secretary

# California Regional Water Quality Control Board Central Coast Region



Arnold Schwarzenegger  
Governor

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September 22, 2008

**BY ELECTRONIC AND REGULAR MAIL**

Carl Niizawa, Deputy City Engineer  
[carln@ci.salinas.ca.us](mailto:carln@ci.salinas.ca.us)  
City of Salinas  
200 Lincoln Ave.  
Salinas, CA 93901-2639

Dear Mr. Niizawa;

## **WATER BOARD APPROVAL OF SALINAS STORMWATER DEVELOPMENT STANDARDS**

On September 4, 2008, the Central Coast Water Board adopted Resolution No. R3-2008-0068, which approves the Salinas Stormwater Development Standards, contingent on Salinas incorporating a list of required revisions into the Development Standards. The Water Board's September 4 motion included removing language in Development Standards Section 1.5.3 that may be redundant with other sections of the document, while preserving all the hydromodification control requirements staff proposed. The Resolution and final list of required revisions are attached.

Please note that although the Resolution states the required revisions must be incorporated into the Development Standards within 30 days of Water Board adoption, we understand if Salinas requires up to 30 days from the date of this letter to incorporate the revisions, due to the late date of this letter.

If you have questions, please contact **Matt Thompson at (805) 549-3159** or Lisa McCann at (805) 549-3132.

Sincerely,

Roger W. Briggs  
Executive Officer

Attachments: Resolution No. R3-208-0068 with Table of Required Revisions

See cc's on next page

*California Environmental Protection Agency*



Item No. 22 Attachment No. 1  
Salinas Stormwater Development  
Standards  
December 4-5 2008 Meeting

Cc (via email):

City of Salinas Staff and Consultants:

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NPDES Stakeholder Committee:

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S:\Shared\Stormwater\Stormwater Facilities\Monterey Co\Municipal\Salinas Phase I Permit\Development Standards\Board Approval, Sept 2008\Transmittal of Reso and Required Revisions to Salinas SWDS, Sept. 2008.doc



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
895 Aerovista Place, Suite 101  
San Luis Obispo, California**

**RESOLUTION NO. R3-2008-0068**

**City of Salinas Stormwater Development Standards  
Monterey County**

The Regional Water Quality Control Board, Central Coast Region ("Water Board") finds:

1. On December 8, 1999, the U.S. Environmental Protection Agency (EPA) promulgated regulations under authority of the Clean Water Act (CWA) Section 402(p). These regulations required National Pollutant Discharge Elimination System (NPDES) stormwater permits for operators of municipal separate storm sewer systems (MS4s) that discharge to waters of the U.S.
2. The CWA allows the EPA to delegate its NPDES permitting authority to states with an approved NPDES program. The State of California is a delegated State. The Porter-Cologne Water Quality Control Act (California Water Code Division 7) authorizes the State Water Resources Control Board (State Board), through the Regional Water Quality Control Boards, to regulate and control the discharge of pollutants into waters of the State and tributaries thereto. The City of Salinas (City or Permittee) is under jurisdiction of the Central Coast Regional Water Quality Control Board (Central Coast Water Board).
3. On February 11, 2005, the Central Coast Water Board adopted Order No. 2004-0135 (NPDES Permit No. CA0049981), Waste Discharge Requirements for City of Salinas Municipal Stormwater Discharges (Permit).
4. The Permit requires the City to develop and implement a stormwater management program (SWMP). The SWMP must reduce the City's stormwater pollutant discharges to the maximum extent practicable (MEP) and protect water quality. The Central Coast Water Board last considered and approved the City's SWMP in February 2008, with final revisions approved by the Water Board on July 11, 2008.
5. The Central Coast Water Board found, verified through Permit adoption, that "increased volume, increased velocity, and discharge duration of storm water runoff from developed areas has the potential to greatly accelerate downstream erosion and impair stream habitat in natural drainages...When water quality impacts are considered during the planning stages of a project, new development and many redevelopment projects can more efficiently incorporate measures to protect water quality" (Permit finding No. 18).

6. Permit Attachment 4 and the City's SWMP require the City to minimize the short and long-term impacts on receiving water quality from new development and significant redevelopment by developing and implementing stormwater development standards. The City's stormwater development standards must control pollutant sources, preserve areas that provide important water quality benefits such as riparian corridors, limit disturbances of natural water bodies, require analysis of pre- vs. post-development hydrology, regulate development in areas especially susceptible to erosion, and control stormwater runoff discharge rates and velocities to prevent erosion and protect stream habitat. The Permit provides the public with opportunities to review and comment on development of the City's stormwater development standards.
7. The City submitted *Draft Stormwater Development Standards for New Development and Significant Redevelopment Projects* (SWDS) for Central Coast Water Board staff review on December 31, 2007. The City also convened a stakeholder committee to facilitate public involvement in SWDS development. After considering Central Coast Water Board staff and public comments, the City submitted revised SWDS to the Central Coast Water Board on May 17, 2008. The Low Impact Development Center of Maryland reviewed and commented on the revised SWDS. Several interested persons submitted comments on the revised SWDS on or around June 23, 2008. Following public notice in accordance with State and federal laws and regulation, the Central Coast Water Board, in a public hearing on July 11, 2008, considered comments on the revised SWDS by its staff, interested persons, and the public. The Central Coast Water Board considered the technical and economic feasibility of SWDS implementation. The Central Coast Water Board continued the SWDS hearing to a future date. After considering Central Coast Water Board comments, the City submitted further revised SWDS on July 25, 2008. In a public hearing on September 4, 2008, the Central Coast Water Board considered all comments regarding the further revised SWDS.
8. The Central Coast Water Board finds the SWDS meets the Central Coast Water Board's maximum extent practicable standard, with the revisions required by Paragraph 2 below. Implementation of the SWDS is technically and economically feasible. The SWDS meet the requirements in Permit Attachment 4, Sections III.a through c.
9. This action to approve the City's SWDS is exempt from the California Environmental Quality Act pursuant to Water Code Section 13389.

**THEREFORE, BE IT RESOLVED THAT:**

1. The Central Coast Water Board hereby approves *the City of Salinas Stormwater Development Standards for New Development and Significant Redevelopment Projects* (SWDS), subject to Paragraph 2 below. The SWDS become effective on October 3, 2008, or when adopted by the City of Salinas, whichever is sooner.
2. The City of Salinas must revise the SWDS no later than October 3, 2008, to include all the changes shown in the Attachment to this Resolution, "Table of Revisions Required by the Central Coast Water Board to *The City of Salinas Stormwater Development Standards (SWDS) for New Development and Significant Redevelopment Projects, July 25, 2008 Revision.*" Failure to make these revisions may subject the City of Salinas to enforcement action.
3. The City of Salinas must provide a copy of the revised SWDS to the Water Board Executive Officer no later than October 3, 2008, pursuant to Water Code Section 13383.
4. Any person affected by this action may petition the State Board to review the action in accordance with section 13320 of the California Water Code and Title 23, California Code of Regulations, Section 2050 et seq. The State Board must receive the petition within 30 days of the date of adoption of this Resolution. Copies of the law and regulations applicable to filing petitions will be provided upon request.

I, Roger W. Briggs, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on September 4, 2008.



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Roger W. Briggs, Executive Officer

**ATTACHMENT TO RESOLUTION R3-2008-0068**

**Table of Revisions Required by the Central Coast Water Board to  
The City of Salinas Stormwater Development Standards (SWDS) for New Development  
and Significant Redevelopment Projects, July 25, 2008 Revision**

As Revised and Approved on September 4, 2008

Acronyms:

BMP            Best Management Practice  
 IMP            Integrated Management Practice  
 LID            Low Impact Development  
 MEP            Maximum Extent Practicable

Ref. No.	SWDS Section	Required Revision
1	Section 1.4.6, Waivers for Providing Stormwater Management	<p>Add the following underlined text:</p> <p>The City is currently in the process of developing Waiver Program for approval by the Regional Board. Upon approval, a detailed description of the Waiver Program will be presented as an additional appendix to these SWDS. <u>Until the Waiver Program is approved by the Regional Board, the City will not grant waivers of these SWDS.</u></p>
2	Section 1.5, Stormwater Management	<p>Add the following underlined text:</p> <p>Overall, stormwater management practices for development shall rely on a "tiered" approach. The first tier shall be site design planning per Section 1.5.1 to avoid and preserve natural drainage features, minimize topography changes, maintain the same overall size of drainage areas that discharge to receiving waters. The second tier shall be site source control measures that minimize stormwater contamination and pollutant transport. The third tier shall be stormwater treatment controls using LID techniques (e.g. IMPs) consistent with the numeric criteria listed in section 1.5.3. <u>Full implementation of all three tiers is required for development approval.</u></p>
3	Section 1.5.3, Numeric Criteria for Stormwater Management	<p>Add the following underlined text and remove the following strikethrough text:</p> <p>All applicable projects per the criteria listed in Section 1.4.1 shall be required to meet the following stated numeric requirements:</p> <ol style="list-style-type: none"> <li>1. All new development projects shall direct runoff from 100% of the area of new impervious surfaces (equivalent to 0% Effective Impervious Area) into BMPs meeting the requirements of these standards. <u>Exceptions may be allowed for driveways when grade breaks are located to minimize the area draining to the street.</u> Plans for new development projects not meeting this requirement will only be approved if</li> </ol>

**ATTACHMENT TO RESOLUTION R3-2008-0068**

Ref. No.	SWDS Section	Required Revision
		<p>the applicant demonstrates, to the satisfaction of the City Engineer, that the full achievement of such is impracticable.</p> <p>2. All redevelopment projects shall direct runoff from a minimum of 95% of the area of new impervious surface area (equivalent to 5% or less Effective Impervious Area) into BMPs meeting the requirements of these standards. Plans for redevelopment projects not meeting this requirement will only be approved if the applicant demonstrates, to the satisfaction of the City Engineer, that the full achievement of such is impracticable.</p> <p>3. The project applicant shall <u>prepare an exhibit showing the entire site divided into discrete drainage areas and demonstrate in submitted site stormwater control plans (SWCPs) that for each discrete drainage area BMPs for runoff of impervious surfaces either (1) runoff from impervious areas produced by the first 0.6 inches of rainfall is detained and infiltrated from each specified drainage area or (2) runoff is routed to BMPs meeting the requirements of these standards. All BMPs must be adequately sized to accommodate its shown designated drainage area per the following numeric criteria:</u></p> <p style="padding-left: 40px;">A. All flow based BMPs shall be sized to, at minimum, the maximum flow rate of runoff from the designated specific drainage area using the 85th percentile hourly rainfall intensity multiplied by two. For the City of Salinas, this equates to a rainfall intensity of 0.22 inches per hour.</p> <p style="padding-left: 40px;">B. All volume based BMPs shall be sized, at minimum, for the volume of runoff produced from a 24 hour 85th percentile storm event. For the City of Salinas, this equates to a rainfall depth of 0.6 inches.</p> <p style="padding-left: 40px;">C. <u>Project applicants must comply with 3., 3.A. and 3.B. above by following and applying the BMP design methodologies, guidelines and considerations in Section 4, Stormwater Design Considerations. All SWCPs shall incorporate LID strategies and associated BMPs to the maximum extent practicable (MEP). Other treatment control BMPs may be used to treat runoff of portions of redevelopment projects where there is to be no new or replaced impervious surfaces installed.</u></p> <p>4. <u>For all new development and redevelopment projects that result in an increase of one acre or greater more of impervious surface, the project applicant shall demonstrate post-project runoff rates and durations do not exceed pre-</u></p>

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Ref. No.	SWDS Section	Required Revision
		<p><u>project runoff rates and durations where such increases could accelerate downstream erosion or harm beneficial uses. The project applicant may demonstrate compliance with this requirement by either of the following methods:</u></p> <p><u>A. For each discrete drainage area, show runoff from impervious areas produced by the first 0.6 inches of rainfall is either (1) detained and infiltrated, or (2) detained and allowed to infiltrate and/or seep away slowly.</u></p> <p><u>B. Create a computer continuous simulation of runoff in the pre-project and post-project condition using 30 years or more of local hourly rainfall data.</u></p> <p><del>pre-project and proposed project hydrologic calculations using approved computer based hydrologic modeling must show that the proposed project 100-year peak discharge is less than the pre-project 10-year peak discharge unless modeling of the project within the regional drainage system demonstrates no adverse impacts of alternative mitigation measures proposed by the applicant. For instance, if the applicant can show with accepted computer modeling of 5-, 20-, and 100-year design storm events that the project would result in no adverse impact to peak flows or its tributary regional storage areas; then the proposed project conditions would be acceptable.</del></p>
4	Section 1.5.5, <i>BMP Implementation</i>	<p>Add the following underlined text and remove the following strikethrough text:</p> <p>The BMPs selected for implementation for new development and significant redevelopment projects shall:</p> <ol style="list-style-type: none"> <li>1. Have pollutant prevention and minimize the exposure of potential pollutants to rainwater (source control BMPs) as the first consideration in stormwater design. <u>The applicant's Stormwater Control Plan shall identify each potential source within the project and incorporate corresponding source control BMPs into the project design.</u></li> <li>2. Be selected based on the type of developed site use, identified pollutants of concern and other pollutants expected to be on site in concentrations that may pose potential water quality concerns (see BMP Design and Selection Matrices in Section 2.3). <u>A combination of appropriate source control BMPs and Low Impact Development treatment BMPs, when properly designed, are considered to address pollutants of concern.</u></li> <li>3. <u>Source control BMPs shall be selected and implemented</u></li> </ol>

**ATTACHMENT TO RESOLUTION R3-2008-0068**

Ref. No.	SWDS Section	Required Revision
		<p><u>according to the most recent version of California Stormwater Quality Association's New Development and Redevelopment Handbook. The current version of this handbook may be found in Appendix I.</u></p> <p><u>4. Be selected for maximum effectiveness in removing pollutants and achieving other principles and objectives of Low Impact Development. Treatment BMPs shall be selected in the following order of preference. If a less-highly-preferred BMP is used, the applicant's Storm Water Control Plan must document the infeasibility of all more-highly-preferred BMPs:</u></p> <p><u>A. Bioretention facilities designed with a minimum 18 inches of soil and a design surface loading rate not exceeding 5 inches per hour and fed by gravity.</u></p> <p><u>B. Capture of the design flow in a vault or sump and pumping to bioretention facilities.</u></p> <p><u>C. A sand or media filter with a maximum design surface loading rate of 5 inches per hour and a minimum media depth of 18 inches. The sand surface must be made accessible for periodic inspection and maintenance (for example, via a removable grating).</u></p> <p><u>D. A higher-rate surface biofilter, such as a tree-pit-style unit. The grading and drainage design should minimize the area draining to each unit and maximize the number of discrete drainage areas and units.</u></p> <p><u>E. A higher-rate vault-based filtration unit, such as those using cartridge filters.</u></p> <p><del>3. Manage stormwater treatment and volume to the MEP. All areas of the site to which these SWDS apply shall be treated using the IMPs presented in Section 3: of these standards. Unless otherwise shown to be impracticable and alternatives are approved by the City Engineer, IMPs shall designed to treat runoff from all site drainage areas to which these SWDS apply using the LID techniques. The Regional Board has determined that use of LID meets the MEP criteria for stormwater management.</del></p> <p><del>4. Be designed and maintained with an engineered soil mix with minimum infiltration rate of 5.0 inches per hour and be engineered to accommodate overflow during larger storm events (e.g., storm events exceeding the design criteria for flow and volume based BMPs discussed above). Refer to Section 4.3.5 for detailed bioretention system design criteria.</del></p>

**ATTACHMENT TO RESOLUTION R3-2008-0068**

<b>Ref. No.</b>	<b>SWDS Section</b>	<b>Required Revision</b>
		<del>including engineered soil mix specifications.</del>
5	Appendix I	Append the most recent version of the California Stormwater Quality Association's New Development and Redevelopment Handbook

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