

## **Appendix L – Order R5-2008-0092 Planning and Land Development**

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This appendix provides the Planning and Development Program requirements of Order R-5-2008-0092. The text in this appendix is excerpted from pages 40-48 of the Order.

### **PLANNING AND LAND DEVELOPMENT PROGRAM**

13. The objectives of the Planning and Land Development Program are as follows:

- a. Incorporate water quality and watershed protection principles into the Discharger's policies and planning procedures;
- b. Ensure that selected post-construction storm water controls will remain effective upon project completion by requiring a maintenance agreement and transfer or establishing a maintenance district zone for all priority development projects;
- c. Provide a comprehensive review of development plans to ensure that storm water quality controls are properly selected to minimize storm water quality impacts;
- d. Provide regular internal training on applicable components of the SWMP; and
- e. As a part of the annual reporting process, conduct an assessment (at least annually) to determine the effectiveness of the Program Element and identify any necessary modifications.

14. The Discharger shall update and continue to implement the Planning and Land Development Component of its SWMP to minimize the short and long-term impacts on receiving water quality from new development and redevelopment. At a minimum the Planning and Land Development Program shall address the objectives listed above and include the following control measures:

- a. Incorporation of Water Quality Protection Principles into City Procedures and Policies
- b. New/Revised Development Standards
- c. Plan Review Sign-Off
- d. Maintenance Agreement and Transfer
- e. Training
- f. Effectiveness Assessment
- g. New Development Standards for Capital Improvement Projects

15. **Water Quality Planning and Design Principles** - In order to reduce pollutants and runoff flows from new development and redevelopment the Discharger shall address the following concepts:

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a. The Discharger shall incorporate water quality and watershed protection principles into planning procedures and policies such as the Development Standards and requirements to direct land-use decisions and require implementation of consistent water quality protection measures for all development projects. These principles and policies shall be designed to protect natural water bodies, reduce impervious land coverage (such as through low impact development design), slow runoff to prevent hydromodification of waterways, and where feasible, maximize opportunities for infiltration of rainwater into soil. Such water quality and watershed protection principles and policies shall consider, at a minimum, the following:

i Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and where feasible to maximize on-site infiltration of runoff (low impact development concepts).

ii Implement pollution prevention methods supplemented by pollutant source and treatment controls. Where practical, use strategies that control the sources of pollutants or constituents (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into MS4s.

iii Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones.

iv Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

v Use methods available to estimate increases in pollutant loads in runoff flows resulting from projected future development. Require incorporation of structural and non-structural BMPs to mitigate the projected increases in pollutant loads.

vi Identify and avoid development in areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that protects areas from erosion and sediment loss.

vii Coordinate with local traffic management programs to reduce pollutants associated with vehicles and increased traffic resulting from development.

viii Implement source and structural controls as necessary and appropriate to protect downstream receiving water quality from increased pollutant loads and flows (hydromodification concepts) from new development and significant redevelopment.

ix Control the post-development peak storm water run-off discharge rates and velocities to maintain or reduce pre-development downstream erosion, and to protect stream habitat.

b. Low Impact Development - New development and redevelopment projects shall integrate Low Impact Development (LID) principles into project design. LID is a storm water management and land development strategy that emphasizes

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conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect predevelopment hydrologic functions. When developing the LID program, the City shall consider and incorporate all appropriate and applicable LID components and measures that have been successfully and effectively implemented in other municipal areas. Other programs include, but are not limited to, USEPA's "Managing Wet Weather with Green Infrastructure, Action Strategy, 2008" and LID program elements specified in the permits or Storm Water Management Plans of other MS4s throughout the state.

c. The Discharger shall revise applicable ordinances/standards/ specifications no later than **one year** after the adoption of the SWMP/Development Standards by the Regional Water Board.

16. The Discharger has adopted development standards in the *City of Modesto Guidance Manual for New Development Stormwater Quality Control Measures*, January 2001 and their Standard Specifications. The Development Standards shall be amended/revised in accordance with this Provision and Provision 23 to ensure that the storm water quality and watershed principles, as listed above in 16.a. and b., are integrated.

**a. Post Development Standards:** The Discharger shall ensure that all new development and significant redevelopment projects falling under the priority project categories listed below meet Development Standards. When the Development Standards are revised, the revised Development Standards shall apply to all priority projects or phases of priority projects at the date of adoption of the Development Standards which do not have one of the following: approval of a tentative map within two years prior to approval of the revised Development Standards, approval of improvement plans by the City engineers, or a permit for development or construction.

Any extensions of a tentative map after adoption of revised Development Standards shall ensure compliance with the revised Development Standards. In addition, those infill projects that require only a Use Permit from the City that apply to the Priority Development Project Categories are subject to the requirements under the Development Standards.

**b. Priority Development Project Categories –** Development Standards requirements shall apply to all new development and significant redevelopment projects falling under the priority project categories or locations as: (1) *significant* redevelopment; (2) home subdivision of 10 housing units or more; (3) commercial developments greater than 10,000 square feet of impervious surface area; (4) automotive repair shops; (5) restaurants; (6) parking lots 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to urban runoff; (7) street and roads; and (8) retail gasoline outlets (RGO).

*Significant* redevelopment is defined as the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant

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redevelopment includes, but is not limited to, expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Where significant redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to the Development Standards, the numeric sizing criteria discussed below applies only to the addition, and not the entire development.

**c. BMP Requirements** – The Development Standards shall include a list of recommended pollution prevention, source control, and/or structural treatment control BMPs. The Development Standards shall require all new development and significant redevelopment projects falling under the above priority project categories or locations to implement a combination of BMPs selected from the recommended BMP list, including at a minimum: (1) source control BMPs and (2) structural treatment control BMPs.

**d. Numeric Sizing Criteria** – The Development Standards shall require structural treatment BMPs to be implemented for all priority development projects. In addition to meeting the BMP requirements listed above, all structural treatment BMPs for a single priority development project shall be sized collectively to comply with either the volume-based or flow-based numeric sizing criteria:

i Volume-based BMPs shall be designed to mitigate (infiltrate or treat) either:

a) The volume of runoff produced from a 24-hour 85<sup>th</sup> percentile storm event, as determined from the local historical rainfall record; or

b) The volume of runoff produced by the 85th percentile 24-hour rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87*, (1998); or

c) The volume of annual runoff based on unit basin storage volume, to achieve 80% or more volume treatment by the method recommended in *California Storm Water Best Management Practices Handbook – Industrial/Commercial*, (1993); or

d) A Discharger justified design storm volume that is determined as part of the Development Standard development and approved by the Executive Officer. The treatment of this volume shall achieve approximately the same reduction in pollutant loads achieved by treatment of the 85th percentile 24-hour runoff event.

ii Flow-based BMPs shall be designed to mitigate (infiltrate or treat) either:

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a) The maximum flow rate of runoff produced by the 85<sup>th</sup> percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or

b) The maximum flow rate of runoff, as determined from local historical rainfall records, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

**e. Equivalent Numeric Sizing Criteria** – The Discharger may develop an equivalent numeric sizing criteria or performance-based standard for post-construction structural treatment BMPs as part of the Development Standards. Such equivalent sizing criteria may be authorized for use in place of the above criteria. In the absence of development and subsequent authorization of such equivalent numeric sizing criteria, the above numeric sizing criteria requirement shall be implemented.

**f. Pollutants and Activities of Concern** – As part of the Development Standards, the Discharger shall identify pollutants and/or activities of concern for each new development or significant redevelopment project. The Discharger shall identify the pollutants of concern by considering the following (1) receiving water quality, including pollutants for which receiving waters are listed as impaired under CWA Section 303(d); (2) land use type of the development project and pollutants associated with that land use type; (3) pollutants expected to be present on site at concentrations that pose potential water quality concerns; (4) activities expected to be on the site; and (5) changes in flow rates and volumes resulting from the development project and sensitivity of receiving waters to changes in flow rates and volumes.

**g. Restaurants Less than 5,000 Square Feet** - New development and significant redevelopment restaurant projects where the land area development is less than 5,000 square feet of impervious surface area shall meet all Development Standards except for structural treatment BMP and numeric sizing criteria requirement above.

**h. Infiltration and Groundwater Protection** – To protect groundwater quality, the Discharger shall consider the type of development and resulting storm water discharge and, if appropriate, apply restrictions to the use of structural BMPs, which are designed to primarily function as infiltration devices (such as infiltration trenches and infiltration basins and rock wells).

**i. Regional Storm Water Mitigation** – The Discharger may apply to the Regional Water Board for approval of a regional or sub-regional storm water mitigation program to substitute in part or wholly Development Standard requirements. The Regional Water board may consider for approval such a program if its implementation will:

a) Result in equivalent or improved storm water quality;

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- b) Protect stream habitat;
- c) Promote cooperative problem solving by diverse interests;
- d) Be fiscally sustainable and has secure funding; and
- e) Be completed in five years including the construction and start-up of treatment facilities.

### **17. Maintenance Agreement and Transfer**

The Discharger shall require that all developments subject to Development Standards and site specific plan requirements provide verification of maintenance provisions for Structural Treatment Control BMPs, including but not limited to legal agreements, covenants, California Environmental Quality Act (CEQA) mitigation requirements, and or conditional use permits. Verification at a minimum shall include:

- a. The developer's signed statement accepting responsibility for maintenance until the responsibility is legally transferred; and either
- b. A signed statement from the public entity assuming responsibility for Structural Treatment Control BMP maintenance and that it meets all local agency design standards; or
- c. Written conditions in the sales or lease agreement, which requires the recipient to assume responsibility for maintenance and conduct a maintenance inspection at least once a year; or
- d. Written text in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to the Home Owners Association for maintenance of the Structural Treatment Control BMPs; or
- e. Any other legally enforceable agreement that assigns responsibility for the maintenance of post-construction Structural Treatment Control BMPs.

### **18. California Environmental Quality Act (CEQA) Document Update**

The Discharger shall incorporate into its CEQA process, procedures for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents. The procedures shall require consideration of the following:

- a. Potential impact of project construction on storm water runoff;
- b. Potential impact of project post-construction activity on storm water runoff;
- c. Potential for discharge of storm water from material storage areas, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste

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handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas;

d. Potential for discharge of storm water to impair the beneficial uses of the receiving waters or areas that provide water quality benefit;

e. Potential for the discharge of storm water to cause significant harm to the biological integrity of the waterways and water bodies;

f. Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm; and

g. Potential for significant increases in erosion of the project site or surrounding areas.

### **19. General Plan Update**

a. The Discharger shall amend, revise, or update its General Plan to include watershed and storm water quality and quantity management considerations and policies when any of the following General Plan elements are updated or amended: (i) Land Use, (ii) Housing, (iii) Conservation, and (iv) Open Space.

b. The Discharger shall provide the Regional Water Board with the draft amendment or revision when a listed General Plan element or the General Plan is noticed for comment in accordance with California Government Code § 65350 et seq.

### **20. Planning Department Coordination, Enforcement and Tracking**

a. The Discharger shall provide for the review of proposed project plan and require measures to ensure that all applicable development will be in compliance with their storm water ordinances, local permits, and all other applicable ordinances and requirements.

b. The Discharger shall develop a process by which Development Standards will be implemented. The process shall identify at what point in the planning process development projects will be required to meet Development Standards. The process shall also include identification of the roles and responsibilities of various municipal departments in implementing the Development Standards, as well as any other measures necessary for the implementation of Development Standards.

c. The Discharger shall develop and implement no later than (6 months from this Order's adoption) the following:

i. A GIS or other electronic system for tracking projects that have been conditioned for post-construction treatment control BMPs. The electronic system, at a minimum, should contain the following information:

a) Municipal Project ID.

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- b) State General Construction Permit WDID No.
- c) Project Acreage.
- d) BMP Type and Description.
- e) BMP Location (coordinates).
- f) Date of Acceptance.
- g) Date of Maintenance Agreement.
- h) Inspection Date and Summary.
- i) Corrective Action.
- j) Date Certificate of Occupancy Issued.

### **21. Targeted Employee Training**

The Discharger shall periodically train its employees in targeted positions (whose jobs or activities are engaged in development planning) to ensure they can adequately implement the Planning and Land Development Program requirements.

### **22. Technical Guidance and Information for Developers**

By **12 June 2009** (or 1 year after the SWMP is adopted, whichever is later), the Discharger shall submit a revised/functionally updated Development Standards [e.g., *Guidance Manual for New Development Stormwater Quality Control Measures*] consistent with the requirements of this Order as a component of the SWMP. The Development Standards shall include guidelines and provide recommendations for low impact development/ hydromodification strategies for the development community in the Modesto Urbanized Area. The guidelines shall encourage the use of low impact development/ hydromodification strategies and be based on the existing site design control measures identified in the existing Development Standards. Prior to approval of the Development Standards, the early implementation of measures likely to be included in the Development Standards shall be encouraged by the Discharger.

*(Editor's Note: Note SWMP was approved by the Central Valley Regional Water Quality Control Board on December 10, 2009)*