# 2012 Update: Stormwater Quality Control Requirements

## Information for Developers, Builders and Project Applicants

*September 2012*

### Why Are New Requirements Needed?

Stormwater runoff from urbanized areas remains the largest source of pollution to San Francisco Bay. Local agencies in urbanized portions of the Bay Area are responsible for controlling stormwater pollution by complying with the Municipal Regional Stormwater Permit, issued by the State Regional Water Quality Control Board (Water Board) in October 2009.

*Rainwater is harvested and used to flush toilets in Oakland.*

### Overview of Stormwater Requirements

During development review, local agencies require projects to include stormwater controls, depending on project type and size, including:

- Site design measures,
- Source controls,
- Low Impact Development (LID) treatment measures,
- Hydromodification management,
- Construction BMPs.

The newest requirements are described in the sidebar at right.

### Site Design for Water Quality

Site design measures to reduce water quality impacts include:

- Reduce impervious surfaces.
- Direct runoff from impervious surfaces to vegetated areas.

New site design requirements are described in the sidebar.

### Source Controls

Source controls prevent potential pollutant sources from contacting rainfall and stormwater. Examples include:

- Roofed trash enclosures.
- Pest-resistant landscaping.
- Sanitary sewer drains for vehicle wash areas (with sewer district approval).

Contact the city where your project is located for its Local Source Control Measures List (see Contact Info on page 2).

### Low Impact Development (LID) StormwaterTreatment

The goal of low impact development (LID) is to reduce stormwater runoff and mimic a site's predevelopment hydrology. LID treatment consists of:

- Infiltration,
- Harvesting and using rainwater,
- Evapotranspiration (evaporating stormwater into the air directly or through plant transpiration), or
- Biotreatment (filtering water through vegetation and engineered soil before it reaches the storm drain).

### *New 2012 Requirement*

*Beginning December 1, 2012, a new requirement applies to:*

- *Projects that create and/or replace at least 2,500 square feet, but less than 10,000 square feet, of impervious surface, and*
- *Individual single family homes that create and/or replace 2,500 square feet or more of impervious surface.*

*These projects must include at least one of the following site design measures:*

- *Direct roof runoff*
  - o *Into cisterns or rain barrels for use, or*
  - o *Onto vegetated areas.*
- *Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.*
- *Direct runoff from driveways/uncovered parking lots onto vegetated areas.*
- *Construct sidewalks, walkways, and/or patios with permeable surfaces.*
- *Construct bike lanes, driveways, and/or uncovered parking lots with permeable surfaces.*

Biotreatment is allowed only if it is infeasible to treat the amount of stormwater specified in Provision C.3.d of the MRP with infiltration, rainwater harvesting and use, or evapotranspiration. LID treatment is required for projects that create and/or replace 10,000 square feet or more of impervious surface. The following project categories require LID if they create and/or replace

5,000 square feet, or more, of impervious surface:

- Uncovered parking areas (stand-alone or part of another use),
- Restaurants,
- Auto service facilities[1],
- Retail gasoline outlets.

A Stormwater Requirements Checklist (available from municipal staff) walks you through a process to evaluate:

- Whether the site soils are sufficiently permeable to infiltrate the amount of runoff specified in Provision C.3.d of the MRP, and
- Whether the project may have sufficient demand for non-potable water to harvest and use the C.3.d amount of runoff.

Evapotranspiration was addressed in the model used to develop checklist questions. For more information on evaluating feasibility, see Appendix J of the Clean Water Program's C.3 Technical Guidance (available on the Program's website).

The use of vault-based systems is restricted to projects that meet the Special Projects criteria described in Appendix K of the C.3 Technical Guidance.

*A bioretention area in Fremont provides biotreatment and some infiltration of stormwater runoff.*

## Hydromodification Management (HM)

When land is covered with buildings and pavement, runoff enters creeks at higher rates and volumes, resulting in channel erosion, flooding and habitat loss. These changes to waterways are known as hydromodification. Hydromodification management (HM) measures are detention and/or infiltration facilities that are constructed with special discharge structures to match pre-project runoff patterns. HM requirements are different from flood control requirements.

If a project creates and/or replaces one acre or more of impervious surface, AND is located in a susceptible area, HM requirements apply. You can view a map of susceptible areas and flyer on HM requirements in the HM section of the Clean Water Program's New Development webpage (see Contact Information).

## Maintaining Treatment and HM Measures

LID treatment measures and HM measures need ongoing maintenance to keep working properly. Applicants must prepare a maintenance plan and sign, with the applicable local agency, a maintenance agreement that runs with the land.

## Construction Site Controls

Project sites are required to use construction BMPs, such as:

- Prepare and use sediment and erosion control plans.
- Minimize exposed soil by stabilizing slopes.

Projects disturbing one acre or more must comply with the Statewide Construction NPDES General Permit. For more information, visit www.swrcb.ca.gov/water_issues/programs/stormwater/construction.shtml.

## What is Required for My Project?

Check with the city where your project is located for specific application requirements.

*Flow-through planters provide biotreatment of runoff in Emeryville.*

## Contact Information

- Clean Water Program: 510/670-5543, www.cleanwaterprogram.org/development
- Water Board staff: 510/622-2300 (request Alameda County storm-water program manager)
- For contact info for new development representatives at local agencies, go to the weblink listed above.

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[1] Standard Industrial Classification (SIC) Codes for auto service facilities include:

- Wholesale distributors (SIC Codes 5013 and 5014);
- Gasoline service stations (SIC Code 5541);
- Auto repair facilities (SIC Codes 7532, 7533, 7534, 7536, 7537, 7538, 7539).