



Notice to Land Development Project Applicants

Additional, New Storm Water Use and Treatment Requirements Will Go Into Effect December 1, 2011

Additional, new, regional requirements mandated by the Regional Water Quality Control Board (Water Board) will affect land development projects beginning December 1, 2011. The following is a summary of applicable new requirements in the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit ("Municipal Regional Permit"). The requirements have also been incorporated into Palo Alto Municipal Code Chapter 16.11 (Storm Water Pollution Prevention).

New Restrictions on Methods of Stormwater Treatment

Beginning December 1, 2011, all projects that are required to treat stormwater will need to treat the permit-specified amount of storm water runoff with the following low impact development methods: rainwater harvesting and reuse, infiltration, evapotranspiration, or biotreatment. However, biotreatment (filtering stormwater through vegetation and soils before discharging to the storm drain system) will be allowed only where harvesting and reuse, infiltration and evapotranspiration are infeasible at the project site. Draft criteria for determining infeasibility have been developed and are being reviewed by Water Board staff (inquire with Public Works staff for the latest information). ***Vault-based treatment will not be allowed as a stand-alone treatment measure.*** Where stormwater harvesting and reuse, infiltration, or evapotranspiration are infeasible, vault-based treatment measures may be used in series with biotreatment, for example, to remove trash or other large solids.

Reference: Palo Alto Municipal Code Section 16.11.030(c)

New Rules for Auto Service Facilities, Retail Gasoline Outlets, Restaurants, and Uncovered Parking

Beginning December 1, 2011, projects that create and/or replace 5,000 square feet or more of impervious surface related to auto service facilities, retail gasoline outlets, restaurants, and/or surface parking will be required to provide low impact development treatment of stormwater runoff. ***This requirement will apply to uncovered parking built as a stand-alone project or included as part of any other development project.*** For all other land use categories, 10,000 square feet will remain the regional threshold of impervious surface area for requiring low impact development, source control, site design, and stormwater treatment measures.

Reference: Palo Alto Municipal Code Section 16.11.020(b)

Will These Requirements Affect My Project?

- If you submitted a development application that was deemed complete before December 1, 2009, and have "diligently pursued" the project, the additional, new requirements will not affect your project.
- If you submit a development application that is deemed complete after December 1, 2009, the additional, new requirements will not apply if the development application receives final discretionary approval before December 1, 2011.
- In all other cases, the additional, new requirements will apply.



Changes to Stormwater Quality Control Requirements

Information for Developers, Builders and Project Applicants

Santa Clara Valley Urban Runoff Pollution Prevention Program

July 2011

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 new Municipal Regional Stormwater Permit, issued by the Regional Water Quality Control Board (Water Board) in October 2009.

Overview of Stormwater Requirements

During development review, local agencies require projects to include stormwater controls, including site design measures, source controls, treatment measures, low impact development measures, hydro-modification management measures, and construction site practices, as appropriate for the project. Many of these requirements have existed for years and are unchanged. New requirements are described in the bar at right.

Site Design for Water Quality

Site design measures to reduce water quality impacts include:

- Preserve existing vegetation;
- Reduce impervious surfaces;
- Direct runoff from impervious surfaces to vegetated areas.

Source Controls

Source controls prevent potential pollutant sources from

contacting rainfall and stormwater. Examples include:

- Roofed trash enclosures.
- Covered outdoor materials handling and storage areas.
- Sanitary sewer drains for vehicle wash areas.

Contact your local agency for appropriate source control measures.

Summary of New Requirements

The following requirements begin December 1, 2011:

- *Stormwater treatment requirements will have to be met using infiltration, evapotranspiration, and/or rainwater harvesting and reuse techniques. Where this is infeasible, landscape-based "biotreatment" measures with underdrains may be used.*
- *The threshold for requiring stormwater treatment will drop from 10,000 to 5,000 square feet, or more, of impervious surface for the following project categories: uncovered parking areas (stand-alone or the top level of a parking structure), restaurants, auto service facilities, and retail gasoline outlets.*

Stormwater Treatment

Stormwater treatment measures are systems designed to remove pollutants before stormwater reaches the

storm drain system, and ultimately San Francisco Bay. Examples of landscape treatment measures include:

- Bioretention areas / rain gardens,
- Flow-through planters,



Roof runoff is directed onto landscaping for infiltration in San Jose

- Vegetated swales.

Since 2006, projects that create and/or replace 10,000 square feet or more of impervious surface have been required to have properly-sized, permanent stormwater treatment measures. Starting December 1, 2011, new stormwater treatment requirements, described in the center bar, will go into effect.

Low Impact Development

The goal of low impact development (LID) is to reduce stormwater runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, evapotranspiring (evaporating stormwater into the air directly or through plant transpiration), and/or

biotreating stormwater runoff close to its source, or onsite.

LID reduces water quality impacts by preserving and re-creating natural landscape features, minimizing imperviousness, and using stormwater as a resource, rather than a waste product. This may be accomplished by installing rain barrels or cisterns, green roofs, permeable pavement, or stormwater treatment measures designed to infiltrate or detain stormwater runoff, so that all of the rainwater runoff required to be treated per the stormwater permit soaks into the ground, is stored for irrigation or in-building use, evaporates, or is taken up by plants. If this is infeasible, landscape-based “biotreatment,” such as a bioretention area or vegetated swale with an underdrain system that flows to the storm drain, is allowed.



This modular rainwater cistern was placed underground to collect runoff from impervious surfaces for reuse as landscaping irrigation at a private residence in Palo Alto.

Criteria to determine feasibility are scheduled to be available mid-2011. The use of vault-based treatment systems will be restricted, although regional criteria may allow them in limited types of projects. More information on new, additional requirements for stormwater treatment is provided on the Santa Clara Valley Urban Runoff Pollution Prevention Program’s (SCVURPPP’s)

New Development webpage (see contact information).

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 in runoff characteristics 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, increases impervious surface area over the pre-project condition, AND is located in a susceptible area, HM requirements apply. You can view a map of susceptible areas and a fact sheet on HM requirements on the SCVURPPP New Development webpage.

Maintaining Treatment and HM Measures

Stormwater 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 designates responsibility to the property owner.

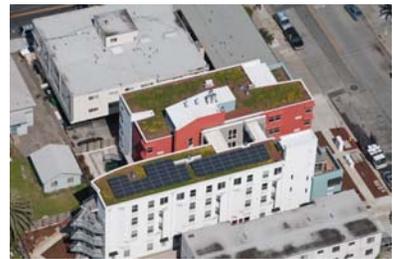
Construction Site Controls

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

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

Projects disturbing one acre or more must comply with the Statewide Construction General Permit. For more information, visit this web site:

www.swrcb.ca.gov/water_issues/programs/stormwater/construction.shtml



A green roof filters stormwater and provides endangered species habitat in San Jose

What is Required for My Project?

Check with the city or county where your project is located for specific application requirements, and more information on whether the new requirements will apply.

Contact Information

- SCVURPPP: (408) 720-8811, www.scvurppp.org
- See SCVURPPP’s New Development webpage for municipal contacts.
- For SCVURPPP’s New Development webpage, go to www.scvurppp.org, click on Program Components, then New Development and Redevelopment.
- San Francisco Bay Regional Water Quality Control Board: (510) 622-2300