

Stormwater Pollution Control Requirements

What Developers, Builders and Project Applicants Need to Know

It's Federal Law

Urban stormwater runoff is a significant source of pollution to the nation's waters. In 1987 Congress began to address this problem by requiring municipalities with storm drain systems to obtain National Pollutant Discharge Elimination System (NPDES) permits. This resulted in local requirements for control of runoff from development projects.

The Countywide Urban Runoff Program

In the Santa Clara Valley, development projects must comply with the NPDES permit issued to the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) by the Regional Water Quality Control Board and its amendments. SCVURPPP is an association of 13 cities in Santa Clara Valley, Santa Clara County, and the Santa Clara Valley Water District that share these permit requirements.

Summary of Requirements

Local agencies are required to address protection of stormwater quality during development review. The following requirements apply to *all projects regardless of size*, as appropriate:

- Construction-phase best management practices (BMPs).
- Post-construction site design measures to maximize infiltration in pervious areas.
- Post-construction source control measures to help keep pollutants out of stormwater.

The requirements listed below apply to certain projects *based on project size and/or location*:

- Post-construction stormwater treatment measures are required for most projects with 10,000 square feet or more of impervious surface.
- Post-construction stormwater quantity (flow peak, volume and duration) controls are required for projects in certain locations with 1 acre or more of impervious surface, in accordance with SCVURPPP's Hydromodification Management Plan (HMP).

Site Design for Water Quality

Some of the many ways to reduce water quality impacts through site design include:

- Reduce impervious surface area;
- Drain rooftop downspouts to lawns or other landscaping; and
- Use landscaping as a storm drainage and treatment feature for paved surfaces.



Parking lot runoff drains to a detention basin in Palo Alto.

What is Source Control?

Source control is all about keeping potential pollutants away from stormwater. Some source control measures include:

- Roofs over trash enclosures and loading docks;
- Sanitary sewer drains in covered parking structures and vehicle washing areas; and
- Indoor wash racks for mats and equipment.

What's Required During Construction?

Many contractors are familiar with BMPs that are required at project sites, including:

- Prepare and implement sediment and erosion control plans;
- Control exposed soil by stabilizing slopes; and
- Control sediment in runoff using sand bag barriers or straw wattles.

Projects that disturb one acre or more of land are subject to an NPDES General Construction Activity Permit and must submit a Notice of Intent to the State Water Resources Control Board.

Stormwater Treatment Measures

Stormwater treatment measures are facilities designed to remove pollutants from stormwater before it reaches the storm drain system, creeks and the Bay. Examples include:

- Vegetated swales,
- Detention basins, and
- Detention and infiltration areas in landscaping.

Treatment measures must be hydraulically sized to treat a specified amount of runoff. And they need ongoing maintenance to continue working properly. During development review, applicants must identify and record the responsible party and funding mechanism for long-term maintenance and assure access to the treatment system to verify maintenance.

Stormwater Quantity Controls

Creek beds and banks can become damaged when the rate and volume of runoff increase, as often occurs when land is developed. In the past, these increases in runoff have caused excessive erosion, sedimentation, and destruction of habitat. To help prevent this, SCVURPPP has prepared a Hydromodification Management Plan (HMP), which identifies areas susceptible to development-induced erosion. In these areas, projects that create one acre or more of impervious surface are required to retain, detain or infiltrate runoff to match pre-project flows and durations. In some cases, projects may be allowed to meet the HMP requirements by helping fund in-stream or regional solutions.



Turf block fire access road, Santa Clara

Projects that May Be Exempt¹

- One single family home that includes appropriate stormwater control measures.
- Sidewalks, bicycle lanes, trails, bridge accessories, guardrails, and landscape features that are part of street, road, highway, and freeway projects under the Dischargers' jurisdiction. These are not exempt in commercial, industrial, or residential developments.
- Interior remodels and routine maintenance or repair, and any other reconstruction work within a public street or road right-of-way are excluded.

Resources on the Web

The following resources provide useful information for selecting and incorporating stormwater controls in development projects.

C.3 Stormwater Handbook, SCVURPPP, 2004. http://www.eoainc.com/c3 handbook final may2004/

Developments Protecting Water Quality: A Guidebook of Site Design Examples, SCVURPPP, 2004. http://www.scvurppp-w2k.com/permit_c3_docs/SCVURPPP_Site_Design_Manual.pdf

Hydromodification Management Plan – Final Report, SCVURPPP, April 2005. http://www.eoainc.com/hmp_final_draft

Stormwater BMP Handbook – New Development and Redevelopment, California Stormwater Quality Association, 2003. http://www.cabmphandbooks.org/Development.asp

Contacts for More Information:

- Your local stormwater program links available at: http://www.scvurppp-w2k.com/Copermittee.htm
- SCVURPPP, at (408) 720-8833, or http://www.scvurppp.org
- San Francisco Bay Regional Water Quality Control Board at (510) 622-2300. Ask for staff responsible for Santa Clara Valley stormwater program.

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¹ See permit Provision C.3 for details of Group 1 and 2 definitions and exemptions.