

FREQUENTLY ASKED QUESTIONS - Revised on 9/10/2009
Planning and Land Development / New Construction
Ventura County NPDES (MS4) Stormwater Permit
(Order No. R4-2009-0057)

The new Municipal Stormwater NPDES Permit was adopted May 7, 2009. The page numbers shown in () are from the Final Version of the Permit available on the Los Angeles Regional Water Quality Control Board's website at:

http://www.swrcb.ca.gov/rwqcb4/water_issues/programs/stormwater/municipal/index.shtml

The Planning & Development FAQ's are subject to change until the Regional Board Executive Officer approves the changes to the Technical Guidance Manual.

	<u>Page</u>
1. Planning and Land Development	2
When will new and re-development projects be expected to meet the new permit regulations?	2
What projects will have to meet the new requirements?	2
What is the Technical Guidance Manual?	2
What can Developers do now?	2
What is Low Impact Development (LID) in this permit?	2
What is Effective Impervious Area (EIA)?	3
What is the general LID design process under the new Permit?	3
Who can certify LID feasibility?	3
What is the design storm for LID design?	4
What off-site mitigation and alternative possibilities are there?	4
How does this Permit affect watershed planning?	4
What can Cities do in advance of the Effective Date?	4
2. New Construction Requirements	4
How has the SWPPP process been changed in the new permit?	4
What are new BMPs for High Risk Sites (Steep hillsides, ESA, 303(d) listed)?	5
How are Capital Improvement Projects (CIPs) treated?	5

ATTACHMENTS:

- Attachment A Projects that Trigger the New Permit Requirement May 7, 2009 Final Permit (Order No. R4-09-0057)
- Attachment B Watersheds and Sub-Watersheds in the Los Angeles Region Basin Plan

1. Planning and Land Development

When will new and re-development projects be expected to meet the new permit regulations?

The effective date for the Planning and Land Development Section is 90 days after the Regional Board approves the new Technical Guidance Manual (TGM) that the cities and county are developing to assist developers with compliance. This date is estimated as approximately August, 2010 (see page 64). Plans that are completed before August 2010 are still required to meet the requirements of the 2000 Permit. Completed plans are defined in the new permit as those "Deemed Complete" for processing by the local agency or that have "Vested Tentative Maps" or Tentative Maps with a valid time extension. (See page 65, top).

What projects will have to meet the new requirements?

The applicability requirements are shown in Attachment "A" and in the Permit (Page 62-63 for new development, and redevelopment on page 64). This list has changed since the previous (2000) permit.

What is the Technical Guidance Manual?

A Technical Guidance Manual (TGM) was developed in 2002 for the previous permit to explain how to design and implement a variety of specific LID and Best Management Practices (BMPs) for the treatment of storm water utilizing source control, site design and structural treatment control. The 2002 TGM will be updated for the new permit requirements to provide cost effective strategies to successfully meet the latest storm water quality improvement goals. The new TGM will also provide alternative compliance measures where LID is infeasible or limited.

When will the Technical Guidance Manual be available?

The Co-Permittees are required to have a final submittal of the TGM to the Regional Board by May 6, 2010. At that point the Regional Board may have a public review period before adoption.

What can Developers do now?

1. For projects that are not likely to be "deemed complete" before August 2010, the applicants should prepare plans to meet the requirements of the new 2009 Permit. Until the new Ventura County TGM is adopted, the BMP lists from the County of Los Angeles LID manual, County of San Diego LID manual, CASQA manual, ASCE database and others can be used in combination with an engineering analysis to assure compliance with the Ventura County permit requirements.
2. Projects "deemed complete" before August 2010, can utilize the 2002 TGM and must continue to meet the requirements of the 2000 Permit.

What is Low Impact Development (LID) in this permit?

In general, LID is a strategy to limit runoff from new development and redevelopment to mimic pre-development* runoff (See Purpose section on Page 61-62, and definition of LID on Page 115). There are various ways to design and implement LID principles that will be detailed in the TGM.

The core LID requirements in the new Permit are to:

1. Mimic pre-development runoff

2. Limit effective impervious area (EIA) to 5% for new development and up to 30% for redevelopment (where 5% is not feasible or off-site mitigation is used).
3. If 5% EIA is not feasible, the project must reduce %EIA to as close to 5% as feasible, and no more than 30% of the total project area.
4. Off-site mitigation is required for the volume of stormwater from the design storm that cannot be retained on-site within the 5% EIA limitations. See off-site mitigation FAQ.
5. Any design storm volume runoff from the impervious area of the site needs to be treated.

* Pre-development means native vegetation and soils that existed at a site prior to first development. The pre-developed condition may be assumed to be an area with the typical vegetation, soil, and storm water runoff characteristics of open space areas in coastal Southern California unless reasonable historic information is provided that the area was atypical.

What is Effective Impervious Area (EIA)?

This is the portion of the total project area that cannot absorb storm water runoff, expressed as a percentage. Impervious surfaces may be rendered “ineffective” if the stormwater runoff is fully retained onsite. In other words, any impervious area can become effectively pervious that collects and fully retains the design storm. For example, a parcel with 5% EIA in the Ventura County Permit means that the design storm runoff from 95% of the impervious area is retained – either infiltrated, reused, evapotranspired, or in some way used – on-site.

What is the general LID design process under the new Permit?

- Check to see if area of disturbance and type of project qualifies for the new permit regulations (see Attachment A).
- Review site for drainage early in the planning and conceptualizing process.
- Arrange the site plan so that EIA is limited to 5% for new development; or limited to 30% for redevelopment or cases when off-site mitigation is used. In all cases EIA can be no more than 30%.
- Applicant must certify in a professional report if 5% EIA and complete capture of the design storm by LID on-site is not feasible. Remaining runoff would require bio-filtration or other treatment, and off-site mitigation projects.
- Feasibility for LID may be limited by:
 - o High seasonal groundwater - within 5 feet
 - o Areas within 100 feet of a groundwater water well used for drinking water
 - o Brownfield development
 - o Geotechnical hazards
 - o Smart Growth and infill
 - o Other site constraints identified in the TGM update.
- Cost effective strategies are possible by considering the integration of water quality treatment and LID BMPs.

Note: Design drainage and LID features to capture small storms on site support *Leadership in Energy and Environmental Design (LEED)* Green Building Rating System, and green architecture award points.

Who can certify LID feasibility?

A licensed professional engineer, geologist, architect, and/or a landscape architect can certify LID feasibility in a report (page 66).

What is the design storm for LID design?

The set of design storms from the current Ventura County Storm Water Quality Urban Impact Mitigation Plan (SQUIMP) is used in the new permit. The new permit uses runoff volume:

- 85th percentile 24-hour runoff event using a 48 to 72-hour draw down time, or
- Runoff based on unit basin storage volume per 2002 Technical Guidance Manual, or
- Runoff from 0.75-inch storm

The applicant can choose one of the above listed methods, but must demonstrate how it is applied in LID retention volume and Post-construction BMP sizing calculations.

What off-site mitigation and alternative possibilities are there?

Alternative Compliance is described in the Permit (Page 66) when on-site LID BMPs to meet the 5% EIA are not feasible. Feasibility is determined by a professional report. Mitigation off-site is required for the portion of the design storm volume that cannot be infiltrated or reused on-site. For example if an EIA of 28% is the best that can be obtained on-site, the difference of 28% (actual EIA) and 5% (the EIA requirement) is 23% EIA. Then the design storm runoff volume from 23% of the total project area would need to be mitigated off-site (pg 67).

Each Co-Permittee will identify LID projects (public and/or private) that could be used to benefit the local sub-watershed by increasing infiltration (groundwater recharge), reuse, and evapotranspiration. Such measures may include bioretention, biofiltration, green streets projects, porous pavement or other BMPs.

The local sub-watershed where alternative compliance can occur is defined by the Basin Plan map shown in Attachment B. A mitigation alternative must be within the same sub-area as the proposed project on the Basin Plan sub-areas shown in Attachment B.

How does this Permit affect watershed planning?

The increased requirements for LID practices will tend to shift stormwater runoff toward mimicking pre-development* conditions in the watershed. Since there are places where LID infiltration or reuse is not practical, the off-site LID projects are an opportunity for watershed planning and to improve recharge for the watershed.

What can Cities do in advance of the Effective Date?

1. Prepare a new checklist for pre-project meetings and for those at the Permit Counter.
2. Prepare standard conditions that can be used under the new permit.
3. Notify interested parties
4. Explain the effective date to new project proponents.
5. Get training in LID and watershed planning.
6. Develop design and costs for off-site alternative LID projects.
7. Prepare a database for LID and other stormwater quality BMPs
8. Revise the Stormwater Ordinance to comply with the new Permit
9. Seek funding initiatives for stormwater treatment

2. New Construction Requirements

How has the SWPPP process been changed in the new permit?

The general process is the same, however, there is now a prescribed list of BMPs. The construction SWPPP is required to be signed by the agency before issuance of grading or construction permits. (See Pages 79-80).

What are the new BMPs for High Risk Sites (Steep hillsides, ESA or 303(d) listed sites)?

Enhanced BMPs are described for high risk sites which include hillsides as designated by the agency (usually 20% or 25% slope depending on local ordinance), areas within or directly discharging to environmentally sensitive area (ESA), and sites that directly discharge to a water body listed on the 303(d) list for siltation or sediment. See pages 77-78 for BMP list and pages 111-113 for definitions of "hillsides", "ESAs", and "directly discharging".

How are Capital Improvement Projects (CIPs) treated?

Effective August 5, 2009, public agency projects that are part of a CIP that disturb less than one acre of soil must develop and implement a Stormwater Pollution Control Plan (SWPCP) (page 84). A Public Project SWPCP template will be available for download at vcstormwater.org. Public projects that disturb one acre or greater of soil are subject to the State General Construction NPDES Permit (GCP) requirements and must provide a Stormwater Pollution Prevention Plan (SWPPP).

**Attachment A: Projects that Trigger the New Permit Requirement
May 7, 2009 Final Permit (Order No. R4-09-0057)**

1. New Development Projects:

- a) Development project subject to Permittee conditions and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:
 - 1) All development projects equal to 1 acre or greater of disturbed area and adding more than 10,000 square feet of impervious surface area.
 - 2) Industrial park 10,000 square feet or more of surface area.
 - 3) Commercial strip mall 10,000 square feet or more of impervious surface area
 - 4) Retail gasoline outlet 5,000 square feet or more of surface area.
 - 5) Restaurant (SIC 5812) 5,000 square feet or more of surface area.
 - 6) Parking lot 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces
 - 7) Streets, roads, highways, and freeway construction of 10,000 square feet or more of impervious surface area shall incorporate USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets to the maximum extent practicable.
 - 8) Automotive service facilities (SIC 5013, 5014, 5511, 5541, 7532-7534 and 7536-7539) [5,000 square feet or more of surface area]
 - 9) Redevelopment projects in subject categories that meet Redevelopment thresholds (identified in subpart E.II.2 below)
 - 10) Projects located in or directly adjacent to, or discharging directly to an Environmentally Sensitive Area (ESA), where the development will:
 - (A) Discharge storm water runoff that is likely to impact a sensitive biological species or habitat; and
 - (B) Create 2,500 square feet or more of impervious surface area.
 - 11) Single-family hillside** homes. To the extent that a Permittee may lawfully impose conditions, mitigation measures or other requirements on the development or construction of a single-family home in a hillside area as defined in the applicable Permittees Code and Ordinances, each Permittee shall require that during the construction of a single-family hillside home, the following measures to be implemented:
 - (A) Conserve natural areas
 - (B) Protect slopes and channels
 - (C) Provide storm drain system stenciling and signage
 - (D) Divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability
 - (E) Direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability.

*Note: ** Hillside means property with known erosive soil conditions, and with grading on any slope greater than 20% or greater, or area designated by the Municipality as a "hillside area"*

2. Redevelopment Projects

- a) Redevelopment projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s) are:
 - 1) Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface are on an already developed site on development categories identified in subpart 4.E.III.1.(a)-(c).
 - 2) Where Redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development and the existing development was not subject to post development storm water quality control requirements, the entire project must be mitigated.
 - 3) Where Redevelopment results in an alteration to less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post development storm water quality control requirements, only the alteration must be mitigated, and not the entire development.
- b) Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement such as the reconstruction of parking lots and roadways which does not disturb additional area and maintains the original grade and alignment, is considered a routine maintenance activity. Redevelopment does not include the repaving of existing roads to maintain original line and grade.
- c) Existing single-family dwelling and accessory structures are exempt from the Redevelopment requirements unless such projects create, add, or replace 10,000 square feet of impervious surface area.

Attachment B: Watersheds and Sub-Watersheds in the Los Angeles Region Basin Plan

