Ventura Countywide Stormwater Quality Management Program Technical Guidance Manual Revision

Stakeholder Meeting
January 6, 2010
Introduction

- 2 Flow Charts:
  - Technical Guidance Manual (TGM) Process
  - Alternative Compliance
- Establishes a framework and decision process to address permit requirements
- Purpose today is to provide an overview
DRAFT 2010 TGM Process Flow Chart

START:
Step 1: Determine Project Applicability. Does the project meet any of the categories defined in Table X? (See Section 1.4)

Is the Project a Single-Family Hillside Home or Streets, Roads, Highways and Freeway Construction ≥ 10,000 ft² of Impervious Cover?

Step 2: Collect Site Information (See Section 3)

Step 3: Apply Site Design Controls (See Section 4)

Step 4: Apply Source Controls (See Section 5)

Step 5: Determine 5% EIA Volumetric Retention Requirement (Section 2.3)

Step 6: Apply Infiltration, Rainwater Harvesting, and/or Evapotranspiration BMPs (See Section 6.3 – 6.5)

Step 7: Submit Maintenance Plan (Section 7)

Redevelopment or Infill Project?

Alternative Compliance (See Figure Y)

Continue Project Design Process

Meet or Exceed Volumetric Retention Requirement?

Iterative Process – Can the Requirement be Met with a Different Combination of Infiltration, Rainwater Harvesting, and/or Evapotranspiration BMPs?*

Yes

Apply Treatment Control BMPs Per Prioritization to Treat Remaining SQDV (See Section 6.6 – 6.9)

No

Redevelopment or Infill Project?

Step 6: Apply Infiltration, Rainwater Harvesting, and/or Evapotranspiration BMPs (See Section 6.3 – 6.5)

No

Yes

Apply Treatment Control BMPs Per Prioritization to Treat Remaining SQDV (See Section 6.6 – 6.9)

Is Project Located within an Approved RPAMP?

Yes

See Specific Requirements Outlined within RPAMP

No

Stormwater Agency Staff Review

Stormwater Controls May be Required

Provide Specified Stormwater Controls

Yes

No

Is the Project a Single-Family Hillside Home or Streets, Roads, Highways and Freeway Construction ≥ 10,000 ft² of Impervious Cover?

No

Yes

See Specific Requirements Outlined in Sections 2.5 and 2.60

*If after several iterations, a new development project is still unable to meet 5% EIA, then the applicant may have to examine other options such as redesigning the site.
2010 TGM Step-by-Step Process

- Steps roughly correspond to Sections in Draft 2010 TGM Outline
- Each step references section where more information will be provided
2010 TGM Step-by-Step Process

1. Determine if Project is Subject to TGM
   - Permit Project Categories
   - Within RPAMP
   - Single-Family Hillside Home or Street, Road and Highway ≥ 10,000 ft²

   **Step 1: Determine Project Applicability.**

   - Yes: Is Project Located within an Approved RPAMP?
     - Yes: See Specific Requirements Outlined within RPAMP
     - No: Stormwater Agency Staff Review
   - No: Stormwater Controls May be Required
     - Provide Specified Stormwater Controls

   **Single-Family Hillside Home or Streets, Roads, Highways and Freeway ≥ 10,000 ft² of Impervious Cover?**

   - Yes: See Specific Requirements Outlined in Sections 2.5 and 2.6
2010 TGM Step-by-Step Process

2. Collect Site Information
   • Understand conditions and constraints onsite
   • Site conditions (topo, soils), nearby waterbodies, etc.

3. Apply Site Design Controls
   • LID Considerations Early in Site Planning Process
4. Apply Source Controls

● Same as 2002 TGM
  ■ Storm Drain Signage, Fueling Area Design, etc.

Step 4: Apply Source Controls
(See Section 5)
2010 TGM Step-by-Step Process

5. Determine 5% EIA Volumetric Retention Requirement

- According to Permit: impervious surfaces shall be rendered ineffective if properly sized to infiltrate, store for reuse or evapotranspire without any runoff (aka retain) from the water quality design event
- Intent is to use Volume as the surrogate

Step 5: Determine 5% EIA Volumetric Retention Requirement (Section 2.3)
6. Apply Infiltration, Rainwater Harvesting, and/or Evapotranspiration BMPs

- Use combination of these types of BMPs to chip away at EIA Volumetric Retention Requirement
- Set up a crediting-type system to help user calculate how much volume a particular BMP is retaining

Step 6: Apply Infiltration, Rainwater Harvesting, and/or Evapotranspiration BMPs
(See Section 6.3 – 6.5)
2010 TGM Step-by-Step Process

Meet or Exceed Volumetric Retention Requirement?

- Yes: Apply Treatment Control BMPs Per Prioritization to Treat Remaining SQDV (See Section 6.6 – 6.9)
- No: Iterative Process – Can the Requirement be Met with a Different Combination of BMPs?*
  - Yes: Apply Treatment Control BMPs Per Prioritization to Treat Remaining SQDV (See Section 6.6 – 6.9)
  - No: Redevelopment or Infill Project?
    - Yes: Alternative Compliance (See Figure Y)
    - No: Yes

* Iterative Process – Can the Requirement be Met with a Different Combination of BMPs?

Redevelopment or Infill Project?

- Yes: Alternative Compliance (See Figure Y)
- No: Yes

Apply Treatment Control BMPs Per Prioritization to Treat Remaining SQDV (See Section 6.6 – 6.9)
Iterative Process:

- If Volumetric Retention Requirement cannot be met, try again
- New Development/Greenfield Development must meet Retention Requirement
  - If Requirement cannot be met, applicant may have to redesign site
- Infill and Redevelopment Projects may be eligible for Alternative Compliance
2010 TGM Step-by-Step Process

- Regardless of Volumetric Retention Requirement, SQDV must be captured and treated for disturbed project area

- BMP Prioritization:
  - Infiltration
  - Storage for Use
  - Evapotranspiration
  - Biofiltration
  - Proprietary LID Products

7. Submit Maintenance Plan

Step 7: Submit Maintenance Plan (Section 7)
Continue Project Design Process
Is it Feasible to Retain Volume to Achieve 30% EIA?

Yes

Submit Professional Report that Documents Infeasibility Meeting 5% EIA Volumetric Retention Requirement (See Section 3.3)

No

Redesign Site for Project Compliance

Apply Treatment Control BMPs Per Prioritization to Treat Remaining SQDV (See Section 6.6 – 6.9)

Determine "Mitigation Volume" (Difference between 5% EIA Volumetric Retention Requirement and Amount Feasibly Retained Onsite) (See Section 2.3)

Offsite Mitigation
- Retain Mitigation Volume at an Offsite Location
- Mitigation Must be Located within Same Subwatershed as Proposed Development Project (see Map)
- Contact Local Agency Before Proceeding (See Section 2.4)
Alternative Compliance

- May be eligible if your site is infill or redevelopment
- Must retain maximum amount feasible
- 30% EIA Cap

Calculate the Maximum Feasible Onsite Retention Volume

Is it Feasible to Retain Volume to Achieve 30% EIA?
Alternative Compliance

- If 30% EIA cannot be met, applicant may have to redesign the site

Is it Feasible to Retain Volume to Achieve 30% EIA?

No

Redesign Site for Project Compliance
Alternative Compliance

- Document infeasibility in Report
- Infeasibility criteria to be spelled out in Section 3.3
- SQDV must still be met for disturbed project area

Submit Professional Report that Documents Infeasibility Meeting 5% EIA Volumetric Retention Requirement
(See Section 3.3)

Apply Treatment Control BMPs Per Prioritization to Treat Remaining SQDV
(See Section 6.6 – 6.9)
Alternative Compliance

- Determine “Mitigation Volume”
  - Difference Between 5% Volumetric Retention Requirement and Amount Feasibly Retained Onsite
- Will provide example calculation in TGM

Determine “Mitigation Volume”
(Difference between 5% EIA Volumetric Retention Requirement and Amount Feasibly Retained Onsite)
(See Section 2.3)
Alternative Compliance

Offsite Mitigation

- Mitigation Volume must be retained at offsite location
- Must be within same subwatershed

**Offsite Mitigation**

- Retain Mitigation Volume at an Offsite Location
  - Mitigation Must be Located within Same Subwatershed as Proposed Development Project (see Map)
  - Contact Local Agency Before Proceeding (See Section 2.4)