

US EPA ARCHIVE DOCUMENT

## Program Review Report

### Ventura Countywide Storm Water Quality Urban Impact Mitigation Plan (SQUIMP) Evaluation (Board Order No. 00-108; NPDES Permit No. CAS004002)

#### Executive Summary

The Los Angeles Regional Water Quality Control Board, with assistance from Tetra Tech, Inc., through a U.S. EPA contract, conducted a program evaluation of the Ventura Countywide Storm Water Quality Storm Water Quality Urban Impact Mitigation Plan (SQUIMP) requirements in August 2004. The primary purpose of the program evaluation was to determine each permittee's implementation of the Planning and Land Development and SQUIMP requirements described in the Ventura County Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit. Secondary goals included collection of information for permit reissuance and to assist all permittees in implementation of the SQUIMP requirements. The first program evaluation conducted the week of August 9<sup>th</sup> focused on nine of the 12 co-permittees – the cities of Fillmore, Moorpark, Port Hueneme, Ojai, Oxnard, Santa Paula, Simi Valley, the County of Ventura, and the Ventura County Watershed Protection District.

This program evaluation report identifies potential permit violations, program deficiencies, and positive attributes. Program deficiencies represent areas of significant concern for successful program implementation. Positive attributes are indications of the co-permittee's overall progress in implementing a development planning program to address storm water discharges.

Several program deficiencies applied to some degree to all of the permittees evaluated:

- The permittees need to develop systems for tracking SQUIMP projects and BMPs.
- The permittees should begin to collect data to determine the effectiveness of BMPs approved under the SQUIMP requirements.
- The permittees should focus more matching BMPs with pollutants of concern (POCs).
- The permittees should add projects subject to the State's Construction General Permit to the list of projects subject to SQUIMP requirements.

The following potential permit violation was identified:

- In Ventura County, at least one project was conditioned with SQUIMP requirements but failed to submit a SQUIMP plan.



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## **1.0 Introduction**

### **1.1 Program Evaluation Purpose**

The primary goal of the program evaluation was to determine each permittee's implementation of the Planning and Land Development and SQUIMP requirements in the NPDES permit (Board Order 00-108 and EPA NPDES Permit No. CAS004002) and the Ventura Countywide Storm Water Management Plan (Ventura County SMP). Secondary goals included the following:

- Acquire data to assist in reissuing the permit;
- Identify and document positive elements of the program that could benefit other Phase I and Phase II municipalities; and
- Review the overall effectiveness of the program.

40 CFR 122.41(i) and Part 6.H of the NPDES permit provide the authority to conduct the program evaluation.

The Program includes 12 co-permittees with the Ventura County Watershed Protection District serving as the Principal Co-permittee. The first program evaluation conducted the week of August 9<sup>th</sup> included the Planning and Land Development programs of nine of the 12 co-permittees – cities of Fillmore, Moorpark, Port Hueneme, Ojai, Oxnard, Santa Paula, Simi Valley, the County of Ventura, and the Ventura County Watershed Protection District.

### **1.2 Permit History**

The NPDES permit was issued on July 27, 2000, and is scheduled to expire on July 27, 2005. This is the second NPDES permit issued to the co-permittees under the storm water Phase I regulations.

### **1.3 Logistics and Program Evaluation Preparation**

Before initiating the on-site program evaluation, Tetra Tech, Inc., conducted a review of available program materials. The goals for the file review were (1) to gain greater knowledge of the existing program, permit requirements, performance criteria, and past activities and (2) to prepare for on-site activities. The following materials were reviewed:

- Board Order 00-108, NPDES Permit No. CAS-004002;
- Ventura Countywide Storm Water Quality Management Program (November 2001);
- Storm Water Quality Urban Impact Mitigation Plan (SQUIMP);
- Technical Guidance Manual for Storm Water Quality Control Measures (July 2002);
- Annual Report for Year ending July 2003 (dated October 2003);
- County and co-permittee web sites; and
- File correspondence with the co-permittees and the permitting authority.

On August 9-August 12,2004, the Los Angeles Regional Water Quality Control Board (Regional Board), with assistance from Tetra Tech, Inc., conducted the program review. The program review schedule was as follows:

<b>Monday, August 9</b>	<b>Tuesday, August 10</b>	<b>Wednesday, August 11</b>	<b>Thursday, August 12</b>
<ul style="list-style-type: none"> <li>• City of Oxnard</li> <li>• City of Ojai</li> <li>• City of Port Hueneme</li> </ul>	<ul style="list-style-type: none"> <li>• City of Oxnard</li> <li>• City of Santa Paula</li> <li>• City of Moorpark</li> </ul>	<ul style="list-style-type: none"> <li>• Ventura County and Ventura County Watershed Protection District</li> <li>• City of Fillmore</li> <li>• City of Simi Valley</li> </ul>	<ul style="list-style-type: none"> <li>• Ventura County and Ventura County Watershed Protection District</li> <li>• Outbrief (all permittees)</li> </ul>

Upon completion of the evaluation, an exit interview was held with the co-permittees to discuss the preliminary findings. During the exit interview, the co-permittees were informed that the findings were to be considered preliminary pending further review by EPA and the Regional Board.

#### **1.4 Planning and Land Development and SQUIMP Requirements**

Part 4.C of the NPDES permit contains the requirements for Planning and Land Development Programs. There are six major requirements in this section of the permit, which are summarized below:

Part 4.C.1 - Requires the permittees to implement the approved Storm Water Quality Urban Impact Mitigation Plan (SQUIMP) by January 27,2001. The SQUIMP was included as Attachment A of the permit, and applies to the following development categories:

- Single-Family Hillside Residences
- 100,000 Square Foot Commercial Developments
- Automotive Repair Shops
- Retail Gasoline Outlets
- Restaurants
- Home Subdivisions with 10 or more housing units
- Location within or directly adjacent to or discharging directly to an environmentally sensitive area
- **Parking** lots with 5,000 square feet or more of impervious parking or access surfaces or with 25 or more parking spaces and potentially exposed to storm water runoff

Each of these development categories is required to meet nine different requirements, which include:

- Control of peak storm water runoff discharge rates
- Conserve natural areas
- Minimize **storm** water pollutants of concern
- Protect slopes and channels
- Provide storm drain system stenciling and **signage**
- Properly design outdoor material storage areas
- Properly design trash storage areas

- Provide proof of ongoing BMP maintenance
- Design standards for **structural** or treatment control **BMPs**

In addition, individual project categories including 100,000 square foot commercial developments, restaurants, retail gasoline outlets, automotive repair shops, and parking lots are required to follow additional provisions described in the **SQUIMP**.

Part 4.C.2 - Required the permittees to develop a technical manual by July 2002. The permittees met this requirement with the publication of the *Technical Guidance Manual for Stormwater Quality Control Measures (Technical Guidance Manual)*.

Part 4.C.3 –Required the permittees to identify by January 2001 specific environmentally sensitive areas in Ventura County. A map of environmentally sensitive areas was produced by the permittees and submitted to the Regional Board.

Part 4.C.4 – Requires the permittees to make appropriate modifications to their internal planning procedures for **preparing/reviewing** CEQA documents.

Part 4.C.5 – Requires the permittees to annually train employees in targeted positions regarding the requirements of the **SQUIMP**.

Part 4.C.6 –Requires the permittees to include watershed and storm water management considerations in the appropriate elements of the permittee's General Plan whenever the elements are significantly rewritten.

## **1.5 Program Areas Not Evaluated**

The following storm water quality management plan program areas were not evaluated during this review:

- Programs for Residents
- Programs for **Industrial/Commercial** Businesses
- Programs for Construction Sites
- Public Agency Activities
- Programs for **Illicit Discharges/Illegal** Connections
- Ordinances and Legal Authority

The following co-permittees were not evaluated during this review, and were evaluated separately by the Regional Board:

- City of Camarillo
- City of San Buenaventura
- City of Thousand Oaks

## **1.6 Program Areas for Additional Review**

The evaluation team recommends the following program areas for additional review:

An evaluation of each permittee's legal authority for implementing the Planning and Land Development (SQUIMP) requirements.

- A follow-up review of the County's and other city's SQUIMP review procedures that have not received many SQUIMP projects to date.
- An evaluation of each permittee's application of SQUIMP requirements in Environmentally Sensitive Areas (ESAs).

## 2.0 Program Evaluation Results

Evaluation results for each co-permittee are presented below and are organized by program area. The population, relative size, growth rates, business composition, and municipal resources vary considerably among the co-permittees.

As indicated in Section 1.0, the evaluation team did not review all components of each co-permittee's program. Therefore, the co-permittees should not consider the enclosed list of program deficiencies, or the evaluation report itself, as a shield against undetected violations nor as a comprehensive endorsement of individual program elements. This report does not preclude or in any way limit EPA's or the Regional Board's authority to identify additional program deficiencies and potential permit violations.

The most significant potential permit violations, program deficiencies, and positive attributes identified during the evaluation are listed in the Executive Summary and are identified below with text boxes.

### 2.1 City of Fillmore

#### 2.1.1 Evaluation of SQUIMP Program Management Deficiencies Noted:

- *The City should expand their system for tracking SQUIMP projects and BMPs.*

The City currently uses a system called "Development Activity List" to track development projects. The City should expand this system to track, for each SQUIMP project, the SQUIMP project category(ies) (i.e., restaurant, retail gasoline outlet, parking lot, etc.), the BMPs approved for that project, and information on maintenance of the BMPs such as required maintenance frequency, responsible parties, and when the last maintenance/inspection was performed.

- *The City should begin to collect data to determine the effectiveness of BMPs approved under the SQUIMP requirements.*

In order for the City to adequately review SQUIMP plans and BMPs, information on the effectiveness of those BMPs must be available. The City should work with other permittees and manufacturers of the proprietary treatment controls typically approved for use in the City to collect data on their **effectiveness** in the Ventura County area. Additional information on performance of treatment control BMPs can be found in Section 5.4 of the *California Stormwater BMP Handbook for New Development and Redevelopment*. Some examples of other programs and guidance that could be useful in this effort are listed below:

- Washington Chapter of APWA, "Protocol for the Acceptance of Unapproved Stormwater Treatment Technologies for use in the Puget Sound Watershed" (November 1999)  
<http://mrsc.org/Subjects/Environment/water/apwa/protocol.aspx>
- City of Sacramento's "Investigation of Structural Control Measures for New Development" (November 1999)  
<http://www.sacstormwater.org/const/manuals/dl-scm99.html>
- International Stormwater BMP Database <http://www.bmpdatabase.org/> A document on "Urban Stormwater BMP Performance Monitoring: A Guidance Manual for Meeting the National Stormwater BMP Database Requirements" is available on this site.
- EPA's Environmental Technology Verification (ETV) Program.  
<http://www.epa.gov/etv/index.html>

### 2.1.2 Evaluation of SQUIMP Plan Review

#### Deficiencies Noted:

- *The City should focus more matching BMPs with pollutants of concern (POCs).*

The SQUIMP requires all projects to "minimize storm water pollutants of concern." The SQUIMP describes this as requiring the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the maximum extent practicable. The City is not explicitly reviewing projects to ensure pollutants of concern and associated BMPs are identified in the SQUIMP projects. For each SQUIMP project reviewed, the City should ensure that pollutants of concern are clearly identified and specific BMPs to address those pollutants have been selected.

- *The City should add projects subject to the State's Construction General Permit to the list of projects subject to SQUIMP requirements.*

Regional Board resolution R-00-02 adopts the numerical mitigation standards (i.e., SQUIMP requirements) as the minimum design criteria for review of post-construction BMPs in the Los Angeles Region for construction projects subject to coverage under the Statewide Construction Storm Water Permit. This essentially requires all construction projects disturbing at least one acre to also comply with the SQUIMP requirements. The City currently does not include these projects in its screening for projects subject to SQUIMP requirements. The City should add these projects to the categories of projects subject to SQUIMP requirements.

- *The City lacked a formal process to verify design calculation for control measures required by the SQUIMP guidelines.*  
Although the SQUIMP allows permittees to accept a signed certification from a registered Civil Engineer in lieu of conducting a detailed review of BMP design, the



City is encouraged to begin conducting this review themselves. This will help ensure that BMP designs meet the standards set in the *Technical Guidance Manual*. At a minimum, the City should verify that certifying engineers have been trained on BMP design for storm water quality before accepting their design without review and strongly encourage projects to submit BMP designs using the forms provided in the *Technical Guidance Manual*.

- *The City lacked a formalized plan review process to assess SQUIMP requirements.* During in-office interviews, the evaluation team discovered that the City lacked a formalized set of procedures to conduct consistent SQUIMP reviews. Although the City staff responsible for SQUIMP review was a small group, the City should develop a formal set of procedures for SQUIMP review. The City uses the "SQUIMP Summary" sheet during reviews, but should expand this to include a checklist or similar form to help document the SQUIMP review process. The checklist should also document how projects meet SQUIMP provisions applicable to all project categories and requirements for a specific project category (if applicable).

This formal review process should also apply to larger projects that are reviewed by the City's consultant. This will provide the City with documentation and assurance that the consultant's review is consistent with how the City reviews SQUIMP projects.

### 2.1.3 Evaluation of SQUIMP Maintenance Program

#### Deficiency Noted:

- *The City lacked a formal process for tracking maintenance activities for all SQUIMP project BMPs.*  
The City lacked a formal process for verifying maintenance of all post-construction BMPs. During the evaluation, City staff explained that all post-construction BMPs, such as bio-swales and detention basins, are maintained and inspected by the City on an annual basis. The City was unable to produce a list or map of the approved BMPs that were annexed over to the City for maintenance and it was unclear whether the City had a formal maintenance schedule for all the SQUIMP approved BMPs. The City should develop a system to track BMPs, inspections, and maintenance, including schedules for required maintenance, to ensure that post-construction BMPs are adequately operating as designed. In order to correct this deficiency, all co-permittees are to put in place by November 15, 2004 a tracking system that will consist of the following at a minimum: BMP location, type of device, maintenance frequency, last maintenance date, responsible party for BMP, and type of SQUIMP project.

#### Positive Attribute:

- *The City requires maintenance easements for all projects that include SQUIMP designed BMPs.*  
Section E28 of the City's Standard Conditions states that "Prior to occupancy, the applicant shall annex the project into the City's Storm Drain Maintenance

Assessment District and shall reimburse the City all costs associated with the annexation.” Maintenance is conducted through the City maintenance district with the developer responsible for costs that are incurred. According to City staff, the Maintenance Assessment District has been in effect prior to SQUIMP requirements add has had no problems with ensuring the maintenance of BMPs.

## 2.1.4 Evaluation of SQUIMP Education and Training

### Deficiencies Noted:

- *The City lacks a formal process for training staff that review SQUIMP requirements.* Provision 4.C.5 requires the permittees to annually train employees in targeted positions regarding the requirements of the SQUIMP. The City conducts training during staff meetings but lacks a formal process to train applicable City staff appropriately about the review of SQUIMP plans. The City should develop a more formal training program for staff about requirements of the SQUIMP to ensure compliance with this permit provision.

## 2.2 City of Moorpark

### 2.2.1 Evaluation of SQUIMP Program Management

#### Deficiencies Noted:

- *The City should begin to collect data to determine the effectiveness of BMPs approved under the SQUIMP requirements.*

In order for the City to adequately review SQUIMP plans and BMPs, information on the effectiveness of those BMPs must be available. The City should proactively assess the effectiveness of the SQUIMP BMPs it approves. This could be accomplished by requiring the private landowners to track and submit data on the adequacy of the operation of their BMPs, including controls used on sites discharging storm water to impaired waters. Additional information on performance of treatment control BMPs can be found in Section 5.4 of the *California Stormwater BMP Handbook for New Development and Redevelopment*. See section 2.1.1 for several examples of other programs and guidance that could be useful in this effort.

- *The City should develop a system for tracking SQUIMP projects and BMPs.*

The City should develop a system to track, for each SQUIMP project, the SQUIMP project category(ies) (i.e., restaurant, retail gasoline outlet, parking lot, etc.), the BMPs approved for that project, and information on maintenance of the BMPs such as required maintenance frequency, responsible parties, and when the last maintenance/inspection was performed.

#### Positive Attributes:

- *The City effectively employs a consulting engineering firm to conduct plan review and to verify engineering (Hydraulics & Hydrology) calculations for SQUIMP flow-based requirements.*

The City has contracted with the same consulting engineering firm for the past 14 years, which has provided long-term continuity and consistency for building, safety, and public works review and inspection services. The consultant staff verify all engineering calculations of submitted SQUIMP plans to ensure that post-construction flow rates do not exceed pre-development runoff conditions.

*The City is proactive in encouraging the use of nonstructural BMPs and site design practices.*

The City requires SQUIMP projects to achieve a 'no net increase in flow' standard with regards to pre-construction and post-construction flow rates and encourages passive, open-channel BMPs, **and** the preservation of open space to meet SQUIMP requirements. The City also focuses on detention and metered discharge and requires a 7-minute contact time standard for grassed swales.

### 2.2.2 Evaluation of SQUIMP Plan Review

#### Deficiencies Noted:

- *The City should focus more on matching BMPs with pollutants of concern (POCs).*

The SQUIMP requires all projects to "minimize storm water pollutants of concern." The SQUIMP describes this as requiring the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the maximum extent practicable. The City is not explicitly reviewing projects to ensure pollutants of concern and associated BMPs are identified in the SQUIMP projects. For each SQUIMP project reviewed, the City should ensure that pollutants of concern are clearly identified and specific BMPs to address those pollutants have been selected.

- *The City should add projects subject to the State's Construction General Permit to the list of projects subject to SQUIMP requirements.*

Regional Board resolution R-00-02 adopts the numerical mitigation standards (i.e., SQUIMP requirements) as the minimum design criteria for review of post-construction BMPs in the Los Angeles Region for construction projects subject to coverage under the Statewide Construction Storm Water Permit. This essentially requires all construction projects disturbing at least one acre to also comply with the SQUIMP requirements. The City currently does not include these projects in its screening for projects subject to SQUIMP requirements. The City should add these projects to the categories of projects subject to SQUIMP requirements.

### 2.2.3 Evaluation of SQUIMP Maintenance Program

#### Deficiency Noted:

- *The City does not have a system in place to "ensure" that maintenance responsibilities for post-construction storm water BMPs are being met for residential developments.*

The City does not have an easily accessible set of records (i.e., tracking system) of the BMPs in place on private property. The City relies on maintenance agreements with commercial property owners and Covenants, Conditions, and Restrictions (C, C, & Rs) through homeowner's associations for residential developments. The City's Department of Public Works maintains a list of publicly owned/operated detention basins and performs annual inspection and maintenance (as well as after major storms), but no comparable system is in place for BMPs on private property. In order to correct this deficiency, all co-permittees are to put in place by November 15, 2004 a tracking system that will consist of the following at a minimum: BMP location, type of device, maintenance frequency, last maintenance date, responsible party for BMP, and type of SQUIMP project.

Positive Attribute:

- *The City has developed a series of "phantom" or potential assessment districts that could be used to recover costs incurred by the City in the event that BMP maintenance on private property is not performed adequately.*

The assessment districts are established on a basin-wide basis for each BMP that requires maintenance. If the private property owner(s) do not perform the necessary maintenance, the City would be able to enter the property, conduct the maintenance, and then bill (or ultimately attach a lien to) the private property owner(s) to recover the costs incurred.

#### 2.2.4 Evaluation of SQUIMP Education and Training

Positive Attributes:

- *The City provides educational brochures and storm water-related outreach materials to homeowner's associations and to construction operators.*

The City is currently working on incorporating storm water issues into their brochures for code compliance and has scheduled meetings with homeowner's associations (HOA) and HOA management companies to increase awareness of the responsibilities of private property owners with respect to NPDES storm water issues.

- *City staff involved in reviewing SQUIMP projects receive regular training on relevant topics.*

- During 2004, Planning and Development staff training included trash enclosures, natural versus mechanical BMPs, ensuring project plans provide adequate areas for SQUIMP controls, source control options, and standard conditions of approval. Engineering and inspection staff received training which addressed SQUIMP controls, grassy swale design criteria, BMP strategies for single family hillside residences, BMP maintenance and pollution prevention during the dry season, and rainy to dry season BMP transition.

## 2.3 City of Port Hueneme

### 2.3.1 Evaluation of SQUIMP Program Management

#### Deficiencies Noted:

- ***The City needs to develop a system for tracking SQUIMP projects and BMPs.***

The City should develop a system to track, for each SQUIMP project, the SQUIMP project category(ies) (i.e., restaurant, retail gasoline outlet, parking lot, etc.), the BMPs approved for that project, and information on maintenance of the BMPs such as required maintenance frequency; responsible parties, and when the last maintenance/inspection was performed.

- ***The City should begin to collect data to determine the effectiveness of BMPs approved under the SQUIMP requirements.***

In order for the City to adequately review SQUIMP plans and BMPs, information on the effectiveness of those BMPs must be available. The City should work with other permittees and manufacturers of the proprietary treatment controls typically approved for use in the City to collect data on their effectiveness in the Ventura County area. Additional information on performance of treatment control BMPs can be found in Section 5.4 of the *California Stormwater BMP Handbook for New Development and Redevelopment*. See section 2.1.1 for several examples of other programs and guidance that could be useful in this effort.

### 2.3.2 Evaluation of SQUIMP Plan Review

#### Deficiencies Noted:

- ***The City should focus more on matching BMPs with pollutants of concern (POCs).***

The SQUIMP requires all projects to "minimize storm water pollutants of concern." The SQUIMP describes this as requiring the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the maximum extent practicable. The City is not explicitly reviewing projects to ensure pollutants of concern and associated BMPs are identified in the SQUIMP projects. For each SQUIMP project reviewed, the City should ensure that pollutants of concern are clearly identified and specific BMPs to address those pollutants have been selected.

- ***The City should add projects subject to the State's Construction General Permit to the list of projects subject to SQUIMP requirements.***

Regional Board resolution R-00-02 adopts the numerical mitigation standards (i.e., SQUIMP requirements) as the minimum design criteria for review of post-construction BMPs in the Los Angeles Region for construction projects subject to coverage under the Statewide Construction Storm Water Permit. This essentially requires all construction projects disturbing at least one acre to also comply with the SQUIMP requirements. The City currently does not include these projects in its

screening for projects subject to SQUIMP requirements. The City should add these projects to the categories of projects subject to SQUIMP requirements.

*Based on the assessment of both completed/built SQUIMP projects, City staff does not check or verify developer's engineering calculations for SQUIMP projects. Although the SQUIMP allows permittees to accept a signed certification from a registered Civil Engineer in lieu of conducting a detailed review of BMP design, the City is encouraged to begin conducting this review themselves to verify that BMPs are adequately sized and designed as specified in the *Technical Guidance Manual*. At a minimum, the City should verify that certifying engineers have been trained on BMP design for water quality before accepting their design without review and strongly encourage projects to submit BMP designs using the forms provided in the *Technical Guidance Manual*.*

*City staff could benefit from using the SQUIMP Summary developed by the Program as a checklist or reminder to ensure that each applicable project is conditioned with appropriate BMPs. .*

*An appropriate checklist could be assembled from successful actual or "as built" projects that have worked best in the City, while taking into account the basis of the decision to approve the use of a given BMP (e.g., limitations of soils and the high groundwater tables and proximity to the ocean). The use of such a checklist would allow City staff to document and evaluate which SQUIMP BMPs are being required (or why a certain BMP is not being required) and what special circumstances are present guide successful BMP selection in the future.*

### 2.3.3 Evaluation of SQUIMP Maintenance Program

#### Deficiency Noted:

- *BMPs and maintenance are not tracked for private development.*  
The City should develop a system to track BMPs, inspections, and maintenance including schedules for when maintenance is required to ensure that post-construction BMPs are adequately operating as designed. In order to correct this deficiency, all co-permittees are to put in place by November 15,2004 a tracking system that will consist of the following at a minimum: BMP location, type of device, maintenance frequency, last maintenance date, responsible party for BMP, and type of SQUIMP project.

### 2.3.4 Evaluation of SQUIMP Education and Training

#### Deficiency Noted:

- *City building officials, construction inspectors, and code enforcement staff need additional training and improved coordination among each other.*  
The City lacks a formal process for training staff that review SQUIMP requirements. Although the City has only a small number of staff responsible for reviewing SQUIMP projects, a more formalized training providing a consistent educational message, a high level of understanding of SQUIMP requirements, and consistent plan

review process would be beneficial. It is recommended that the City develop a more formal and frequent training program for SQUIMP review staff.

## 2.4 City of Ojai

### 2.4.1 Evaluation of SQUIMP Program Management

#### Deficiencies Noted:

- ***The City needs to develop a system for tracking SQUIMP projects and BMPs.***

The City should develop a system to track, for each SQUIMP project, the SQUIMP project category(ies) (i.e., restaurant, retail gasoline outlet, parking lot, etc.), the BMPs approved for that project, and information on maintenance of the BMPs such as required maintenance frequency, responsible parties, and when the last maintenance/inspection was performed.

- ***The City should begin to collect data to determine the effectiveness of BMPs approved under the SQUIMP requirements.***

In order for the City to adequately review SQUIMP plans and BMPs, information on the effectiveness of those BMPs must be available. The City should work with other permittees and manufacturers of the proprietary treatment controls typically approved for use in the City to collect data on their effectiveness in the Ventura County area. Additional information on performance of treatment control BMPs can be found in Section 5.4 of the *California Stormwater BMP Handbook for New Development and Redevelopment*. See section 2.1.1 for examples of other programs and guidance that could be useful in this effort.

### 2.4.2 Evaluation of SQUIMP Plan Review

#### Deficiencies Noted:

- ***The City should focus more on matching BMPs with pollutants of concern (POCs).***

The SQUIMP requires all projects to "minimize storm water pollutants of concern." The SQUIMP describes this as requiring the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the maximum extent practicable. The City is not explicitly reviewing projects to ensure pollutants of concern and associated BMPs are identified in the SQUIMP projects. For each SQUIMP project reviewed, the City should ensure that pollutants of concern are clearly identified and specific BMPs to address those pollutants have been selected.

- ***The City should add projects subject to the State's Construction General Permit to the list of projects subject to SQUIMP requirements.***

Regional Board resolution R-00-02 adopts the numerical mitigation standards (i.e., SQUIMP requirements) as the minimum design criteria for review of post-construction BMPs in the Los Angeles Region for construction projects subject to coverage under the Statewide Construction Storm Water Permit. This essentially

requires all construction projects disturbing at least one acre to also comply with the SQUIMP requirements. The City currently does not include these projects in its screening for projects subject to SQUIMP requirements. The City should add these projects to the categories of projects subject to SQUIMP requirements.

*The City lacks formalized procedures for screening SQUIMP projects.*

Currently, there are two **projects** that have been subject to the SQUIMP review process (Ojai Valley Inn and the Los Arboles subdivision). During the **evaluation** team's document review it was not apparent that the two projects had been identified as SQUIMP projects and associated provisions applied as conditions to the project. It would benefit the continuity of the SQUIMP program for the City to develop a formalized guidance document to screen projects in the plan review process. The City should use the "SQUIMP summary" sheet provided in the *Technical Guidance Manual* which breaks down the SQUIMP categories, associated **provision(s)**, and BMP selection.

Additionally, it was unclear during the in-office evaluations how the City was screening the projects to determine whether the projects were in an environmentally sensitive area (ESA). Staff explained that the maps that were provided by the county did not show local **ESAs**. However, the Ojai Valley Inn project was the only project identified to have the potential to impact **an** ESA. A more in-depth evaluation of the project revealed that there were no special conditions placed on the project to address SQUIMP requirements and the projects encroachment upon the ESA.

### 2.4.3 Evaluation of SQUIMP Maintenance Program

#### Deficiency Noted:

- *The City needs to require maintenance agreements for SQUIMP projects and develop a tracking system for SQUIMP BMPs.*

The City is not currently requiring maintenance agreements for structural or treatment control BMPs. The City provided a copy of an "Agreement for Construction of Subdivision Improvements, Tract No. 5220" which discussed the responsibility for repair and reconstruction of defective work, however this agreement applied to the construction phase of the project and was not proof of ongoing BMP maintenance. **An** example of a maintenance agreement is included in Appendix C of the *Technical Guidance Manual*. The City should require SQUIMP projects with structural or treatment controls to develop and sign a similar agreement.

The City should develop a system to track structural and treatment control BMPs and should use it as a tool to schedule inspections to periodically verify that controls are operating as designed. In order to correct this deficiency, all co-permittees are to put in **place** by November 15,2004 a tracking system that will consist of the following at a minimum: BMP location, type of device, maintenance frequency, last maintenance date, responsible party for BMP, and type of SQUIMP project.

### 2.4.4 Evaluation of SQUIMP Education and Training

#### Deficiencies Noted:



- ***The City lacks a formal process for training staff who review SQUIMP requirements.***  
The City lacked a formal process for training city staff involved in the review of SQUIMP plans. Although the City had a small number of staff responsible for reviewing SQUIMP projects, a more formalized training providing a consistent educational message, a high level of understanding of SQUIMP requirements, and a consistent plan review process would be beneficial. The City should develop a more formal and frequent training program for SQUIMP review staff.

## 2.5 City of Oxnard

### 2.5.1 Evaluation of SQUIMP Program Management

#### Deficiencies Noted:

- ***The City needs to expand its system for tracking SQUIMP projects and BMPs.***

The City currently tracks projects and the types of BMPs installed in a spreadsheet. The City should consider expanding this system to also include the SQUIMP project category(ies) (e.g., restaurant, retail gasoline outlet, parking lot, etc.) and information on maintenance of the BMPs such as required maintenance frequency, responsible parties, and when the last maintenance/inspection was performed.

- ***The City should begin to collect data to determine the effectiveness of BMPs approved under the SQUIMP requirements.***

The City reviews and approves SQUIMP plans that include proprietary treatment controls. Although the City asks engineers to design these systems to meet a specific standard, the City has not yet conducted any monitoring to assess whether these systems are effective (although the City has recently required one project to conduct monitoring during construction). The City should work with other permittees and the manufacturers of these proprietary treatment controls to collect data on their effectiveness in the Ventura County area. Additional information on performance of treatment control BMPs can be found in Section 5.4 of the *California Stormwater BMP Handbook for New Development and Redevelopment*. See section 2.1.1 for several examples of other programs and guidance that could be useful in this effort.

#### Positive Attribute:

***The City's program appears to be well coordinated between plan review, inspection and maintenance programs.***

The City appears to work closely between departments to ensure that SQUIMP projects and BMPs are adequately designed, reviewed, installed, and maintained. For example, the plan review staff distributes copies of maintenance agreements to inspection staff so that they are aware of the BMP and maintenance requirements when conducting inspections. Also, the City maintenance program coordinates closely with plan review staff to ensure that residential BMPs, which are maintained by the City, are designed for ease of maintenance.

## 2.5.2 Evaluation of SQUIMP Plan Review

### Deficiencies Noted:

- *The City should focus more on matching BMPs with pollutants of concern (POCs).*

The SQUIMP requires all projects to "minimize storm water pollutants of concern." The SQUIMP describes this as requiring the incorporation of a **BMP** or combination of **BMPs** best suited to maximize the reduction of pollutant loadings in that runoff to the maximum extent practicable. The City is not explicitly reviewing projects to ensure pollutants of concern and associated BMPs are identified in the SQUIMP projects. For each SQUIMP project reviewed, the City should ensure that pollutants of concern are clearly identified and specific BMPs to address those pollutants have been selected.

- *The City should add projects subject to the State's Construction General Permit to the list of projects subject to SQUIMP requirements.*

Regional Board resolution **R-00-02** adopts the numerical mitigation standards (i.e., SQUIMP requirements) as the **minimum** design criteria for review of **post-construction BMPs** in the **Los Angeles Region** for construction projects subject to coverage under the Statewide Construction Storm Water Permit. This essentially requires all construction projects disturbing at least one acre to also comply with the SQUIMP requirements. The City **currently** does not include these projects in its screening for projects subject to SQUIMP requirements. The City should add these projects to the categories of projects subject to SQUIMP requirements.

*This City has approved the installation of numerous proprietary BMPs which could prove to be a challenge to maintain.*

The numerous proprietary **BMPs** within the City are maintained by both the City and private landowners. These systems, which are typically underground and can be overlooked by the property **owner**, can be challenging to maintain. Although the City requires signed maintenance agreements (as described below), the City will need to track these BMPs and ensure that they are being adequately maintained, which could prove challenging as the total number of these proprietary devices grows.

### Positive Attributes:

- *The City has developed a set of specific performance standards for proprietary treatment controls BMPs to meet.*

The City requires the engineers or manufacturers of proprietary treatment controls to document that the control will capture at least 80% of the silt that is 50 microns in size. This standard provides a consistent target for all proprietary controls to meet before they are approved for use in the City. As described above, the City is encouraged to build on this by also documenting the in-field performance of these BMPs.

- *The City performs a thorough review of SQUIMP plans and has developed written guidance on SQUIMP requirements for plan review staff.*  
The City conducts a detailed review of SQUIMP plans that includes site design aspects, source controls, and treatment controls. The City also reviews design calculations to ensure that they adequately meet City requirements. In addition, the City has developed a brief, informal guidance for plan review staff on review issues associated with construction SWPPPs and SQUIMPs. This information guidance includes a list of proprietary BMPs approved for use in the City, design issues associated with BMPs, and maintenance requirements.
- *The City has several SQUIMP projects constructed and operating which could serve as an educational tool for other cities.*  
Because of the lag time between project proposal and construction, some permittees have very few SQUIMP projects that have been built. The City of Oxnard has several well-designed SQUIMP projects already constructed that could serve as models for other cities. These include a series of swales and vegetated treatment systems at the Sysco industrial park and a vegetated filter strip, trash enclosure and fueling island BMPs at the Palm West Plaza commercial project. The City is also inspecting the construction of the Westport residential project, which includes the installation of approximately 8 StormFilter treatment units. These projects could be used to demonstrate SQUIMP design principles in the field.

### 2.5.3 Evaluation of SQUIMP Maintenance Program

#### Deficiency Noted:

- *The City needs to develop a system to track City-maintained BMPs and activities.*  
The City currently tracks City-maintained BMPs using various paper forms and documents. The City should develop a more efficient system, such as a database, to track these City-maintained BMPs and activities, and should use it as a tool to schedule inspections and maintenance for staff. In order to correct this deficiency, all co-permittees are to put in place by November 15, 2004 a tracking system that will consist of the following at a minimum: BMP location, type of device, maintenance frequency, last maintenance date, responsible party for BMP, and type of SQUIMP project.

#### Positive Attributes:

- *The City maintains BMPs in residential areas while still requiring commercial/industrial property owners to maintain BMPs on their property.*  
The City generally requires storm water BMPs in residential areas to be in the public right-of-way and maintained by the City. Maintenance and assessment districts provide funding for the maintenance of residential BMPs.
- *The City requires a signed maintenance agreement that is recorded against the property.*

Maintenance agreements include a map of the site with BMP locations identified. The City's industrial/commercial storm water inspector is provided with copies of the maintenance agreement and map, and verifies maintenance records during routine storm water inspections. The City plans to send a letter in September reminding owners of the BMPs and their required inspections and maintenance.

- *The City requires monitoring wells at restaurants to check the performance of oil and grease removal BMPs before discharge to the sanitary sewer.*

The City's pretreatment program requires the installation of monitoring wells at restaurants that use grease removal BMPs to treat wastewater before discharging it to the sanitary sewer. This monitoring helps ensure that the grease removal devices are operating properly and do not spill into the City's MS4.

#### 2.5.4 Evaluation of SQUIMP Education and Training

##### Positive Attribute:

- *The City senior storm water inspector provides training to both City staff and property owners on SQUIMP requirements and post-construction BMPs.*

The City senior storm water inspector provides annual training to City staff involved in SQUIMP projects and also provides training to property owners before project sign-off on the maintenance requirements of the BMPs installed on-site.

#### 2.6 City of Santa Paula

##### 2.6.1 Evaluation of SQUIMP Program Management

##### Deficiencies Noted:

- *The City needs to develop a system for tracking SQUIMP projects and BMPs.*

The City should develop a system to track, for each SQUIMP project, the SQUIMP category(ies) the project fell under (i.e., restaurant, retail gasoline outlet, parking lot, etc.), the BMPs approved for that project, and information on maintenance of the BMPs such as required maintenance frequency, responsible parties, and when the last maintenance/inspection was performed.

- *The City should begin to collect data to determine the effectiveness of BMPs approved under the SQUIMP requirements.*

In order for the City to adequately review SQUIMP plans and BMPs, information on the effectiveness of those BMPs must be available. The City should work with other permittees and manufacturers of the proprietary treatment controls typically approved for use in the City to collect data on their effectiveness in the Ventura County area. Additional information on performance of treatment control BMPs can be found in Section 5.4 of the *California Stormwater BMP Handbook for New Development and Redevelopment*. See section 2.1.1 for several examples of other programs and guidance that could be useful in this effort.

## 2.6.2 Evaluation of SQUIMP Plan Review

### Deficiencies Noted:

- *The City should focus more on matching BMPs with pollutants of concern (POC).*

The SQUIMP requires all projects to "minimize storm water pollutants of concern." The SQUIMP describes this as requiring the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the maximum extent practicable. The City is not **explicitly reviewing** projects to ensure pollutants of concern and associated BMPs are identified in the SQUIMP projects. For each SQUIMP project reviewed, the City should ensure that pollutants of concern are clearly identified and specific BMPs to address those pollutants have been selected.

- *The City should add projects subject to the State's Construction General Permit to the list of projects subject to SQUIMP requirements.*

Regional Board resolution R-00-02 adopts the numerical mitigation standards (i.e., SQUIMP requirements) as the minimum design criteria for review of **post**-construction BMPs in the Los Angeles Region for construction projects subject to coverage under the Statewide Construction Storm Water Permit. This essentially requires all construction projects disturbing at least one acre to also comply with the SQUIMP requirements. The City currently does not include these projects in its screening for projects subject to SQUIMP requirements. The City should add these projects to the categories of projects subject to SQUIMP requirements.

- *The City lacked a formal process to verify design calculations for control measures required by the SQUIMP guidelines.*

Although the SQUIMP allows permittees to accept a signed certification from a registered Civil Engineer in lieu of conducting a detailed review of **BMP** design, the City is encouraged to begin conducting this review themselves. This will help ensure that BMP designs meet the standards set in the *Technical Guidance Manual*. At a minimum, the City should verify that certifying engineers have been trained on BMP design for water quality before accepting their design without review and strongly encourage projects to submit BMP designs using the forms provided in the *Technical Guidance Manual*.

- *The City lacked a formalized plan review process to assess SQUIMP requirements.* **During** in office interviews, the evaluation team discovered that the City lacked formalized set of procedures to conduct consistent SQUIMP reviews. Although the City Regulatory Compliance Specialist was knowledgeable in regards to the SQUIMP requirements and the plan review process, the City should develop a **formal** set of procedures for SQUIMP review. As an example, the City may develop a flow chart that would include responsible staff for the review, associated materials used in the reviews (i.e., checklists, technical guidance manuals, etc.), SQUIMP categories, associated provisions, and required BMPs.

- *The City's lacked formal standard conditions for projects requiring SQUIMP provisions.*

During in-office evaluations, City staff explained that conditions on a project were not formal and that they were tailored specifically to each project. The City lacked a formal document that identified the City's standard conditions. The City Regulatory Compliance Specialist edits the conceptual plans as they go through the plan review process addressing storm water controls and SQUIMP provisions. Because the City had no formal process of imposing project standard conditions, it was unclear whether SQUIMP requirements were being addressed. The City should develop a process to ensure that SQUIMP provisions are required for all applicable project categories.

### 2.6.3 Evaluation of SQUIMP Maintenance Program

#### Deficiency Noted:

*The City should develop a maintenance agreement and tracking system for SQUIMP structural and treatment control BMPs.*

The City lacked maintenance agreements that would provide proof of proper maintenance of post-construction BMPs within the City's jurisdiction. The City was referred to Appendix C of the *Technical Guidance Manual*, which provides an example of a maintenance agreement form.

The City should also develop a system to track maintenance and required maintenance frequency of structural and treatment control BMPs. Maintenance of BMPs owned by the City was mainly reactionary. Due to the small number of storm water controls (2 debris basins), the City was encouraged to proactively inspect the maintenance of these storm water controls rather than react to a problem. A tracking system for these controls will help ensure that both City-owned and private controls are operating as designed. In order to correct this deficiency, all co-permittees are to put in place by November 15, 2004 a tracking system that will consist of the following at a minimum: BMP location, type of device, maintenance frequency, last maintenance date, responsible party for BMP, and type of SQUIMP project.

### 2.6.4 Evaluation of SQUIMP Education and Training

#### Deficiencies Noted:

- *The City lacks a formal process for training staff that review SQUIMP requirements.* Provision 4.C.5 requires the permittees to annually train employees in targeted positions regarding the requirements of the SQUIMP. The City conducts training during staff meetings but lacks a formal process to train City staff involved in the review of SQUIMP plans. The City should develop a more formal training program for staff on the requirements of the SQUIMP to ensure compliance with this permit provision. This training should also include Planning Department personnel.

## 2.7 City of Simi Valley

### 2.7.1 Evaluation of SQUIMP Program Management

#### Deficiencies Noted:

- *The City needs to develop a system for tracking SQUIMP projects and BMPs.*

The City should develop a system to track, for each SQUIMP project, the SQUIMP category(ies) the project fell under (i.e., restaurant, retail gasoline outlet, parking lot, etc.), the BMPs approved for that project, and information on maintenance of the BMPs such as required maintenance frequency, responsible parties, and when the last maintenance/inspection was performed.

- *The City should begin to collect data to determine the effectiveness of the water quality aspects of the BMPs approved under the SQUIMP requirements.*

Although the City has required on-site storm water detention for many years, for the City to adequately review SQUIMP plans and BMPs, information on the effectiveness of those BMPs must be available. The City should work with other co-permittees and manufacturers of the proprietary treatment controls typically approved for use in the City to collect data on their effectiveness in the Ventura County area. Additional information on performance of treatment control BMPs can be found in Section 5.4 of the *California Stormwater BMP Handbook for New Development and Redevelopment*. See section 2.1.1 for several examples of other programs and guidance that could be useful in this effort.

### 2.7.2 Evaluation of SQUIMP Plan Review

#### Deficiencies Noted:

- *The City should focus more on matching BMPs with pollutants of concern (POCs).*

The SQUIMP requires all projects to "minimize storm water pollutants of concern." The SQUIMP describes this as requiring the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the maximum extent practicable. The City is not explicitly reviewing projects to ensure pollutants of concern and associated BMPs are identified in the SQUIMP projects. For each SQUIMP project reviewed, the City should ensure that pollutants of concern are clearly identified and specific BMPs to address those pollutants have been selected.

- *The City should add projects subject to the State's Construction General Permit to the list of projects subject to SQUIMP requirements.*

Regional Board resolution R-00-02 adopts the numerical mitigation standards (i.e., SQUIMP requirements) as the minimum design criteria for review of post-construction BMPs in the Los Angeles Region for construction projects subject to coverage under the Statewide Construction Storm Water Permit. This essentially requires all construction projects disturbing at least one acre to also comply with the SQUIMP requirements. The City currently does not include these projects in its screening for projects subject to SQUIMP requirements. The City should add these projects to the categories of projects subject to SQUIMP requirements.

- *The City should encourage alternative BMP designs and not rely so heavily on proprietary control measures.*

The City generally prohibits infiltration devices and discourages the use of detention in many parts of the City. The City usually refers developers to the **website** containing the *Technical Guidance Manual*, which generally results in the developers installing a proprietary control measure. The City should try to encourage alternative BMPs where possible, given the design limitations set by the City.

### 2.7.3 Evaluation of SQUIMP Maintenance Program

#### Deficiency Noted:

- *Tracking of projects only appears to occur through the project approval stage hindering the City's ability to verify the "as built" condition and to conduct inspections to ensure proper operation and maintenance of SQUIMP BMPs.*

Without a database, the City must rely on individual project files, rather than a single database. The current procedures limit the ability to conduct any follow up analysis of BMPs, as well as hinder efforts to effectively track ongoing inspection and maintenance. The City should commit to implementing a BMP tracking database to help ensure that structural and treatment control BMPs are operating as designed. In order to correct this deficiency, all co-permittees are to put in place by November 15, 2004 a tracking system that will consist of the following at a minimum: BMP location, type of device, maintenance frequency, last maintenance date, responsible party for BMP, and type of SQUIMP project.

### 2.7.4 Evaluation of SQUIMP Education and Training

#### Deficiency Noted:

- *The City should provide additional training to all staff involved in SQUIMPs and post-construction BMPs.*

The various City departments involved in some aspect of SQUIMP implementation should receive additional, specific storm water training, including the interdepartmental cross training of staff and management to increase the understanding and awareness of City staff of SQUIMP responsibilities. The City should also ensure that staff involved in development planning are trained on the SQUIMP requirements and the BMPs described in the *Technical Guidance Manual*. In addition, City construction inspectors should receive training on SQUIMP requirements and BMPs in order to be able to identify potential projects that have not met the SQUIMP requirements and ensure that post-construction BMPs are adequately installed and are being properly maintained.

## 2.8 County of Ventura and Ventura County Watershed Protection District

The SQUIMP reviews for the County and Watershed Protection District are conducted by the same person and largely follow the same procedures, so the findings for both permittees are included in this section.



## 2.8.1 Evaluation of SQUIMP Program Management

### Deficiencies Noted:

- *The County needs to expand its system for tracking SQUIMP projects and BMPs.*

The County has developed a database to track development project conditions. This database should be expanded to track, for each SQUIMP project, the SQUIMP category(ies) the project fell under (i.e., restaurant, retail gasoline outlet, parking lot, etc.), the BMPs approved for that project, and information on maintenance of the BMPs such as required maintenance frequency, responsible parties, and when the last maintenance/inspection was performed.

- *The County should begin to collect data to determine the effectiveness of BMPs approved under the SQUIMP requirements.*

In order for the County to adequately review SQUIMP plans and BMPs, information on the effectiveness of those BMPs must be available. The County should work with other co-permittees and manufacturers of the proprietary treatment controls typically approved for use in the County to collect data on their effectiveness in Ventura County. Additional information on performance of treatment control BMPs can be found in Section 5.4 of the *California Stormwater BMP Handbook for New Development and Redevelopment*. See section 2.1.1 for several examples of other programs and guidance that could be useful in this effort.

- *The County needs to ensure better coordination between the District and County Departments on SQUIMP projects.*

Within the County, there are at least three groups with direct involvement in SQUIMP projects – the Watershed Protection District, the Planning Department and the Public Works Department's Development and Inspection Services. The County needs better coordination between these departments to ensure that SQUIMP requirements are met on all projects. For example, in some cases projects were designed with flood control BMPs without considering SQUIMP requirements. Because of the close relationship between BMPs designed to meet SQUIMP requirements and BMPs designed to meet flood control requirements, the departments responsible for these programs must work together to ensure that the requirements of both programs are met on every project.

## 2.8.2 Evaluation of SQUIMP Plan Review

### Potential Permit Violation:

- *At least one project was conditioned with SQUIMP requirements but failed to submit a SQUIMP plan.*

Provision C.1 of the permit requires permittees to implement the SQUIMP provisions not later than January 27, 2001. A significant expansion of an industrial facility was conditioned to comply with the SQUIMP provisions; however, this project began construction without submitting a SQUIMP plan to the County. A site visit revealed that the project had been under construction for several months with minimal construction controls in place (the construction plans were not available for review).

An evaluation of County records revealed that a **SQUIMP** plan was not developed. The County must ensure that all projects required to comply with the SQUIMP requirements submit acceptable SQUIMP plans and install BMPs according to the plans. The County is in the process of incorporating the Permits Plus system into their plan review **process**. This system should be designed to ensure that SQUIMP requirements are met before a project receives permits and can begin construction.

Deficiencies Noted:

- *The County should focus more on matching BMPs with pollutants of concern (POCs).*

The SQUIMP requires all projects to "minimize storm water pollutants of concern." The SQUIMP describes this as requiring the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the maximum extent practicable. The City is not explicitly reviewing projects to ensure pollutants of concern and associated BMPs are identified in the SQUIMP projects. For each SQUIMP project reviewed, the County should ensure that pollutants of concern are clearly identified and specific BMPs to address those pollutants have been selected.

- *The County should add projects subject to the State's Construction General Permit to the list of projects subject to SQUIMP requirements.*

Regional Board resolution R-00-02 adopts the numerical mitigation standards (i.e., SQUIMP requirements) as the minimum design criteria for review of post-construction BMPs in the Los Angeles Region for construction projects subject to coverage under the Statewide Construction Storm Water Permit. This essentially requires all construction projects disturbing at least one acre to also comply with the SQUIMP requirements. The County currently does not include these projects in its screening for projects subject to SQUIMP requirements. The County should add these projects to the categories of projects subject to SQUIMP requirements.

### 2.8.3 Evaluation of SQUIMP Maintenance Program

Deficiency Noted:

- *The County needs to develop a system to track SQUIMP BMPs and activities.*  
The County currently tracks maintenance of Watershed District BMPs, but does not yet have a system to track BMPs and maintenance of structural or treatment controls approved for private projects. The County should develop a more efficient system to track these BMPs and activities, and should use it as a tool to schedule inspections to periodically verify that controls are operating as designed. In order to correct this deficiency, all co-permittees are to put in place by November 15, 2004 a tracking system that will consist of the following at a minimum: BMP location, type of device, maintenance frequency, last maintenance date, responsible party for BMP, and type of SQUIMP project.

Positive Attribute:

- *The County conditions projects to require submittal of maintenance records every October.*

Although the County reports to have no SQUIMP projects constructed, it does condition projects to submit maintenance records by October 1 of each year. As SQUIMP projects are built, the County will need to develop a system to track the submittal of these maintenance records and decide which BMPs the County should periodically inspect to ensure they are being maintained.

#### 2.8.4 Evaluation of SQUIMP Education and Training Deficiency Noted:

- *The County should provide additional training to all staff involved in SQUIMPs and post-construction BMPs.*

As described above, three different County departments are involved in some aspect of SQUIMP implementation. The County should ensure that staff involved in development planning are trained on the SQUIMP requirements and the BMPs described in the *Technical Guidance Manual*. In addition, County construction inspectors should receive training on SQUIMP requirements and BMPs in order to be able to identify potential projects that have not met the SQUIMP requirements and ensure that post-construction BMPs are adequately installed.