

US EPA ARCHIVE DOCUMENT

Program Evaluation Report

City of American Canyon Stormwater Management Program (NPDES Permit No. CAS 612007)

1.0 Introduction

1.1 Program Evaluation Purpose

The purpose of the program evaluation was to determine the City's compliance with its National Pollutant Discharge Elimination System (NPDES) permit (CAS 612007 and Board Order 00-004) and to evaluate the current implementation status of the City's Stormwater Management Program (Program) with respect to EPA's stormwater regulations. Secondary goals included the following:

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

40 CFR 122.41(i) provides the authority to conduct the program evaluation.

1.2 Permit History

The NPDES stormwater permit was issued on January 19, 2000. The permit expired on January 19, 2005; however, the Board has administratively extended the permit. This is the first stormwater permit issued to the City.

1.3 Logistics and Program Evaluation Preparation

Before initiating the on-site program evaluation, Tetra Tech, Inc., reviewed the following program materials:

- NPDES Permit No. CAS 612007
- City Web site

On June 27–29, 2005, Tetra Tech, Inc., with assistance from the Regional Board and US EPA, conducted the program evaluation. The evaluation schedule was as follows:

Monday, June 27	Tuesday, June 28	Wednesday, June 29
<ul style="list-style-type: none"> • Program evaluation kickoff meeting • Program Management • Public Information and Participation • Municipal Maintenance Activities (office and field) 	<ul style="list-style-type: none"> • Illicit Discharge Control Activities (office) • Business Inspection Program (office and field) 	<ul style="list-style-type: none"> • Construction and New Development/Redevelopment (office and field) • Program Effectiveness • Stormwater Monitoring • Program evaluation outbrief meeting

Upon completion of the evaluation, an outbrief was held to discuss the preliminary findings. During the outbrief, the attendees were informed that the findings were to be considered preliminary pending further review by EPA and the Regional Board.

1.4 Program Areas Evaluated

The following program areas were evaluated:

- Program Management (including the City’s assessment of program effectiveness)
- Municipal Facilities and Activities
- Industrial and Commercial Inspections
- Construction
- New Development
- Illicit Connections and Illegal Discharges
- Education and Outreach
- Reporting

1.5 Program Areas Not Evaluated

The following areas were not evaluated in detail as part of the program evaluation:

- Wet-weather monitoring program and monitoring program details (e.g., sampling location, types, frequency, parameters).
- Other NPDES permits issued to the City (e.g., industrial or construction NPDES stormwater permits).
- Inspection reports, plan review reports, and other relevant files. The program evaluation team did not conduct a detailed file review to verify that all elements of the Program were being implemented as described. Instead, observations by the evaluation team and statements from City representatives were used to assess overall compliance with permit requirements. A detailed file review of specific program areas could be included in a subsequent evaluation.

2.0 Program Evaluation Results

This program evaluation report identifies potential violations, program deficiencies, and positive attributes. This report is not a formal finding of violation. **Potential violations** are areas of concern that Regional Board staff should review to determine whether a violation has occurred. **Program deficiencies** are areas of concern for successful program implementation. Positive attributes indicate the City's overall progress in implementing the Program. The evaluation team identified only positive attributes that were innovative and exceptional (beyond minimum requirements). Some areas were found to be simply adequate; that is, not particularly deficient or innovative.

The evaluation team *did not* evaluate all components of the City's Program. Therefore, the City should not consider the enclosed list of potential permit violations and program deficiencies a *comprehensive* evaluation of individual program elements.

For discussion and tracking purposes, each deficiency and potential violation is separately numbered.

2.1 Evaluation of Program Management

Positive Attributes:

- *The City has hired an Environmental Program Specialist largely dedicated to the stormwater program.*
The City recently hired an Environmental Program Specialist to review and manage stormwater program activities and NPDES permit compliance. This position will be critical as the City continues to implement its stormwater program and work with nearby communities to coordinate stormwater activities.
- *The City adopted a stormwater ordinance in 2003.*
The City's stormwater ordinance, adopted on October 2, 2003, provides the City with the broad authority to inspect, require BMPs, collect samples, and take civil and administrative enforcement actions. The ordinance also prohibits the discharge of non-stormwater to storm drains.

Deficiency Noted:

- *No. 1: The City should annually revise and update its stormwater management plan, as appropriate.*
The City's stormwater management plan was prepared in 2000 and describes activities to comply with its NPDES permit issued in January of that year. Since the SWMP was prepared, the City has adopted a stormwater ordinance and hired an Environmental Program Specialist. In addition, the SWMP describes many activities that will be taken in "future years" (i.e., after 2001). In order to serve as a useful implementation guide for stormwater activities, the City should annually update and revise the SWMP, as appropriate.

2.2 Evaluation of Public Information and Participation

Positive Attribute:

- *The City is conducting a variety of public outreach activities.*
The City is conducting a variety of stormwater public outreach activities, including school education programs, creek cleanup events, mercury elimination, water conservation programs, and sponsoring environmental booths at public events. In addition, the City negotiated an agreement with a local waste hauler to provide curbside motor oil recycling.

Deficiencies Noted:

- *No. 2: The City needs to develop a public education strategy.*
As described in the positive attribute above, the City is conducting a variety of public outreach activities, however, these activities should be coordinated and organized according to a public education strategy specific to the City. The education strategy will help the City to define goals and objectives for outreach, identify target audiences, create and package the City's message, and distribute and evaluate the strategy.

Information on developing a stormwater public education strategy can be found in the EPA guidance document "Getting In Step: A Guide for Conducting Watershed Outreach Campaigns" available at <http://www.epa.gov/owow/watershed/outreach/documents>.

- *No. 3: The City should develop additional stormwater outreach materials.*
The City should develop additional stormwater outreach materials targeting specific business types, the construction industry, and residential activities. For example, a brochure on proper vehicle maintenance and/or washing practices would be helpful during business inspections or when investigating an illicit discharge associated with vehicles.

A number of stormwater programs in the Bay area have developed stormwater-specific outreach brochures for various activities. The City could minimize costs by reviewing and using already developed outreach brochures that meet its needs. Links to several example outreach brochures are provided below:

http://www.cleanwaterprogram.org/publications_libraryResources.htm
http://www.cccleanwater.org/businesses/prevent_pollution/index.php
<http://www.sactostormwater.org/documents.asp>

- *No. 4: The City should develop a specific stormwater or water quality Web page.*
The City's Public Works Information Web site includes links to a number of public works-related programs; however, the stormwater program is not specifically included. The City should create a specific stormwater or water quality Web page to describe some of the City's stormwater activities, identify who to call with a water quality complaint, and include copies of relevant outreach materials.

2.3 Evaluation of Municipal Maintenance Activities

Potential Permit Violation:

- *No. 5: The City needs to complete the mapping for its storm drain system.*
The City is currently developing an inventory of storm drains, inlets, manholes and outfalls in order to map the storm drain system. The City should complete this map as soon as practical for use in both municipal maintenance and illicit discharge activities.

Deficiencies Noted:

- *No. 6: The City should inspect catch basins more frequently.*
The City stated during the audit that it inspects and cleans catch basins approximately once every year and a half. However, the City is not using a system to record this maintenance information for individual catch basins, making it difficult for the City to actually determine if it has inspected all catch basins. The City should develop a system to more specifically track the maintenance of catch basins and ensure that all catch basins are inspected annually before the rainy season.
- *No. 7: The City should conduct regular site inspections of the municipal corporation yard to identify and resolve poor housekeeping issues and to reinforce stormwater requirements to staff using the site.*
There were areas where used paint cans and containers were stored improperly. A periodic, thorough inspection of the site would identify such housekeeping problems and allow them to be remedied in a timely manner.
- *No. 8: Because of the extent of the activities occurring at the municipal corporation yard, the City should develop a stormwater pollution prevention plan (SWPPP) or similar document to be implemented at the site.*
Numerous City staff work at or visit the site regularly and all should be trained about stormwater pollution prevention practices, including spill response and control, proper storage of materials, vehicle maintenance and washing practices, and other topics. A SWPPP would describe such practices to be implemented at the site and would prescribe a training program for staff.

2.4 Evaluation of Business Inspection Program

Potential Permit Violation:

- *No. 9: The City has not fully implemented its business inspection program.*
The City's performance standards for business inspections describe commitments to develop an inspection database system to track inspections, inspect all NPDES permitted industries at least annually, inspect certain other businesses biannually, and develop procedures for addressing violations. The City has developed a prioritized list of businesses that could potentially impact stormwater, but has not yet begun inspections.

The City should fully implement its business inspection program and begin the inspection of priority businesses. To help the City's stormwater inspector gain experience, the City should schedule several joint industrial inspections with the Regional Board. The City could also have their stormwater inspector observe how several other Phase I cities in the Bay area conduct business stormwater inspections.

2.5 Evaluation of Illicit Discharge Program

Potential Permit Violation:

- *No. 10: The City needs to develop a system to track illicit discharge complaints received and how these discharges are resolved.*
The City does not have a formal system to track illicit discharge complaints received and how each complaint is resolved. The City should develop a system so that each complaint is logged in separately, tracked as to the type of discharge, who responded, clean-up, and how the discharge was ultimately resolved. This information will help the City demonstrate its level of effort in addressing illicit discharge and will provide information on possible trends in locations of frequent discharges or the types of activities that most frequently are reported as illicit discharges.

Deficiencies Noted:

- *No. 11: The City should publicize the phone number for illicit discharge complaints.*
The City stated that calls reporting illicit discharges are received at the main Public Works number, individual City staff numbers, or other contacts such as police or code enforcement. To ensure that the calls are routed to the appropriate person and the public knows who to call to report a water quality complaint or illicit discharge, the City should publicize a specific phone number. This number should be clearly identified on the City's web site and appropriate City outreach materials.
- *No. 12: The City should update its spill response plan.*
The City's *Spill Response Plan and Regulations* were dated April 1997. A revision to this plan has been drafted but has not been finalized as of the date of the evaluation. The spill response plan should be updated as soon as possible and should be periodically reviewed to ensure that procedures and contact information are current.

2.6 Evaluation of New Development and Redevelopment Program

Positive Attributes:

- *The City construction inspectors are thorough and well-trained.*
The evaluation team met with two City inspectors as they conducted several construction inspections. The inspectors were well-trained, knowledgeable about requirements and BMPs, and conducted thorough erosion and sediment control inspections.
- *The City has required post-construction BMPs for large residential developments.*
Although the City has not developed specific post-construction design standards, it has required projects to address post-construction runoff for a number of years. Most

notably, the Vintage Ranch project installed a series of detention basins to control post-construction runoff.

Deficiencies Noted:

- *No. 13: The City needs to document its inspections.*
While the inspectors say they are out at the construction sites every day and ask for immediately correction of problems, there is no documentation of the inspections. The City needs to develop inspection forms for the inspectors to fill out each time they are out at the construction sites in order to document and track inspections, reinspections, and escalating enforcement actions.
- *No. 14: The City should set standards for erosion control BMPs.*
The City reviews plans for erosion and sediment control, but does not specify BMP standards or the minimum BMPs required for sites. The City should identify the types of BMPs required at construction sites and review erosion and sediment control plans against that standard. For example, perimeter erosion controls, storm drain inlet protection, stabilized construction entrances, slope protection, and concrete washouts could be identified as the types of BMPs required at all sites, if applicable. These BMP standards should also be clearly communicated to the construction industry. The City of Coronado has developed a simple and clear BMP fact sheet (<http://www.coronado.ca.us/stormwater/swconstrenglish.pdf>).
- *No. 15: The City should set standards for post-construction design.*
Although the City requires projects to address post-construction runoff, it does not specify a post-construction design standard that a project should meet. The City should review relevant post-construction standards developed by other cities and adopt a standard that best fits the type of development in American Canyon. Two example post-construction standards are listed below:
 - The “C.3” requirements developed in Contra Costa County (and other county programs in the Bay area)
<http://www.cccleanwater.org/construction/nd.php>
 - Attachment 4 of the Phase II General Permit
http://www.waterboards.ca.gov/stormwtr/docs/final_attachment4.pdf
 - The Standard Urban Stormwater Mitigation Plan (SUSMP) requirements developed in Los Angeles County
<http://www.lastormwater.org/WPD/businesses/susmp/susmpintro.htm>

2.7 Evaluation of Stormwater Monitoring Program

Positive Attribute:

- *The City is conducting turbidity monitoring at several locations.*
The City recently conducted its first year of turbidity monitoring at several locations in local streams. This monitoring included sampling upstream and downstream of an active construction site. The City should evaluate this turbidity monitoring as it develops a plan to evaluate program effectiveness to determine if this monitoring will help the City to evaluate the long-term effectiveness of the stormwater program.

Deficiency Noted:

- *No. 16: The City should develop a specific plan to evaluate the effectiveness of its stormwater program.*

The City should develop a specific plan to evaluate the effectiveness of its stormwater program. The current annual report summarizes past activities but does not provide detailed analysis evaluating those activities. The City should use the annual report preparation process to analyze not only *what happened* but also *why* it happened and *what needs to change* in the future to improve the Program. Ultimately, this evaluation will help the City to improve implementation of the Program and help document water quality improvements.

For additional information on program effectiveness, the City should review the presentations from the November 14, 2003, meeting of the California Storm Water Quality Association. That meeting focused on MS4 program effectiveness and how MS4s can document such effectiveness. The presentation materials are available at <http://www.casqa.org/meetings/presentations.html>. An additional resource is *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* developed by the San Diego Municipal Storm Water co-permittees. A copy of the report is available at http://www.projectcleanwater.org/pdf/copermittees/assessment_framework_final.pdf