Program Evaluation Report

Santa Clara Valley Urban Runoff Pollution Prevention Program: City of Milpitas, City of Palo Alto, and City of Santa Clara Follow-up Evaluation for the County of Santa Clara (NPDES Permit No. CAS029718)

Executive Summary

Tetra Tech, Inc., with assistance from the California Regional Water Quality Control Board, San Francisco Region (Regional Board), conducted a program evaluation of 3 of the 15 copermittees implementing the Santa Clara Valley Urban Runoff Pollution Prevention Program in April 2005. The purpose of the program evaluation was to determine the copermittees' compliance with the National Pollutant Discharge Elimination System permit (CAS029718 and Board Order Nos. 01-024 and 01-119) and to evaluate the current implementation status of the copermittees' Urban Runoff Management Plan with respect to the Environmental Protection Agency's storm water regulations. The program evaluation included an in-field verification of program implementation. The three copermittees evaluated were the City of Milpitas, the City of Palo Alto, and the City of Santa Clara. Tetra Tech also conducted a follow-up evaluation of the County of Santa Clara to determine the status of the county's program with respect to deficiencies identified in a December 2003 evaluation.

This program evaluation report identifies potential permit violations, program deficiencies, and positive attributes and is not a formal finding of violation. Program deficiencies are areas of concern for successful program implementation. Positive attributes indicate overall progress in implementing the program.

The following potential permit violations and program deficiencies are considered the most significant:

- The City of Milpitas's construction inspectors for private construction sites failed to adequately identify and enforce a storm water quality violation.

- As part of their industrial inspection process, the City of Milpitas Industrial inspectors failed to verify Notice of Intent (NOI) coverage under the State's Industrial General Permit and make visual verification of Storm Water Pollution Prevention Plans (SWPPPs).

- The City of Palo Alto has not identified high-priority areas for illicit connections or illegal dumping and is not conducting field screening in such areas.

- The City of Santa Clara does not completely document its procedures for prioritizing, scheduling, and conducting inspections of industrial and commercial facilities and does not increase its inspection frequency for businesses with frequent violations.

Several elements of the copermittees' program were particularly notable:

- The City of Milpitas Fire Department's Training Database tracks workshops, certifications, courses, and associated dates for recertification.
- The City of Palo Alto administers a Clean Bay Business program for vehicle service facilities to encourage compliance with pretreatment- and storm water-related best management practices contained in the sewer use ordinance.

- The City of Palo Alto uses creative methods of preventing pollution at the source, such as free "car wash kits" for local community groups.

- The City of Santa Clara has developed detailed guidance for developers and plan reviewers to implement the C.3 Provisions.

CONTENTS

September 15, 2005

1.0   Introduction

1.1   Program Evaluation Purpose

The purpose of the program evaluation was to determine the copermittees' compliance with their National Pollutant Discharge Elimination System (NPDES) permit (CAS029718 and Board Order Nos. 01-024 and 01-119) and to evaluate the current implementation status of the copermittees' Urban Runoff Management Plan (URMP) with respect to the Environmental Protection Agency's (EPA's) storm water 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 reissuance of the permit.

Title 40 of the *Code of Federal Regulations* (CFR) paragraph 122.41(i) provides the authority to conduct the program evaluation.

1.2   Permit History

The NPDES storm water permit was issued February 21, 2001, and amended October 17, 2001; the permit is scheduled to expire February 21, 2006. The current permit, the third issued to the copermittees, requires each copermittee to develop and implement an URMP. The URMP contains performance standards that define the level of implementation necessary to demonstrate the control of pollutants in storm water to the maximum extent practicable.

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. CAS029718

- City of Milpitas Urban Runoff Management Plan

- City of Milpitas Urban Runoff Management Plan Annual Report 2003–2004 (September 2004)

- City of Palo Alto Urban Runoff Management Plan Annual Report 2003–2004 (September 2004)

- City of Santa Clara Urban Runoff Management Plan Annual Report 2003–2004 (September 2004)

- County of Santa Clara Urban Runoff Management Plan

- County of Santa Clara Urban Runoff Management Plan Annual Report 2003–2004 (September 2004)

- Santa Clara Valley Urban Runoff Pollution Prevention Program model performance standards and supporting documents

- Permittees' Web sites

On April 26–28, 2005, Tetra Tech, Inc., with assistance from the Regional Board, conducted the program evaluation. The evaluation schedule for the City of Palo Alto and the City of Santa Clara was as follows:

Tuesday, April 26	Wednesday, April 27	Thursday, April 28
• Program Evaluation Kickoff Meeting • Industrial and Commercial Discharges (office and field) • Illicit Connection/Illegal Dumping (office)	• Municipal Maintenance Activities (office and field) • New Development and Redevelopment (office) • Construction Inspection (office)	• Construction Inspection (field) • Program Evaluation Exit Interview

The evaluation for the City of Milpitas was abbreviated (2 days only) and followed the following schedule:

Wednesday, April 27	Thursday, April 28
• Program Evaluation Kickoff Meeting • Industrial and Commercial Discharges (office) • Illicit Connection/Illegal Discharge Elimination (office) • Construction Inspections (office)	• Industrial/Construction Inspections (field) • Program Evaluation Exit Interview

The follow-up evaluation of the County of Santa Clara was conducted on Tuesday, April 26, and included the following components: Program Management, Illicit Connection/Illegal Discharge Elimination, Industrial and Commercial Discharges, Construction Inspection, and Municipal Maintenance Activities.

Upon completion of the evaluation, an exit interview was held to discuss the preliminary findings. During the exit interview, the inspectors informed the attendees 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 for the City of Milpitas:

- Industrial and Commercial Discharges
- Illicit Connection/Illegal Dumping (ICID) Elimination
- Construction Inspections

The following program areas were evaluated for the City of Palo Alto and the City of Santa Clara:

- Industrial and Commercial Discharges
- ICID Elimination
- Municipal Maintenance Activities (including public streets, roads, and highways operation and maintenance; storm drain system operation and maintenance; rural public works maintenance and support activities; and water utility operation and maintenance)
- New Development and Redevelopment
- Construction Inspection

The following program areas were reevaluated for the County of Santa Clara:

- Program Management and Effectiveness
- Illicit Connection/Illegal Discharge Elimination
- Industrial and Commercial Discharges
- Construction Inspection
- Municipal Maintenance Activities (including public streets, roads, and highways operation and maintenance; storm drain system operation and maintenance; rural public works maintenance and support activities; and water utility operation and maintenance)

1.5 Program Areas Not Evaluated

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

- Monitoring Programs
- Program Management
- Public Information and Participation
- Metals Control Programs
- Control Program for Pesticides
- Watershed Management
- Other NPDES permits issued to the copermittees (e.g., industrial or construction NPDES storm water permits)

2.0 Program Evaluation Results

This program evaluation report identifies potential permit violations, program deficiencies, and positive attributes and is not a formal finding of violation. Program deficiencies are areas of concern for successful program implementation. Positive attributes indicate a copermittee's overall progress in implementing the program. The evaluation team identified only positive attributes that were innovative (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 the components of each permittee's program. Therefore, the copermittees should not consider the enclosed list of program positive attributes and deficiencies a comprehensive evaluation of individual program elements.

The *most significant* potential permit violations, program deficiencies, and positive attributes identified during the evaluation are noted in the Executive Summary and are identified with ⬚ *text boxes* in the following subsections.

2.1   City of Milpitas

2.1.1   Evaluation of Industrial and Commercial Discharges Program

Deficiencies Noted:

- *Industrial inspectors were not verifying Notice of Intent (NOI) coverage under the State's Industrial General Permit as part of their industrial inspection process, and the checklist used for these inspections needs additional detail.*
  Section 9B, "Industrial/Commercial Discharger Control Program," of the URMP identifies performance standards for facilities that have filed for coverage under the State's Industrial General Permit. Exhibit A of Section 9B lists the best management practices (BMPs) that must be verified by the inspector. The "General Facility Information" section of Exhibit A requires the inspector to "determine whether an NOI for coverage under the State's General Permit has been submitted" and to "make a visual verification of the NOI." Furthermore, the inspector is required to make "a visual verification of a SWPPP [Storm Water Pollution Prevention Plan] if an NOI has been filed." During the field evaluations it was not apparent that the City of Milpitas Fire Department's industrial inspector was conducting verification activities as part of a routine inspection. Although the industrial inspector conducts adequate urban runoff evaluations, the inspection protocol must be revised to include the verification of on-site NOIs and SWPPPs in accordance with the City's URMP. The industrial inspectors should use and reference Section 9B, Exhibit A, of the City's URMP.

  To conduct these industrial inspections, the City Fire Department had developed an urban runoff checklist. The checklist addresses interior activities, exterior cleaning activities, exterior processes and storage, exterior equipment, landscape activities, and miscellaneous requirements. However, the checklist fails to address the verification of documentation required in accordance with the State's Industrial General Permit and as stated in Section 9B of the URMP and therefore should be amended. In addition, the checklist should be amended to identify non-storm water discharges, include a follow-up inspection date, and describe enforcement escalation actions.

- *The industrial inspections database does not specifically identify facilities permitted under the State's Industrial General Permit.*
  Although the City's industrial inspections database contains inspection dates, inspection types, and follow-up enforcement actions, the database does not identify the industrial facilities that have coverage under the State's Industrial General Permit. Section 9B of the City's URMP discusses the identification of facilities that have filed for coverage under the State's Industrial General Permit. To track the permitted

facilities, the City must identify the industrial facilities, enter them into the database, and update the database frequently to account for new facilities that have obtained General Permit coverage or changes in ownership.

Positive Attributes:

- *The City of Milpitas Fire Department's Training Database tracks workshops, certifications, courses, and associated dates for recertification.*
  The City of Milpitas Fire Department had developed a database to document and track training associated with each inspector, as well as Fire Department employees. The database tracks workshops attended, certifications, and training courses. The database is available to be viewed by all staff and notifies employees when they need to be recertified. During the in-office evaluation, the City presented the training database and demonstrated its usefulness. For example, the City demonstrated how the database has been updated to include the recent storm water industrial and commercial training conducted by the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP).

2.1.2 Evaluation of Illicit Connection/Illegal Dumping (ICID) Elimination Program

Positive Attributes:

- *The City had developed standard guidelines for hazardous and nonhazardous materials released into storm drains and watercourses, as well as a procedure to identify and address high-priority areas for ICID incidents.*
  The City had developed Standard Operating Procedure, No. 8-6 (SOP 8-6), which addresses response and cleanup of nonhazardous and hazardous releases to storm drains and watercourses. SOP 8-6 identifies roles and responsibilities, general information regarding spills, cleanup responsibility for hazardous and nonhazardous materials release, urban runoff recordkeeping and reporting, cost recovery, and enforcement. The document identifies the departments responsible for cleanup on the basis of the size and type of the release. Table 1 of the SOP identifies various discharge control options, which depend on the type of discharge, preferred disposal options, and primary control approaches. Attachment 2 to the SOP identifies response procedures and includes a cleanup guidelines flowchart for hazardous releases, nonhazardous releases on public property, and nonhazardous releases on private property. Finally, the document includes points of contact for each department or organization and is available to all City staff.

  In addition, in accordance with Section 9H.2.IV of the Storm Water Management Plan (SWMP), the City had developed detailed standard guidelines that identify the high-priority areas on a map. These high-priority areas are inventoried and sampled annually for water quality. The City also conducts annual, proactive investigations to identify outfalls that are to be considered high-priority.

2.1.3   Evaluation of Construction Inspection Program
<u>Potential Permit Violations:</u>

> • *The City's construction inspectors for private construction sites failed to adequately identify and enforce a storm water quality violation.*

Initial observations of the Parc Place construction site revealed extensive sediment tracking from multiple construction entrances. Construction entrance sediment controls had been inadequately installed and appeared not to control sediment leaving the site. Although the construction contractor had a street sweeper vehicle cleaning the bordering streets, sediment had accumulated in the gutters and was entering an adjacent storm drain. Furthermore, the construction contractor had improperly installed storm drain protection. Although the storm drain had been protected with gravel bags, the bags had been inadequately placed and did not have the capacity to prevent sediment-laden water from entering the storm drain. The inspection team noted that sediment-laden water was obviously directly entering the drain inlet.

Although the City's construction inspector noted that the sediment controls for the construction entrances and the storm drain inlet were inadequate, only minimal actions were taken to respond. Furthermore, the construction inspector did not identify the sediment discharge as a major violation. Additionally, the city inspector gave the contractor 24 hours to clean up the discharge. The Tetra Tech inspector and Regional Board staff found the city inspector's actions inappropriate for this discharge and directed the construction inspector and contractor to clean up the discharge immediately.

The city construction inspector, who is on-site daily, must take immediate authoritative action to direct the construction contractors to prevent these types of discharges. The city inspector should also anticipate the cumulative effect of deficient sediment control BMPs and their potential to discharge sediment-laden waters. The Tetra Tech inspector and Regional Board staff found the City inspector's enforcement actions as well as the contractor's lack of adequate sediment control BMPs to be unacceptable. The City must adhere to the standard operating procedures set forth in Section 10F of the City's URMP and to strictly comply with the Construction Storm Water General Permit, which prohibits the discharge of materials other than storm water into surface waters.

Section II-13-37 of the "Grading, Excavation, Paving and Erosion Control" ordinance obligates the Chief Building Inspector to "inspect the work site for compliance conditions of the approved grading permit, for verification of reports submitted by the permittee, and for quality of work being performed as approved by the permit."

The construction inspector is referred to Section 10F of the City's URMP, which includes performance standards obligating the City (1) to ensure that construction site operators prevent illicit discharges from entering storm drains and watercourses, (2) to adequately maintain erosion and sediment controls, and (3) to take appropriate enforcement actions.

Deficiencies Noted:

- *The City lacked interdepartmental coordination and consistency to implement the Construction Inspection Program.*

    The City's Construction Inspection Program is split into three different areas: private, public, and special projects. Private construction development inspections are conducted through the Building Inspection Division. Public capital improvement projects (CIPs) and special project inspections are conducted through the Engineering Division. During in-office interviews it was apparent that the three construction inspection programs lack consistency. For example, the building inspectors have developed and maintained a daily log for each site. The log books document daily activities, corrective actions, and violations. The CIP inspectors keep a separate computer log, which includes daily work performed and associated pictures. Finally, the special project inspectors have not yet developed a tracking mechanism for daily inspections. The City should develop a protocol for all construction inspectors to follow to ensure that erosion and sediment control issues are consistently addressed at all sites and to facilitate tracking and reporting.

- *The City's construction inspection checklists are inadequate to inspect for storm water controls during inspections.*

    Document review of the construction program revealed that the checklist used by the private construction inspector was not detailed enough to address storm water controls. For example, the form did not itemize such areas as erosion and sediment controls, wind erosion controls, non-storm water discharges, waste materials, storage areas, and other potential pollutant sources. Section 10F, Exhibit A, of the City's URMP provides an inspection checklist that identifies requirements for all projects. The checklist addresses items such as storage and handling of materials, erosion and sediment controls, and associated SWPPP documentation. The inspectors should reference the checklist provided in Exhibit A of Section 10F.

2.2   City of Palo Alto

2.2.1   Evaluation of Industrial and Commercial Discharges Program

Deficiencies Noted:

- *City inspectors must conduct industrial and commercial facility inspections for storm water compliance with the same diligence as is shown for pretreatment compliance.*

    The City uses the same inspection staff for pretreatment and storm water inspections. Although the City is commended for the efficient use of available resources and for cross-training existing inspection staff, the Tetra Tech inspector noted during several facility inspections that pretreatment compliance seemed to have higher priority than storm water management practices. One of the inspectors evaluated, though knowledgeable about storm water issues and BMPs, focused primarily on pretreatment issues during several inspections. As required by the SCVURPPP Industrial and Commercial Discharges Control Program Performance Standard (IND-

PS), the City has developed a training program for inspectors; however, the City is encouraged to communicate with inspection staff more regularly to ensure that storm water management is a priority during all inspections in addition to any pretreatment requirements.

Positive Attributes:

- *The City inspects all NOI filers and program-wide industrial/commercial facilities more frequently than is required by the MS4 permit.*
  The Industrial/Commercial Discharger Control Program Performance Standard (IND-PS) states that each copermittee must inspect all industrial facilities required to file an NOI with the State at least once every 5 years. The City of Palo Alto inspects each facility twice a year during regular pretreatment inspections. The IND-PS also requires the City to inspect all non-filing industrial/commercial facilities that have a potential to be a source of pollutants to storm water no less than once every 5 years. The City inspects all vehicle service facilities at least once a year, all industrial facilities that are required to have a pretreatment permit twice a year, and all restaurants once every 3 years, along with following up on annual referrals from the County Health Department.

- *The City administers a Clean Bay Business program for vehicle service facilities to encourage compliance with pretreatment- and storm water-related BMPs contained in the sewer use ordinance (SUO).*
  Palo Alto created the Clean Bay Business program 12 years ago to address the discharges from the industry that the City believed to be the highest water quality priority—vehicle service facilities. Facilities that qualify include those that repair automobiles, trucks, buses, airplanes, boats, and the like or perform services such as parts cleaning, body work, vehicle washing, fuel dispensing, or radiator, muffler, or transmission repair. Each facility is inspected to ensure that it meets the requirements outlined in the SUO (Section 16.09.010). The storm water requirements outlined in the SUO include BMPs such as no discharge to storm drains; proper disposal of mop and cleanup water; secondary containment for chemicals, fluids, and hazardous materials; no vehicle fluid removal outside; no unattended drip pans; and no vehicle washing discharges from commercial washing or fleet washing facilities. Each facility inspected and deemed compliant with the SUO is determined to be a Clean Bay Business and provided a plaque or window sticker to identify it as such. To date, 98 percent of vehicle service facilities in Palo Alto are considered Clean Bay Businesses.

- *The City uses the existing Regional Water Quality Control Plant's pretreatment enforcement escalation scheme to enforce storm water regulations.*
  The Public Works Environmental Compliance Division administers the City's pretreatment program and performs all storm water inspections. The inspectors use the same enforcement response plan to gain compliance for both pretreatment and storm water-related violations. This approach ensures an accepted, consistent, and defensible method of using verbal or written warnings, compliance directives,

citations, or various criminal or civil remedies for industrial/commercial facilities and construction projects throughout the City.

2.2.2 Evaluation of ICID Elimination Program

Deficiencies Noted:

- *The City has not identified high-priority areas for illicit connections or illegal dumping and is not conducting field screening in such areas.*

  Section A.4. of the Illicit Connection and Illegal Dumping Elimination Activities Performance Standard (ICID-PS) requires that the City proactively conduct field investigations of outfalls in high-priority areas of the City to detect illicit connections and illegal dumping. The areas are to be prioritized on the basis of historical data such as dumping, citizen complaints, presence of certain types of land uses, and water quality impairments. Although the City conducted video inspections of the entire storm drain system in the early 1990s to detect cross-connections, blockages, or other types of infrastructure issues, it is important to continue to assess water quality threats in the high-priority areas of the City and work proactively to detect and stop illegal discharges. The City has an impressive geographic information system (GIS) that is used to track and locate the sources of spills and dumping. The City should use this system to identify high-priority areas for ICID and begin field evaluations to eliminate or reduce the number of ICID occurrences in these areas.

Positive Attributes:

- *The City uses creative methods of preventing pollution at the source, such as free "car wash kits" for local community groups.*

  The City has determined that fundraising car washes are a significant water quality threat. To minimize the impact of such car washes, the City has developed informational brochures and a program to assist groups in discharging the car wash water in an approved manner. Groups can borrow a "car wash kit" from the City's wastewater treatment plant. The kit includes a hose and pump that can be used to pump wash water to a sanitary sewer inlet or to a landscaped, pervious area for infiltration. This information has been distributed to all gas stations around the City to be given to groups that might approach the facilities seeking permission to hold a car wash.

- *The City has created a sticker and installed one on the dashboard of each City vehicle with information about dumping and illegal discharges, along with the telephone number for reporting incidents.*
  To ensure that each municipal employee has quick access to information about illegal discharges and how to report them, the City has developed and installed in each vehicle a sticker with descriptions of common discharges and the number to call. This is a very creative and effective method to help formalize reporting among City departments and agencies, as required by Section A.3. of the ICID-PS. In addition, the Storm Drain System Operation and Maintenance Model Performance Standard

requires that the City develop a process to advise inspectors when hot spots or unusual contaminants are encountered during storm drain cleaning and maintenance, and this sticker ensures that all storm drain maintenance staff have access to the required information when they are in the field.

2.2.3   Evaluation of Municipal Maintenance Activities Program

Deficiencies Noted:

- *The City Municipal Service Center's SWPPP has not been updated since 1992 and does not reflect the storm water management responsibilities and BMPs required of each separate entity using the corporation yard.*

  The City Municipal Service Center (MSC) has a SWPPP that was developed in 1992. The SWPPP has not been updated since that time and therefore might not prescribe adequate storm water BMPs for the facility. During the site inspection conducted as a part of the MS4 evaluation, the Tetra Tech inspector noted multiple oil spills and stains, as well as open dumpsters, even though the inspection was conducted during a rain event. In addition, the painting stencil scraping area was outside and was not covered. A large amount of paint chips and dust was present in this area. When questioned, the City representatives noted that multiple City agencies were responsible for various areas of this facility. The Tetra Tech inspector recommended that the SWPPP be updated to include appropriate BMPs for the facility (i.e., thorough inspection and cleanup of oil spills and paint chips weekly and prior to each rain event) and the party, division, or department responsible for each BMP or section of the MSC. It is recommended that the SWPPP be maintained by the Facilities Manager but organized by the municipal "tenants" residing at the MSC. Each division or department could have a mini-SWPPP approved by the appropriate manager or supervisor. This would ensure that the managers are aware of which BMPs are required for each individual building, bay, or parking area and which manager is responsible for implementing and maintaining each BMP. It would also allow the facility manager and the storm water inspection staff to have a list of responsible parties to contact if a noncompliance issue should arise.

- *The City's performance standards for operation and maintenance of public streets, roads and highways, and storm drain systems lack quantifiable targets.*

  The City has developed performance standards for public streets, roads and highways, and storm drain system operation and maintenance. These performance standards are primarily broad descriptions of practices (e.g., "the City will implement BMPs to reduce pollutants to the maximum extent practicable" and "City will implement a process to ensure that contractors employed to perform O&M activities use appropriate BMPs"). The City should develop performance standards that include specific activities and are quantifiable.

2.2.4 Evaluation of New and Redevelopment Program

Deficiencies Noted:

- *The City should formalize the erosion control and storm water management plan review process.*
Although Public Works Engineering staff were knowledgeable about New Development and Redevelopment Performance Standard requirements and post-construction BMPs and were successfully approving plans with post-development storm water controls, no formal process that outlines the steps taken and decisions made during the review process had been established. Plan review checklists could be based on existing documentation, specifically, the City's standard conditions and plan review comments or the City of Palo Alto's *Planning Your Land Development Project* document. Checklists would benefit new employees involved in the plan review process and would help to reduce perceived ambiguity on the part of the development community.

Positive Attributes:

- *The City encourages developers to consider alternatives to traditional storm water management, such as low-impact development practices and reduction in impervious surfaces.*
The City proactively encourages the use of alternative design techniques, such as low-impact development practices and policies that reduce the amount of impervious surface, micromanagement of storm water on residential projects, and use of storm water management features for aesthetic purposes on commercial sites.

2.2.5 Evaluation of Construction Inspection Program

Positive Attributes:

- *The City includes a statement on all approved erosion and sediment control plan sheets that requires the developer or property owner to notify the City and request an inspection of all erosion control measures prior to land disturbance.*
The City indicated on p. 23 of the SCVURPPP FY 2003–2004 Annual Report to the Regional Board that a better mechanism was needed to indicate to the storm water inspector when projects (normally small projects) actually "broke ground," therefore needing to be inspected for water quality. Although the inspector was notified when permits were issued, it was noted that significant time could elapse before any work was actually begun on-site. To alleviate this potential discrepancy, the City's Public Works Engineering Department now requires that a note be included on all erosion control plan sheets for residential and small commercial projects. The note requires the developer or property owner to contact the City's Environmental Compliance Division for an inspection after all erosion control measures are installed, but prior to any land disturbance or prior to the start of the wet season, whichever occurs first. This requirement ensures that the inspector is aware of all active construction sites and allows the inspector to advise the developer regarding any recommended

improvements to the erosion and sediment control BMPs installed prior to the project's initiation.

2.3   City of Santa Clara

2.3.1   Evaluation of Industrial and Commercial Discharges Program
<u>Deficiencies Noted:</u>

- *The City does not completely document its procedures for prioritizing, scheduling, and conducting inspections of industrial and commercial facilities, and does not increase its inspection frequency for businesses with frequent violations.*
  The City uses spreadsheets to schedule and track inspections of industrial and commercial facilities, and facilities are inspected at least as frequently as required by the permit. (Provision C.6.i states that "Frequency of inspection of a given site or category of industry or commercial business may vary depending upon known or anticipated threat to water quality, but should not be less frequent than once in five years.") However, the documentation does not explicitly describe how facilities are selected for inspection each season to meet this minimum requirement. The City should establish an inspection frequency for each category of business or use another method of scheduling that is appropriate for the City's business demographics and areas of particular concern.

  In addition, a category should be established specifying increased inspection frequency for businesses with inspection records that show frequent violations during regular inspections (in addition to follow-up inspections that might occur after the violations are found). For example, an automotive dismantling business visited during the program evaluation had a history of recurring violations, with each inspection showing the same or similar problems from year to year. Even though this business was inspected more often than once every 5 years, compliance was not being achieved. It is recommended that businesses like these be subjected to increased scrutiny and escalated enforcement actions to ensure that a minimum level of compliance is attained from year to year.

- *The City should develop a more detailed inspection form for industrial and commercial facility inspections.*
  The form the City currently employs for industrial and commercial inspections is a generic notice of violation form. An experienced inspector can use the form to write details about violations, but the form does not itemize common storm water problems or BMPs, which would guide inspections. The City should consider expanding this form to include a checklist of common storm water problem areas. In the case of a restaurant inspection, for example, the list might include mop wash areas, trash storage areas, storm drain inlets, and parking areas. Guidance for items to include on a more detailed inspection form can be found in the SCVURPPP *Performance Standard and Supporting Documents for the Industrial/Commercial Discharger Control Program*, Section 3, "Work Plan BMPs and Control Measures."

- *The City should distribute multilingual outreach materials to business owners for whom English is not their first language.*
  The City has developed BMP materials for businesses in multiple languages that inspectors can use to educate business owners. The City should ensure that inspectors deliver these materials whenever possible and as appropriate. For example, during the program evaluation, the owners of an automotive dismantling business with several storm water violations were provided BMP materials in English even though Vietnamese brochures would have been more appropriate and the City had developed them. These tailored materials were warranted because the inspection history of the business showed repeated violations.

2.3.2 Evaluation of ICID Elimination Program

Deficiencies Noted:

- *The City should develop a set of procedures that document in detail the City's ICID elimination program.*
  The City should provide documentation in the urban runoff management plan of the procedures the City uses to implement the ICID program. Such documentation can be based on the model performance standards developed by the SCVURPPP but should be tailored to identify the City's specific activities and personnel responsible for individual tasks. The documentation should also include the City's procedures for identifying and targeting high-priority areas for illicit discharges and illegal dumping. The documentation should include a list of persons or positions (job titles and departments) that respond to spills or other discharges. It should also include methods for follow-up and enforcement when responsible parties can be identified. The City's program is well established, but documentation of standard operating procedures developed by staff who are implementing the program is the best way to ensure that the program maintains the same level of high quality over the long term.

Positive Attributes:

- *The City has a commendable process for identifying and responding to ICID incidents.*
  At the time of the program evaluation, an ICID incident, which involved sediment-laden sump water being discharged from a landscaped area at a motel, was reported by a City street-sweeper via intra-city communication. City staff responded immediately and were able to work with the property manager to stop the discharge. City staff explained the illegal nature of the discharge to the property manager, discussed the drainage problem leading to the discharge, and offered both immediate and long-term solutions to the problem. A City staff person followed up within a day to confirm that the discharge had been abated and cleaned up.

- *The City has an effective tracking system for ICID incidents that includes detailed follow-up and enforcement results.*
  The City tracks illicit discharge events by using a spreadsheet and maintains hardcopy records of each incident. The records examined by the Tetra Tech inspector during

the program evaluation were very detailed and provided information such as how the event was reported, who responded, what actions were taken to clean up or otherwise mitigate the discharge, and what enforcement actions were taken against responsible parties. Costs are tracked and recovered when City crews respond for cleanup. The summary spreadsheet tracking all illicit discharge events and follow-up activities is sent to the SCVURPPP quarterly.

2.3.3 Evaluation of Municipal Maintenance Activities Program

Deficiencies Noted:

- *The City should develop and implement a performance standard to inspect municipally owned or operated facilities regularly.*

  The City owns a significant amount of property, several parcels of which are used for municipal activities. The City should conduct periodic storm water inspections to look for housekeeping problems, check the condition of and maintain structural BMPs, and ensure that City employees are following prescribed practices that reduce the risk of pollutants entering the storm drain system. A visit to the City's corporation yard revealed a relatively clean site with numerous BMPs, including a wash rack for municipal vehicles, a treatment system for dewatering of materials collected during street sweeping, and storm drain inlet protection. The site also had a detailed SWPPP. Deficiencies at the site included an insufficient number of spill kits and two areas with improperly stored chemicals and fuel. Periodic inspections of such a large site with multiple site managers and numerous staff would help to minimize such deficiencies and ensure that staff are continually reminded of storm water issues. The SWPPP should be updated regularly to reflect any changes in activities performed or BMPs implemented at the site.

- *Many of the City's performance standards for operation and maintenance of public streets, roads and highways, and storm drain systems lack quantifiable targets.*

  The City has developed several performance standards each for public streets, roads and highways, and storm drain system O&M. These performance standards are primarily broad descriptions of practices (e.g., "ensure that City contractors follow BMPs" and "set standard for storm drain BMP implementation"). The City should develop performance standards that include specific activities and are quantifiable. For example, the performance standard pertaining to contractors' use of BMPs could read "Review contract provisions to ensure that adequate standards for BMP use are specified, and spot-check contractor crews in the field quarterly to ensure that BMPs are being implemented consistently and correctly."

Positive Attributes:

- *The City has strong street sweeping, leaf, and litter removal programs.*
  The City employs three full-time street sweepers, who sweep all of the City's streets using regenerative air sweepers. The frequency of street sweeping is high: all residential streets are swept biweekly, and many are swept weekly throughout the

year. Industrial areas are swept twice a month. In the fall the City employs leaf vacuums and ground crews to collect leaf litter from City streets. The City also undertakes extensive Cleanup Campaigns to collect trash items that might otherwise be disposed of improperly.

- *The City has effectively trained street sweeper operators to identify and report illicit discharges and dumping.*
  Street sweeper operators, because they are constantly traveling throughout the City, are trained to identify illicit discharges and report them to the Streets Department. During the program evaluation, one of the street sweepers reported a spill, and the response was immediate. Records show that street sweeper operators report incidents to the Streets Department regularly. This is an effective way to use City staff to meet multiple storm water objectives during their normal course of business.

2.3.4   Evaluation of New and Redevelopment Program

Deficiencies Noted:

- *The City should develop a protocol to ensure that landscaped BMPs are being built and maintained as designed.*
  The City has approved several development plans under the C.3. Provisions, although none of the properties were finished at the time of the program evaluation. Because the City has moved toward more low-impact BMPs that require specific landscaping and grading to function properly, such as grassed swales and bioretention areas, building inspectors and engineers should work with the City's planners to ensure that these BMPs are installed and operate as intended. Because these systems are relatively new to the City, an effort should be made to ensure that inspectors are aware of the design characteristics and limitations of these practices at least for the first few developments implementing the C.3. Provisions.

Positive Attributes:

- *The City has developed detailed guidance for developers and plan reviewers to implement the C.3. Provisions.*
  The City has used many of the guidance materials developed by the SCVURPPP to aid plan reviewers and the development community as the C.3. Provisions have taken effect. The City has also developed additional materials to assist in the plan submission and review process, including City-specific worksheets and other guidance materials that facilitate BMP sizing calculations. City staff have attended training workshops that included working through example C.3 projects. The set of materials assembled by the City and its contractor will be very helpful for both developers seeking to gain project approval and planners ensuring that all projects meet the new requirements. To ensure that the C.3 requirements are being applied consistently, the City should ensure that these materials, especially the checklist designed for use by city planners when reviewing submissions, are used for each project.

- *The City encourages developers to consider alternatives to traditional storm water management, such as low-impact development practices and reduction in impervious surfaces.*
  The City proactively encourages the use of alternative design techniques, such as low-impact development practices and policies that reduce the amount of impervious surface, micromanagement of storm water on residential projects, and use of storm water management features for aesthetic purposes on commercial sites.

2.3.5 Evaluation of Construction Inspection Program

Deficiencies Noted:

- *The City should conduct full storm water inspections more often than once a year.*
  The City is mostly built-out and therefore has few active construction sites at any one time. The City's current practice is to conduct a thorough storm water inspection, in which the entire site is inspected and a checklist is filled out, annually prior to the start of the rainy season. Subsequent inspections consist of "drive-by" inspections, in which the inspector drives through the property and checks for obvious problems, such as tracking of dirt onto the street or evidence of sediment entering storm drains. Drive-by inspections cannot identify less obvious problems that might be found at sites, such as improperly stored materials, spills, or poor housekeeping practices, all of which might be hidden by structures or equipment. Performance Standards CSI-2 and CSI-4 require that the City inspect construction sites prior to and during weather events. A drive-by inspection in which a construction inspection form is not completed does not constitute an "inspection" as implied by the performance standards.

2.4 County of Santa Clara

2.4.1 Evaluation of Program Management and Effectiveness
Follow-up Evaluation Findings:

- *The County has increased interdepartmental accountability, BMP ownership, and support.*
  In the December 2003 evaluations of the County, the municipal inspector identified deficiencies regarding a lack of departmental accountability, BMP ownership, and support from County staff. Since the 2003 evaluation, the County's nonpoint source (NPS) coordinator has identified an NPS contact for each responsible County department. Many of the NPS contacts are department managerial staff, the choice of which identified an increase in program support and prioritization. Identifying an NPS contact for each department has created a mechanism to disseminate information, receive information crucial for the development of the annual reports, and streamline the inspection and enforcement referral process.

  Interdepartmental coordination has increased because of the NPS contacts. For example, storm water violations and issues observed by the Hazardous Materials

Compliance Division (HMCD) during an industrial facility inspection are referred to the NPS coordinator, which benefits the County by increasing coordination, improving tracking of storm water issues, and increasing storm water program awareness.

- *The County's annual report format has improved to address overall program effectiveness.*
  The December 2003 evaluation of the County's program identified the annual report as deficient in assessing program effectiveness. Furthermore, some performance standards lacked quantifiable targets.

  In an effort to address program effectiveness, each year the NPS coordinator disperses to NPS contacts formal letters requesting required information for the annual reports. Each responsible department is obligated to develop a summary of its implementation responsibilities. For example, each municipal department is required to summarize the activities it accomplished during the reporting period. The summaries explain performance standard accomplishments, BMP effectiveness, and activities to be conducted in the next reporting period. The summaries are submitted to the NPS coordinator and are then compiled and incorporated into the annual report.

  In addition, the inspector identified quantifiable goals for performance standard implementation. For example, Table 1 of the URMP (Facility Inspection Implementation Schedule) identifies inspection frequencies and associated percentages of inspections completed (i.e., 100 percent for NOI filers, 33 percent for vehicle service facilities). The table is divided into three sections, including NOI filers, NOI filer investigations, and commercial facilities. The table sets forth percentage goals to complete industrial and commercial inspections on an annual basis.

- *The County has developed a formal employee training program.*
  The December 2003 evaluations revealed that the County lacked a standardized and formal employee training program, most notably a program for industrial inspectors. During the reevaluation, the Tetra Tech inspector observed through document review and in-office interviews that the County had developed a comprehensive employee training program. Attachment M of the FY 2004 annual report addresses training conducted by the County. The training tables in Attachment M include staff members' names, associated departments, titles of the training courses, and instructors' names. Attachment M also states that 28 County employees attended a training session addressing industrial and commercial storm water issues.

2.4.2 Evaluation of ICID Program
Follow-up Evaluation Findings:

- *The County has improved reporting and analysis for the ICID program.*
  During the December 2003 evaluations, the Tetra Tech inspector observed inadequate annual reporting and program evaluation for the ICID program. In an effort to improve the annual reporting format and program assessment, the County has

developed a database to track complaints using Assistance Request Complaint (ARC) forms. Attachment B of the FY 2004 annual report includes the ICID summary report, which quantifies the number of ICID incident report sources, incident sources, incident types (i.e., spills, dumping, vehicle repair, and miscellaneous incidents), and enforcement actions. In Attachment B the County further identifies the actions taken to address the aforementioned incidents.

- *The County has developed a mechanism to respond to illicit discharges.*
  The December 2003 evaluations found that the County had not conducted proactive ICID inspections. Since then, the County has developed a summary report that identifies and tracks issues and areas that are continually problematic. In addition to the tracking illicit discharge events, the County HMCD continually searches for relevant violations as part of the inspection/complaint investigation process. This process includes interviews with business owners/managers regarding proper waste disposal practices. Violations are tracked and referred to the NPS coordinator, as required, and are followed up with enforcement actions depending on response to the violation notice. Standard Operation Procedures (SOPs) for ICID elimination activities are noted in Section IX F of the URMP and are currently being implemented by the county departments.

  The NPS coordinator explained that the County's community characteristics limit the occurrences of illicit discharges, meaning that most illicit discharges and complaints occur within the jurisdictions of incorporated cities. In an effort to address illicit discharge complaints on a countywide basis, the County has participated in the SCVURPPP workshops addressing illicit discharges and illegal connections and has increased its in-house employee training. The County's training is described in the FY 2004 Annual Report, Attachment M.

2.4.3   Evaluation of Industrial and Commercial Dischargers Program
Follow-up Evaluation Findings:

- *The County proactively identifies facilities covered under the State's Industrial General Permit.*
  During the December 2003 evaluation, the Tetra Tech inspector found that the County had not identified and inspected facilities covered by the State's Industrial General Permit. According to the NPS coordinator, facilities that obtain coverage under the State's Industrial General Permit identify the nearest city. The State's permitted industrial facility database does not specifically identify facilities located in unincorporated areas. Since the December 2003 evaluation, the NPS coordinator had downloaded the State's permitted industrial facilities database and compared the database to the County's "Land Use Database." The NPS coordinator identified facilities that are located in unincorporated areas and are covered under the State's Industrial General Permit. These facilities should be included in "Category A," which requires inspections. Attachment C.1 of the FY 2004 annual report identifies both the facilities covered under the State's General Permit and the "Category A" list.

Furthermore, Attachment C.1 identifies the inspection schedule for all facilities within the County's jurisdiction.

- *The County has developed standard operating procedures for industrial and commercial enforcement actions.*
  The December 2003 evaluation found that the County lacked formalized procedures for storm water-specific enforcement actions. During the recent reevaluation the Tetra Tech inspector reviewed the *California Uniform Retail Food Facilities Law (CURFFL) User Guide*. The methods included in the CURFFL guide are used as standard operating procedures for industrial and commercial inspection enforcement actions. More specifically, the guide identifies major and minor violations and the activities identified during an inspection that elicit a major or minor finding. The City's inspection staff had received training on these procedures.

2.4.4 Evaluation of Construction Inspection Program
Follow-up Evaluation Findings:

- *The County has taken the necessary steps to develop and adopt a formal storm water inspection checklist for construction inspections.*
  The December 2003 evaluation revealed that the construction inspectors did not have formal construction inspection checklists. According to the County's response letter to the Regional Board addressing the December 2003 evaluation, the inspection checklist was to be developed and adopted by the end of the FY 2005 reporting period. The NPS coordinator has obtained example checklists and is in the process of incorporating the checklist into the construction inspections.

2.4.5 Evaluation of Municipal Maintenance (PSR, SDO, PM) Programs
Follow-up Evaluation Findings:

- *The Hellyer County Parks maintenance yard had improved on-site storm water controls, as well as standard operating procedures for routine activities.*
  During the December 2003 evaluations, the Hellyer County Parks maintenance yard lacked adequate storm water controls. Since then, the municipal staff has developed the *NPDES Permit Compliance Items Booklet*. The booklet contains pictures and documentation addressing the following items:

  - A parking sweeper that conducts sweeping once a week or as needed according to traffic.
  - New spill kits located at the fueling areas in a highly visible, bright yellow, marked container.
  - Storm drains labeled "No dumping!! Flows to Bay." These storm drains are checked monthly and stenciled as needed.
  - Storm drains equipped with filter fabric drain inserts that are replaced twice a year (replacement drain inserts are stored onsite).
  - The installation of a silt catchment area at the northern portion of the facility. Construction of the 150-foot by 12-foot silt catchment area included the installation of 1.5-inch rock used to reduce sediment tracking.

The booklet now resides at the municipal parks yard and will be updated when new measures are implemented. In addition, the County municipal maintenance departments, such as the Rural Public Works maintenance and support activities and the Airports Department, had developed standard operating procedures for standard municipal maintenance activities. They include internal organization, training, erosion and sediment controls for construction activities, waste disposal, equipment storage and operations, technical assistance, and emergency repair procedures. The standard operating procedures are maintained by the relevant departments and by the NPS coordinator.