

Program Evaluation Report

Contra Costa Clean Water Program: Cities of Concord, Pinole, Pittsburg, Richmond, San Pablo and Contra Costa Clean Water Program (NPDES Permit No. CA0029912)

Executive Summary

In September 2004 Tetra Tech, Inc., with assistance from the California Regional Water Quality Control Board, San Francisco Region (Regional Board), conducted a program evaluation of 5 of the 18 permittees implementing the Contra Costa Clean Water Program (Clean Water Program). The purpose of the program evaluation was to determine the permittees' compliance with the National Pollutant Discharge Elimination System (NPDES) permit (CA0029912 and Board Order No. 99-058, plus amendments) and to evaluate the current implementation status of the permittees' performance standards. Because the Regional Board had already conducted some evaluation activities, the evaluation of some permittees was limited to specific topics. The program evaluation included an office and in-field verification of most aspects of program implementation for the City of Richmond. An evaluation of the office activities with limited field activities was conducted in the Cities of San Pablo and Pinole. The team also conducted follow-up evaluations in the cities of Concord and Pittsburg and the Contra Costa Clean Water Program to review progress made since these permittees were evaluated in May 2003.

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 cities have not developed separate management plans or implementation strategies to better fit the site specific needs, characteristics, and priorities of each community.
- The street sweeper cleanout area at the City of Concord's corporation yard needs to be moved or redesigned to more adequately control potential discharge during cleaning events and the rainy season.
- The City of Pittsburg's inspection schedule does not include any industrial facilities.
- All of the permittees evaluated will require additional training and guidance on the new C.3 provisions for new development and redevelopment projects.

- The street sweeper cleanout area at the City of Concord's corporation yard needs to be moved or redesigned to more adequately control potential discharge during cleaning events and the rainy season.
- The City of Pittsburg's inspection schedule does not include any industrial facilities.
- The City of Pittsburg has not developed an application and storage plan for pesticides, herbicides, and fertilizers.
- The City of Richmond compiles its Annual Report Form without adequate evaluation and assessment of its BMPs.
- Very few City of Richmond top management and elected officials are fully aware of the stormwater program.
- The City of Richmond's Municipal Code apparently does not allow the City to take enforcement action against industries that are not issued either pretreatment or City-issued stormwater permits.
- City of Richmond staff acknowledged that a Illicit Discharge Control Plan had been developed a while ago and that it is not currently followed.
- The City of Richmond Planning Department is not using CEQA and mitigation measures to address stormwater quality.
- City of Richmond staff were not fully aware of new development requirements required by the current Order 99-058.
- The City of Richmond Planning Department does not provide outreach to the development community and does not have any manuals to be used by staff.
- In the City of Richmond, all phases of construction are inspected however building inspectors do not currently include stormwater quality as part of their building inspection activities.
- A SWPPP for the City of Richmond's municipal yard has not been developed.
- Inspection of the City of Richmond's municipal yard revealed many sources of pollutants not adequately addressed by BMPs.
- A wash bay at the City of Richmond municipal yard was directly connected to the storm drain.
- City of Richmond officials regularly attend only one public event annually.

- The City of Richmond does not have a database to track its public education and outreach activities.

Several elements of the permittees' Clean Water Program were particularly notable:

- The Clean Water Program and the permittees have developed clear spill response flowcharts and guidance.
- The City of Concord expanded the types of facilities addressed by the Inspection Activities program element to include fleet operations, corporation yards, golf courses, batch plants, nurseries, mobile cleaners, and manufacturing facilities.
- The City of Pinole has developed outreach materials with “typical stormwater violations” at auto facilities and restaurants.
- The City of Pittsburg has developed high-, medium- and low-priority field screening areas for illicit discharge control and is inspecting the high-priority areas weekly or monthly.
- The City of Richmond uses trained pretreatment program inspectors to implement its stormwater inspection program.
- The City of Richmond conducts very thorough inspections of commercial businesses.

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1.0 Introduction

1.1 Program Evaluation Purpose

The purpose of the program evaluation was to determine the permittees' compliance with the National Pollutant Discharge Elimination System (NPDES) permit (CA0029912 and Board Order No. 99-058) and to evaluate the current implementation status of the permittees' performance standards with respect to EPA's stormwater regulations. Secondary goals included the following:

- Review the overall effectiveness of the Clean Water Program.
- Identify and document positive elements of the Clean Water Program that could benefit other Phase I and Phase II municipalities.
- Acquire data to assist in 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 July 21, 1999, and expired on July 21, 2004 but has been administratively extended. The current permit, the second issued to the permittees, requires each permittee to follow the Contra Costa Clean Water Program's Stormwater Management Plan (1999–2004) and associated performance standards. The performance standards represent the level of effort required of each permittee and are essentially best management practices (BMPs) that each permittee must implement. The permit has also been amended twice, with Order R2-2003-0022 and Order R2-2004-0059.

1.3 Logistics and Program Evaluation Preparation

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

- NPDES Permit No. CA0029912 and amendments
- Contra Costa Clean Water Program's Stormwater Management Plan (1999 – 2004) and associated performance standards
- 2002/2003 annual reports for each of the permittees
- Regional Board correspondence with each permittee
- Permittees' Web sites

On August 31-September 2, Tetra Tech, Inc., with assistance from Regional Board staff, conducted the program evaluation. The evaluation schedule is provided on page 2.

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

	Team 1: Follow-up on May 2003 Evaluation Findings	Team 2: City of Richmond	Team 3: City of Pinole (Wed.) City of San Pablo (Tues/Wed)
Tuesday, August 31, 2004			
Morning	City of Pittsburg Inspection Activities (office and field)	Inspection Activities; Industrial Outreach; Illicit Discharge Control Activities, Public Outreach (office)	San Pablo New Development and Construction Controls (office); Inspection Activities (office)
Afternoon	Illicit Discharge Control Activities (office); Municipal Maintenance Activities (office); New Development and Construction Controls (office)	Inspection Activities (field)	Municipal Maintenance Activities (office and field); Illicit Discharge Control Activities (office)
Wednesday, September 1, 2004			
Morning	City of Concord Illicit Discharge Control Activities (office); New Development and Construction Controls (office)	Municipal Maintenance Activities (office and field)	Pinole New Development and Construction Controls (office); Inspection Activities (office)
Afternoon	Contra Costa Clean Water Program Program Management (office); Reporting (office)	New Development and Construction Controls (office)	Municipal Maintenance Activities (office and field); Illicit Discharge Control Activities (office)
Thursday, September 2, 2004			
Morning	City of Concord Municipal Maintenance Activities (office and field)	New Development and Construction Controls (field)	San Pablo Inspection Activities (field)
Afternoon	Outbrief (all permittees together)		

1.4 Program Areas Evaluated

Because the Regional Board had already conducted evaluation activities, the evaluation of some permittees was limited to specific topics and did not always include an in-field evaluation of activities. A brief description of the program areas evaluated for each permittee is provided below.

On February 19, 2003, the Regional Board amended the Contra Costa MS4 permit to require additional treatment controls for certain new development and significant redevelopment projects (the “C.3” provisions). Implementation of this provision is required by February 15, 2005. These requirements were discussed during the evaluation, but because most permittees have not fully implemented these provisions, the evaluation of these new development requirements was limited in scope.

For the Cities of Pittsburg and Concord, the evaluation team conducted a follow-up evaluation of findings from the May 2003 MS4 evaluation and an additional limited evaluation of New Development and Construction Controls and Municipal Maintenance in Concord. Field activities included an evaluation of industrial/commercial inspection staff in the City of Pittsburg, and an inspection of the corporation yard in the City of Concord. For the Contra Costa Clean Water Program, the evaluation consisted primarily of a follow-up evaluation of the findings from the May 2003 MS4 evaluation, although there was a brief discussion of the status of “C.3” provisions of the permit. This evaluation was conducted in the office and did not include any field activities.

The City of Richmond evaluation included all the major stormwater program areas and was conducted in both the office and the field. For the Cities of San Pablo and Pinole, the office portion of the evaluation included all the major stormwater program areas, while field activities were limited to municipal maintenance (San Pablo and Pinole) and inspection activities (San Pablo).

1.5 Program Areas Recommended for Further Evaluation

The evaluation team recommends the following additional assessments:

- An evaluation of the permittees that were not evaluated.
- Additional evaluations of the new development (C.3) requirements after the permittees begin implementation in 2005.
- A follow-up evaluation of the City of Richmond’s activities to comply with the stormwater permit.

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 permittee’s overall progress in implementing the Clean Water Program. The evaluation team identified only positive attributes that were innovative (beyond minimum requirements). Some areas were found to be simply adequate; that is, they were not particularly deficient or innovative and therefore were not described in the report. The evaluation team did not evaluate all components of each permittee’s Clean Water Program. Therefore, the permittees should not consider the enclosed list of violations, deficiencies, and attributes 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 Contra Costa Clean Water Program (CWP)

2.1.1 Evaluation of Program Management

Positive Attributes:

- *The CWP has encouraged copermitees to develop individual implementation strategies.*

In 2003, the evaluation team recommended that each permittee develop an individual stormwater management plan, or implementation strategy. On October 15, 2003, CWP staff presented the “Tetra Tech Audit Final Report Findings” to the CWP Management Committee. In this presentation, the CWP requested, as a “corrective measure,” that the municipalities “prepare and maintain written plans for implementation of program elements and performance standards. Conduct regular meetings with appropriate departments, municipal staff, and contractors.” In January 2004, the CWP staff again reminded the Management Committee in a memo to continue to address all recommended corrective measures that resulted from the 2003 evaluation.

The CWP revised its 2003/2004 Annual Report Instructions to include requirements that the municipalities submit the names of primary contacts for certain program elements and performance standards, as well as the total numbers of staff responsible for implementation.

During the evaluation interview, the CWP staff indicated they agreed that it was important for each municipality to document exactly how they implement each program element, as it is undoubtedly different for each (i.e. Public Works maintenance staff may conduct dry weather screening once per year on every outfall in one city, while in another, the outfalls in the industrial high-priority areas only are screened annually by the stormwater coordinator). CWP should develop written guidance on the minimum elements expected in an implementation strategy. A strategy should include, at a minimum, responsible parties for each program element (with a contact name when possible), performance standards, a detailed description of the implementation procedure, compliance timelines (both for permit year and permit term), data necessary for reporting and who is responsible for gathering this information, reporting deadlines (both within the municipality as well as for the CWP, Regional Board), and who is responsible for submittal of reports, as well as goals and objectives.

The CWP staff indicated that a requirement to develop implementation strategies should be included in the permit renewal to assure that each copermitee outlines how it will implement each program element.

- *The Model Plan for Illicit Discharge Control Activities has been rewritten to include additional detail as requested.*

In 2003, the evaluation team found that the Clean Water Program’s Model Plans for Illicit Discharge Control Activities and Industrial and Commercial Business Inspections lacked sufficient detail for effective implementation. The CWP Management Committee instructed the Industrial/Commercial Advisory Committee to review/revise the plans as outlined in the 2003 evaluation. The Model Illicit Discharge Control Activities Plan has been revised (November 2003) and distributed to the copermittees. The following table outlines the recommended changes included in the 2003 evaluation report and how these changes were addressed in the 2004 Plan.

2003 Model IDCA Plan	2004 Model IDCA Plan Change
Set a minimum schedule for screening high-, medium- and low-priority areas.	Section 2.1.2 Inspection Activities Schedule outlines frequency of inspections for high-, medium-, and low-priority areas as well as “call out” inspections based on complaints.
Define which activities or areas within a community are considered high-priority, or provide guidance to permittees on what they should consider when identifying high-priority areas.	Section 2.1.1 Field Screening Areas describes various criteria municipalities should use to determine whether an area should be considered low-, medium-, or high-priority.
Describe criteria for identifying whether a discharge is “illicit.”	The Introduction provides a definition for ‘illicit’ discharge.
Include detailed procedures to follow when an illicit discharge has been identified.	Sections 2.2.1 and 2.2.2 describe how the [agency] should respond to active and inactive illicit discharges as well as how to process calls and complaints from residents.
Describe the enforcement procedures to be used.	Enforcement is described in Section 2.3 of the Plan. Procedures include use of stormwater ordinances, written warnings, fines or other measures. The plan specifies that this activity should be coordinated through the Stormwater Program Coordinator. For serious violations, the Plan recommends referral to emergency response personnel, the District Attorney, the RWQCB, the California Department of Fish and Game and/or the U.S. EPA.

Deficiencies Noted:

- *The Industrial/Commercial Inspection Plan has not been revised.*
The Industrial/Commercial Inspection Plan revision was begun, but due to a loss of staff at the CWP, it has not been completed. The CWP is currently interviewing to fill a new position and staff indicated that this person would be charged with completing the Industrial/Commercial Inspection Plan revision this year.
- *To date, formal measures to document the effectiveness of individual program elements have not been developed by the Clean Water Program.*

In 2003, the evaluation team found that the permittees lacked formal measures to document the effectiveness of individual program elements. As noted after the 2003 evaluation, the current method of evaluating the Clean Water Program still involves documenting activities such as the number of public education events, number of catch basins cleaned, number of outfalls inspected, and other basic performance measures. These activities are tracked, but performance standards or goals against which the activities' performance can be measured have not been established. To provide a means to measure program effectiveness, the CWP should develop a program effectiveness strategy that includes both water quality monitoring with implementation data. This should include indirect and direct measures to assess the effectiveness of each program element and/or performance standard.

During the evaluation, the CWP staff indicated that they plan to develop and incorporate additional measures of effectiveness during the next permit cycle. The CWP expressed an interest in working with the Regional Board and copermitees in establishing appropriate goals and methods of assessment to be used to evaluate each copermitee as well as the CWP as a whole. These goals and assessment measures should be included in the Annual Reporting Format to ensure consistent reporting by permittees.

The additional information on program effectiveness, the permittees 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 copermitees. A copy of the report is available at http://www.projectcleanwater.org/pdf/copermitees/assessment_framework_final.pdf

- *The Clean Water Program should develop an annual reporting format that more effectively describes each permittees activities.*
The CWP should develop a standard reporting format for permittees that allows the Regional Board and citizens to more effectively assess activities undertaken in compliance with the permit. For example, the tables of performance standard status provide little useful information to a reader and do not provide any additional explanation beyond a status of “implemented” and an evaluation of “effective.”

The CWP should build on the existing reporting format to develop an annual report that clearly describes for each of the program areas:

- What the permittees were required to do (e.g., a summary or permit requirements or performance standards);
- What the permittees accomplished to meet that requirement (including tables, graphs and explanatory text of the activities); and
- An explanation/analysis as to why the permittees accomplished what they did and what changes or additional BMPs are needed for the next year.

2.1.3 Evaluation of Illicit Discharge Control Activities

Positive Attribute:

- *The Clean Water Program and the permittees have developed clear spill response flowcharts and guidance.*

The Clean Water Program has developed a set of flowcharts documenting the spill response procedures for various spill types (e.g., any spill type, non-hazardous spills, and hazardous spills). The flowchart describes the steps to take, who should be involved, and what should happen during the spill response. Each permittee has customized these flowcharts to their unique circumstances and has included phone numbers of appropriate State, Federal, and local contacts. The spill response flowcharts were laminated and available in the field vehicles visited during the evaluation.

2.1.4 Evaluation of New Development & Construction Controls

Positive Attribute:

- *The Clean Water Program used copermittee and stakeholder input to develop a “Stormwater C.3 Guidebook” for use by applicants throughout the County to facilitate compliance with C.3 requirements by February 2005.*

The CWP has been working since February 2003 to develop a C.3 implementation workplan, committee structure, and guidebook. The guidebook contains fact sheets to assist applicants with a general understanding of maximum extent practicable, best management practices, imperviousness, and “design storm.” Twelve steps for designing a plan are described and include, among other items, checklists, sample plans, information about how to select BMPs, and methods to develop a maintenance plan, as well as alternative compliance options. Multiple appendices are included as well, such as model conditions of approval, a pollutant source control checklist, Contra Costa hydrology data, a spreadsheet for BMP sizing, and an example operation and maintenance plan. The draft guidebook has been distributed to all the copermittees for review and comment with a final guidebook expected by the end of 2004.

2.2 City of Concord

2.2.1 Evaluation of Program Management

Deficiency Noted:

- *The City has not developed a separate management plan or implementation strategy to better fit the site specific needs, characteristics, and priorities of its community.*

The CWP SWMP serves as a framework for the identification, assignment, and implementation of BMPs that provides flexibility to a municipality to address specific problems associated with their community. The City simply follows the SWMP and Performance Measures developed by the CWP; it does not have a separate plan that it implements. The City should develop a city-specific, stormwater quality program that uses the CWP SWMP as its foundation. The SWMP should address specific roles

and responsibilities within the City and describe how the City will implement activities to comply with the permit and performance standards. A City-specific SWMP or a City-specific comprehensive implementation management strategy would allow the City to prioritize the implementation of its program based on the pollutants of concern and the sources of those pollutants that are specific to the City.

2.2.2 Evaluation of Inspection Activities and Industrial Outreach

Positive Attribute:

- *The City expanded the types of facilities addressed by the Inspection Activities program element to include fleet operations, corporation yards, golf courses, batch plants, nurseries, mobile cleaners, and manufacturing facilities.*

In the 2003 evaluation, it was recommended that the City expand the types of facilities addressed by the Inspection Activities program element. Since this evaluation, the City has added 115 additional facilities to its inspection program, which is a 20 percent increase in the number of facilities. The additional facilities were chosen based on complaints, recommendations from City personnel (i.e. Police Department, Public Works), type of industrial activity, or location within a “special emphasis area” (based on various environmental or other issues). In addition, facilities now are being inspected annually if they are found to be in noncompliance.

Deficiency Noted:

- *The City has not identified or located industrial facilities in Concord that are covered under an NPDES industrial stormwater permit.*

The City was not aware of numbers or locations of facilities within the City that hold an individual NPDES industrial stormwater permit or have coverage under the state-wide general permit. While it is not required that the City inspect all NPDES permittees, it is important that the City be aware of the facilities’ activities, locations and potential for discharges. This information is also important for the identification of potential high-priority areas for illicit discharges and/or spills within the City, as well as for dry weather screening. It is recommended that the City obtain a list of all permit holders and determine what additional facility information is needed. The SWRCB maintains a database of industrial stormwater permit holders at <http://www.waterboards.ca.gov/stormwtr/databases.html>.

The Clean Water Program was also questioned about this issue and agreed to acquire and disseminate this information to all copermittees.

2.2.3 Evaluation of Illicit Discharge Control Activities

Positive Attributes:

- *The City has deemed all outfalls high-priority areas and are now conducting annual screening for dry weather discharges before the rainy season.*

In 2003, the evaluation team found that the City was not screening outfalls for dry weather discharges in high-priority areas. In the current evaluation, the City inspects every outfall during September prior to the rainy season and is now conducting dry

weather screening for each. The City has developed a Dry Weather Screening Program document which describes how to implement the program and Public Works field staff (Streets and Transportation Divisions) have been trained on how to conduct the screening. As the program is still in the early developmental stages, it was recommended that the City review the “Illicit Discharge Detection and Elimination Manual” that was developed by the Center for Watershed Protection (available from: <http://www.cwp.org>).

- *Field maintenance staff have been formally trained regarding illicit discharge detection and stormwater issues.*

In 2003, the evaluation team found that the field staff were not formally trained on illicit discharge detection. The current evaluation found that the City has developed a Dry Weather Screening Program document that describes how to implement the program, and Public Works field staff (Streets and Transportation Divisions) have been trained on how to identify discharges and conduct the screening.

- *City maintenance staff now use a form or checklist to identify and describe illicit discharges in the field.*

In 2003 the evaluation team found that maintenance staff did not use a form or checklist to identify and describe illicit discharges in the field. The current evaluation found that a checklist has been developed and is used for each outfall screened. The checklist documents general information about the outfall, identifies the watershed in which it is located, and records the results of tests from nine parameters (i.e. color, odor, clarity, floating solids, suspended solids, sheen, foam, settled solids, and other indicators). The checklist forms are kept in vehicles to be used to report illicit discharges to the coordinator for entry into a database.

2.2.4 Evaluation of New Development & Construction Controls

Positive Attribute:

- *The City uses an “erosion control monitoring/stockpiling fee” to offset the costs of daily erosion and sediment control inspections during the time the grading permit is active.*

The City charges a fee of \$16 for every day that the grading permit is needed. This amount has to be determined and paid in advance of receiving the grading permit. The fee is used to pay for daily grading and erosion control inspections. Any project that moves more than 50 cubic yards of soil must apply for a grading permit and pay this fee.

Deficiencies Noted:

- *Building Department staff perform inspections after the grading is complete, but these staff appear to need additional training and do not document or track inspections adequately.*

Building Inspectors were not available to interview during the day of the audit, but it appeared from questioning the Building Official and the stormwater coordinator that training for Building Department staff may not be adequate. The City should ensure

that all inspectors are adequately trained and are ensuring compliance with erosion and sediment control and pollution prevention requirements. The County has developed an inspection manual for construction site field inspectors, and this resource could be used to assist the City in training its Building Department staff. The Construction-Site Stormwater Quality Inspection Manual (dated March 25, 2003) has been developed to assist field staff in implementing the construction site field inspection performance standards (NDCC-14 through NDCC-19).

In addition, Building Inspectors are not adequately documenting and tracking erosion control and pollution prevention items. A database is in development that will include this type of information along with other building-related items, but in the meantime, it is recommended that the Building Inspectors amend their documentation to more accurately portray stormwater-related compliance after grading is complete. Procedures need to be put in place to ensure that appropriate BMPs are deployed and maintained through all phases of construction, not just in the grading phase.

- *City staff will require additional training and guidance on the new C.3 provisions for new development and redevelopment projects.*

The Clean Water Program is developing a *Stormwater C.3 Guidebook* to assist project engineers in complying with the C.3 requirements for new development and redevelopment performance standards and will be providing training in the fall for planners and engineers. The City will be responsible for incorporating the C.3 requirements into their own plan review procedures and training materials. The C.3 requirements are a significant change from how the City currently reviews plans for stormwater treatment controls for new developments. The City will need to ensure that clear plan review procedures are in place and staff are adequately trained on these requirements. The City should develop plan review checklists, written plan review guidance, and standard conditions to help implement the C.3 requirements.

- *The City of Concord needs to update the “Guidelines for Preparation of Subdivision Maps and Plans” document to reflect the Phase II project size change.*
The City provides a document to assist applicants with the preparation of subdivision maps and plans; however, it needs to be updated to reflect NPDES Phase II changes. Section I.1.6. currently reads “Any development involving five or more acres of total land area must obtain a General Permit from the State Water Resources Control Board.” The City must update this to indicate a size of one acre or more requires coverage under the General Permit.

2.2.5 Evaluation of Municipal Maintenance Activities

Positive Attributes:

- *The Neighborhood Preservation Department requires that all commercial and industrial parking lots be swept.*
The Neighborhood Preservation Department (previously known as Code Enforcement) requires that all commercial and industrial parking lots be maintained to abide by City code. A frequency is not specified, but noncompliance can result in

a citation. The stormwater coordinator assists this department by sending out an annual reminder letter to the facilities.

- *The City's Public Works Department has a well-established storm sewer maintenance program with clear schedules, goals, and a database to track activities.*

The Public Works Department has a comprehensive program in place to ensure proper maintenance of the storm drain system. The program includes inspecting and cleaning catch basins at least once a year and conducting regular street sweeping. Downtown streets are swept weekly, residential streets monthly, and major arterials are swept at least once a month. The Department tracks each structure that is inspected or cleaned, each that is street swept, and the completion of each performance standard, and the department also notes the resources expended in a performance-based database tracking and budgeting system.

Potential permit violation:

- *The street sweeper cleanout area at the City's corporation yard needs to be moved or redesigned to more adequately control potential discharge during cleaning events and the rainy season.*

The City's corporation yard has a wash rack area on the west side of the Fleet Maintenance Building. This wash rack is located under a roof and drains to the sanitary sewer. The facility's SWPPP indicated that this wash rack was being used to clean the City's "sweepers and other equipment." However, upon inspection, it was determined that the City's sweepers are actually being washed out about 20 yards away over a storm sewer drop inlet. The sweepers are too large to fit under the roofed wash rack area. The inlet over which the washing is occurring is surrounded by concrete and asphalt berms to prevent the solids from sheet flowing through the parking lot, but the sediment-laden water is discharged directly into the drop inlet. Sediments that accumulate at this berm are cleaned daily, according to the facility manager. This drop inlet is a 36" box inlet and is equipped with a sump that is five feet deep. Any discharge water that flows over the top of this sump goes to another box that has 10 feet of sump area. The second drop inlet is also equipped with a package BMP that is designed to remove petroleum and hydrocarbons. According to the facility manager, these sump areas collect sediment from the street sweeper washing activity and are to be pumped at least once every two weeks in the dry season and once a week during the rainy season.

According to performance standards MUNI-95, MUNI-96, and MUNI-97, City vehicles and equipment are to be washed at designated wash pads where the water can be sent to a sanitary sewer. If it is not possible to clean out the street sweepers at the existing wash rack area due to the roof level, the City must either find another location that is plumbed to the sanitary sewer to clean their sweepers or move and redesign an area at the corporation yard to allow for adequate clarification and settling of the wash water prior to entering the storm drain system. The City should consider construction of a dewatering facility for street sweeping debris and other wastes removed from the MS4. Allowing the pollutants to settle in the sumps and assuming that they will be cleaned out appropriately is not adequate to ensure that the

sweeper wash area or the sumps themselves do not become a source of polluted discharge from the corporation yard. In addition, sediment laden discharge water will also impact the treatment capability of the package BMP that is designed to filter oil and grease, not solids, from stormwater.

2.3 City of Pinole

2.3.1 Evaluation of Program Management

Positive Attributes:

- *The City has developed a clear and efficient program management structure.*
The City stormwater program manager works closely with City departments and is well organized, with outreach materials, inspection files, and reports easily organized and tracked.
- *The City has developed a sophisticated database for tracking illicit discharges and stormwater inspections.*
The City uses a FileMaker Pro database to track both illicit discharge investigations and stormwater inspections. The database tracks information on the facility, type of inspection, and inspection findings, and it is capable of including relevant photos with each inspection. The database can also print out standard report forms. This database is an excellent tool for the City and could be a good resource for other permittees.

Deficiency Noted:

- *The City has not developed a separate management plan or implementation strategy to better fit the site specific needs, characteristics, and priorities of its community.*

The CWP SWMP serves as a framework for the identification, assignment, and implementation of BMPs that provides flexibility to a municipality to address specific problems associated with their community. The City simply follows the SWMP and Performance Measures developed by the CWP; it does not have a separate plan that it implements. The City should develop a city-specific, stormwater quality program that uses the CWP SWMP as its foundation. The SWMP should address specific roles and responsibilities within the City and describe how the City will implement activities to comply with the permit and performance standards. A City-specific SWMP or a City-specific comprehensive implementation management strategy would allow the City to prioritize the implementation of its program based on the pollutants of concern and the sources of those pollutants that are specific to the City.

2.3.2 Evaluation of Inspection Activities and Industrial Outreach

Positive Attribute:

- *The City has developed outreach materials with “typical stormwater violations” at auto facilities and restaurants.*

To assist facilities in complying with the City’s stormwater program, the City has developed two different fact sheets describing typical stormwater violations observed

at auto facilities and restaurants. Each fact sheet describes different categories of typical violations and the recommended BMPs that facilities can follow to prevent those violations. The City has also developed a BMP fact sheet for parking lots and BMPs for cleaning parking lots. The City’s outreach materials are available on-line at: <http://www.ci.pinole.ca.us/publicworks/stormdrains.html>

2.3.3 Evaluation of Illicit Discharge Control Activities

Adequate.

2.3.4 Evaluation of New Development and Construction Controls

Positive Attribute:

- *The City has developed a variety of stormwater outreach materials for construction that are City-specific and easy to read and understand.*

In addition to outreach materials developed by the Clean Water Program, BASMAA, and others, the City has developed several fact sheets of their own on construction site BMPs, small construction notice of intent requirements, and guidelines for small, “weekend” concrete jobs. These fact sheets are clearly written and easy for construction site contractors to read and understand. The City’s outreach materials are available on-line at:

<http://www.ci.pinole.ca.us/publicworks/stormdrains.html>

Deficiency Noted:

- *City staff will require additional training and guidance on the new C.3 provisions for new development and redevelopment projects.*

The Clean Water Program is developing a *Stormwater C.3 Guidebook* to assist project engineers in complying with the C.3 requirements for new development and redevelopment performance standards. These requirements apply to projects that create one or more acres of impervious surface and are deemed complete after February 15, 2005 (the threshold drops to 10,000 square feet of impervious surface by August 15, 2006). The City will be responsible for incorporating the C.3 requirements into their own plan review procedures and training materials. The C.3 requirements are a significant change from how the City currently reviews plans for stormwater treatment controls for new developments. The City will need to ensure that clear plan review procedures are in place and staff are adequately trained on these requirements. The City should develop plan review checklists, written plan review guidance, and standards conditions to help implement the C.3 requirements.

2.3.5 Evaluation of Municipal Maintenance Activities

Positive Attribute:

- *The City has developed a detailed database to track municipal maintenance and schedule inspections and cleaning activities.*

The City uses a FileMakerPro database to inventory activities and storm drainage infrastructure. The database tracks all storm drain inlets, culverts, manholes, outfalls, and other structures and allows the City to systematically inspect and clean the entire

MS4. The City typically inspects all the facilities in the spring and enters information into the database on what maintenance is required at each facility. In the summer, the City prints out reports for the facilities require cleaning and other maintenance. This allows the City to track their maintenance activities and allows for easy reporting.

2.4 City of Pittsburg

2.4.1 Evaluation of Program Management

Positive Attribute:

- *The City's stormwater coordinator has developed a list of stormwater contacts in each department and has established a more collaborative relationship to facilitate implementation of the program elements.*

In 2003, the evaluation team found that the City lacked intra-departmental coordination on stormwater activities. The current evaluation found that a stormwater contacts list has been developed for the City to better identify staff responsible for various program elements and performance elements. The stormwater coordinator indicated that communication and cooperation between departments and staff is much improved since the previous evaluation, and this was evident during the interviews with other staff.

Deficiencies Noted:

- *The City has not developed a separate management plan or implementation strategy to better fit the site specific needs, characteristics, and priorities of its community.*

The CWP SWMP serves as a framework for the identification, assignment, and implementation of BMPs that provides flexibility to a municipality to address specific problems associated with their community. The City simply follows the SWMP and Performance Measures developed by the CWP; it does not have a separate plan that it implements. The City should develop a city-specific, stormwater quality program that uses the CWP SWMP as its foundation. The SWMP should address specific roles and responsibilities within the City and describe how the City will implement activities to comply with the permit and performance standards. A City-specific SWMP or a City-specific comprehensive implementation management strategy would allow the City to prioritize the implementation of its program based on the pollutants of concern and the sources of those pollutants that are specific to the City.

- *The City has not established a regular meeting schedule or other formal method for communicating program updates, deadlines, and reporting requirements.*
It is recommended that a more formal, regular form of coordination be established to more easily distribute information among the contacts and coordinator. If official meetings are not feasible, a group e-mail list might be sufficient to relay regular information, deadlines, compliance requirements, etc. This could serve as a reminder to staff about program requirements as well as facilitate two-way communication with the coordinator.

2.4.2 Evaluation of Inspection Activities and Industrial Outreach

Potential Permit Violation:

- *The City's inspection schedule does not include any industrial facilities.*

The City contracts with the Delta Diablo Sanitation District to conduct inspections of only automotive repair facilities and restaurants once every 5 years. The INSP-1 performance standard requires that the City evaluate all business types to determine which have the greatest potential to cause stormwater pollution. This evaluation has not been completed; therefore, no industrial facilities have been inspected or have been targeted for a future inspection.

In 2003, the evaluation team found that the City did not identify industrial facilities regulated by the Statewide General Permit for Industrial Activities and did not have any procedures in place to address facilities that did not file for this permit. The current evaluation found that the City was not aware of numbers or locations of facilities within the City that hold an individual NPDES industrial stormwater permit or have coverage under the state-wide general permit. While it is not required that the City inspect all NPDES permittees, it is important that the City be aware of the facilities activities, location, and potential for discharge. This information is also important for the identification of potential high-priority areas for illicit discharges and/or spills within the City, as well as for dry weather screening. It is recommended that the City obtain a list of all permit holders and determine what additional facility information is needed.

Positive Attributes:

- *The City has contracted with Delta Diablo Sanitation District to perform industrial and commercial inspections and has required them to be trained and have an inspection checklist developed.*

In 2003, the evaluation team found that the City lacked an adequate Inspection Activities program for industrial and commercial businesses. This included the lack of any written standards, procedures, or training for industrial stormwater inspectors. The current evaluation found that the City has contracted with Delta Diablo Sanitation District (DD) for the last year. The City and DD have combined the existing pretreatment inspection checklist with the CWP checklist to address stormwater issues. DD inspectors distribute education materials regarding stormwater requirements and BMPs and inspectors appeared well informed about stormwater issues when evaluated in the field.

- *The City distributes information that advertises both the CWP 1-800-NO-DUMPING hotline number as well as the 24-hour public works emergency hotline number for stormwater-related issues.*

In 2003, the evaluation team found that the City lacked a public stormwater hotline. The City is making a more concerted effort to distribute both a Clean Water Program and a Public Works telephone number to facilitate the reporting of illicit discharges, dumping, and spills throughout the City.

Deficiency Noted:

- *The City should consider expanding the types of commercial facilities addressed by the inspection activities program element.*

As stated previously, the City contracts with the Delta Diablo Sanitation District to conduct inspections of automotive repair facilities and restaurants once every 5 years. Regardless of location or compliance history, the City does not perform any additional commercial inspections beyond the Sanitation District’s inspections, unless in response to a complaint. The City should consider conducting additional inspections in priority areas or targeting priority businesses with a potential to impact stormwater quality.

2.4.3 Evaluation of Illicit Discharge Control Activities

Positive Attributes:

- *The City has developed high-, medium- and low-priority field screening areas for illicit discharge control and is inspecting the high-priority areas weekly or monthly.*

In 2003, the evaluation team found that the City had not identified illegal dumping hot spots as required in the illicit discharge control plan. The City has identified three major areas as a high-priority for field screening (Table 1, City of Pittsburg IDCA Plan) that include one open channel and two arterial streets. These areas were selected based on communication with Public Works field staff regarding dumping, spills, litter, etc. The open channel is inspected on a monthly basis and the arterial streets are inspected weekly.

- *The City’s illicit discharge inspectors have been trained on formalized procedures for inspections and enforcement.*

In 2003, the evaluation team found that illicit discharge inspectors lacked adequate training on formal procedures for inspections and enforcement. Inspection staff has now been trained regarding illicit discharge detection and enforcement. Checklists are used and discharge information is entered into a database. In cases where spills, discharges, or dumping are found, each instance is given a case number and compliance is tracked. Inspectors have been instructed to clean up any discharge or dumping if it occurs in the right-of-way, and the City does cost recovery. If an incident occurs on private property, it is referred to Code Enforcement staff follow up and clean up. The stormwater coordinator does all enforcement follow up.

- *The City’s Code Enforcement staff does routine Pollution Exposure Reports (PEX) that detail the sources of pollution that have been abated during Code Enforcement inspections.*

The Code Enforcement staff, throughout their daily field activities, proactively look for and remove sources of pollution. The stormwater coordinator gets PEX reports that detail the types of items that have been removed, such as tires, paint, batteries, appliances, etc.

Deficiency Noted:

- *The City should consider including portions of the storm drain system in the field screening program that are located in areas targeted as high-priority for illicit discharges and connections.*

Currently, it appears that the City is regularly inspecting for litter, dumping, and spills along the established high-priority IDCA areas; however, no dry weather outfall field screening is being conducted. According to the IDCA Plan, field screening areas include “storm drain system, catch basins, inlets, pipes, and outfalls.” The IDCA-9 performance standard requires that portions of the storm drain system be included in the field screening program to detect any illicit connections, spills or dumping that occur. These illicit activities could occur and go unnoticed if the outfalls are not inspected during dry weather. The City should consider which outfall areas might be a priority for this type of field screening and add those areas to the program.

2.4.4 Evaluation of Municipal Maintenance Activities

Potential Permit Violation:

- *The City has not developed an application and storage plan for pesticides, herbicides, and fertilizers.*

In 2003, the evaluation team found that the City did not have an application and storage plan for pesticides, herbicides, and fertilizers as required by the performance standards. The current evaluation found that the City had not developed a pesticide/herbicide/fertilizer application plan. As recommended during the previous evaluation, the City should develop an application plan so that registered City applicators are aware of the appropriate BMPs and restrictions when they apply pesticides. The plan should address performance standards MUNI-123 through MUNI-165, which specifically discuss pesticide use and storage, fertilizer use and storage, and use of Diazinon and copper-based pesticides. Furthermore, integrated pest management (IPM) practices should be incorporated into the plan. Performance standard MUNI-110 requires that necessary safety equipment and spill containment kits be readily accessible in areas where chemicals are used. Spill kits should be placed on spray trucks and other trucks that have a high potential for spills.

Positive Attribute:

- *The City’s field crews have been trained on stormwater performance standards and BMPs.*

In 2003, the evaluation team found that field crews lacked formal guidance and training on how to properly maintain structural stormwater controls. The stormwater coordinator performed an in-house training for field staff in January 2004. The training addressed the performance standards required for municipal activities and was completed in conjunction with the hazardous waste training.

2.4.5 Evaluation of Public Education

Positive Attribute:

- *The City has expanded, personalized, and targeted the materials it uses to educate the public.*

In 2003 the evaluation team found that the City relied almost exclusively on Contra Costs Clean Water Program publications to educate the public. The City has obtained additional information from the U.S. EPA and includes Pittsburg contact information on CWP materials. In addition, the City has developed several publications for issues the City has deemed important (i.e. battery recycling).

2.4.6 Evaluation of New Development and Construction Controls

Positive Attributes:

- *The City’s engineering and building inspectors have been formally trained, use a checklist for inspections and have been informed about enforcement procedures and protocol.*

In 2003 the evaluation team found that construction inspectors lacked adequate inspection procedures and knowledge of the City’s enforcement procedures. Inspectors now use a construction checklist during routine inspections during dry and rainy season inspections and have attended CWP training. The development of checklists and attendance at training appeared to help the inspector that was interviewed to evaluate the maintenance of erosion and sediment control BMPs and enforce the stormwater ordinance; however, there was not time during the evaluation to observe the construction inspectors in the field to gauge their effectiveness.

- *The City considers any discharge from a construction project into the City’s storm drain system an illicit discharge that is handled by Code Enforcement and the stormwater coordinator.*

The City uses not only engineering inspectors but also Code Enforcement staff to require compliance with erosion control requirements. If any sediment or other material leaves a construction site and enters a storm drain, it is characterized as an illicit discharge and referred to Code Enforcement. This increases the resources and enforcement capability of City staff in the field and allows discharges from construction sites to be tracked as illicit discharges.

- *The City verifies NPDES permit coverage for construction sites disturbing more than 1 acre.*

In 2003, the evaluation team found that the City did not adequately verify NPDES permit coverage for construction sites disturbing more than one acre. Now, engineering staff require that a copy of the NOI application be provided during plan review. Staff also view the State Board’s website to check for WDID numbers. It was recommended that a copy of the canceled check or WDID letter from the Regional Board be required for submittal as well, and the City engineer verified that this is obtained in some cases, but not for every project.

Deficiency Noted:

- *City staff will require additional training and guidance on the new C.3 provisions for new development and redevelopment projects.*

The Clean Water Program is developing a *Stormwater C.3 Guidebook* to assist project engineers in complying with the C.3 requirements for new development and

redevelopment performance standards. These requirements apply to projects that create one or more acres of impervious surface and are deemed complete after February 15, 2005 (the threshold drops to 10,000 square feet of impervious surface by August 15, 2006). The City will be responsible for incorporating the C.3 requirements into their own plan review procedures and training materials. The C.3 requirements are a significant change from how the City currently reviews plans for stormwater treatment controls for new developments. The City will need to ensure that clear plan review procedures are in place and staff are adequately trained on these requirements.

2.5 City of Richmond

2.5.1 Evaluation of Program Management

Potential Permit Violations:

- *The City compiles its Annual Report Form without adequate evaluation and assessment of its BMPs.*

Provisions C.5 and C.6 of Order 99-058 require the permittees to submit Annual Reports and an annual report format each year documenting the status of activities. The City uses the Annual Report checklist that was developed by the CWP and IPP is responsible for compiling and submitting the Annual Report. Each department in the City that is responsible for implementing various BMPs in the SWMP are responsible for completing the appropriate section of the annual report form. IPP has had difficulty getting adequate participation and response. In the Annual Reports, the various departments have reported that the BMPs implemented were effective even though the City has not developed assessment tools to help evaluate the effectiveness of the measures. Prior to the 2003/2004 Annual Report IPP staff did not review the components of the Annual Report submitted by the different departments; however, after reviewing the 2003/2004 annual report, IPP staff found it needed to revise the “effectiveness” rating for many performance standards. It is recommended that the City develop tools to help them assess and evaluate whether a BMP or components of BMPs have been implemented and are effective.

- *Very few City top management and elected officials are fully aware of the stormwater program.*

The City Manager position has changed multiple times in the past year. The current manager is an interim manager that does not have a focus on stormwater quality issues. Very few City Council members are aware or knowledgeable about the stormwater program. Many have a vague understanding because of budget issues and approval. Staff has not provided (or been allowed to provide) any real outreach to the council or top management (City Manager, Assistant City Managers, and Department Heads) to educate them about the stormwater program. Most do not understand the regulatory requirements or potential liability to the City for failing to comply. It is vital to the success of the City stormwater program that city leaders and management are fully aware of the City’s program and its compliance responsibilities. During the audit, City personnel indicated that many of the current council members may change with the upcoming election. They propose waiting until after the election to develop

a new member packet that provides information on the program. It is recommended that the City use other resources, such as the CWP and Regional Board, to promote the stormwater program to its city council. During the audit, City staff requested the assistance of the Regional Board in this matter.

Positive Attribute:

- *The City of Richmond continues to implement parts of its program effectively despite significant layoffs and reorganization taking place in the City.*
During the past 12 months the City has experienced a significant reduction in staffing (300 employees) due to citywide revenue shortfalls, which included a reduction in staff allocated to stormwater activities. While the program is clearly understaffed and budgeted, the Industrial Pretreatment Program (IPP) for the City has taken on a considerable amount of responsibility to ensure the industrial inspection, IC/ID, and public education programs continue to be implemented.

Deficiencies Noted:

- | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • <i>The City has not developed a separate management plan or implementation strategy to better fit the site specific needs, characteristics, and priorities of its community.</i> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The CWP SWMP serves as a framework for the identification, assignment, and implementation of BMPs that provides flexibility to a municipality to address specific problems associated with their community. The City simply follows the SWMP and Performance Measures developed by the CWP; it does not have a separate plan that it implements. The CWP defined the focus of its SWMP based on input from the various co-permittees, and this has become the focus for the City. The City appears to establish program priorities based on activities rather than pollutants of concern. The City evaluates current activities being conducted to determine the activities to be conducted during in the next year. The City should develop a city-specific, stormwater quality program that uses the CWP SWMP as its foundation. A City-specific SWMP or a City-specific comprehensive implementation management strategy would allow the City to prioritize the implementation of its program based on the pollutants of concern and the sources of those pollutants that are specific to the City.

- *There is no formal management structure or foundation for the City stormwater program.*
The City program relies on the CWP to provide overall program management and regulatory support. There is no formal management structure or foundation for the City stormwater program. Those areas not supported by the CWP are to be implemented by various departments within the City. An organizational chart was created that demonstrates which departments are accountable for implementing the various aspects of the program and reporting. By default, the responsibility for most tasks falls to the IPP, whose primary responsibility is the implementation of the industrial pretreatment program, but the City has not designated an individual or department that provides oversight of the City's entire program to ensure full compliance with its permit and SWMP. The IPP has taken on some oversight role,

but IPP staff does not have any authority or control over the other departments. If there are issues regarding program implementation or reporting, the IPP reports issues to its manager (the City engineer), who reports it to his manager, who then reports it to the City Manager. This process does not work very well. In most cases other departments are not giving the stormwater program the attention and emphasis that is needed.

With its current reorganization efforts, the City has an opportunity to restructure its stormwater program management. The IPP has developed a proposed management structure that would create a separate stormwater program department managed by an Environmental Compliance Manager, who would have overall control of the program. At a minimum, as part of a comprehensive implementation strategy, the City should develop a stormwater management program organizational chart and management structure that assigns tasks and responsibilities to the various departments and managers. The responsible parties should be held accountable to develop, implement, monitor, and report its assigned activities.

- *The City does not have a centralized database or tracking system for the management, monitoring and reporting of its program.*
 Order 99-058 requires the City to report the status of each Performance Measure in its Annual Report and to evaluate and assess the effectiveness of these measures. The City currently implements various rudimentary electronic and manual tracking practices to record permit-related activities. Their current methods do not provide the City the capabilities to: (1) readily evaluate the status of BMP implementation, or (2) properly evaluate and measure the effectiveness of its program through trend analysis and other measurement and evaluation tools that may be available if a more centralized database system were used. Considering the size and complexity of its stormwater program, at a minimum the City should develop a more centralized tracking system to track and monitor its program.
- *The City funds its stormwater program through a stormwater fee that was established in 1992 based on program cost estimates made at that time and have not been adjusted since.*
 The City established its own Stormwater Utility Fee in 1992 to fund its stormwater program. Fee amounts are based on land use and are calculated based on methodologies prescribed in the Municipal Code. The City collects approximately \$1.5 million annually and the funds are used for both the stormwater quality and stormwater system maintenance programs. The amount of the fee was based on costs estimates developed in 1992 and may not be reflective of the current costs for the program. In 1992 the CWP assessed the City \$90,000 for its participation in the program, which included the annual permit fee. Today the CWP fee is \$270,000 per year; in addition, the City must now pay its own annual permit fee, which is more than \$15,000. Federal Stormwater Regulations 40 CFR 122.26(d)(2)(vi) require the dischargers to conduct a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of its program. Such analysis is to include a description of the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds. It is

recommended the City evaluate both current and projected costs to fully implement and monitor its stormwater program and take steps necessary to ensure that the program is fully funded. The City should investigate other funding mechanisms that could be used by the City to fund various stormwater program activities. Finding alternative funding sources may reduce the burden on the stormwater fee and allow these revenues to fund additional stormwater program activities. Alternative funding mechanisms may include:

- Developer fees (finance department is currently reviewing these fees)
 - Sanitary sewer fees and connection fees
 - Grading fees (plan check)
 - Construction site inspection fees
 - Building code inspection fee
 - Storm drain connection fee (planning and inspection)
 - Industrial pretreatment business permit fee
 - Industrial permit inspection fee
 - Business license fees
 - Abatement fees
 - Cost recovery for hazmat
 - Fines and penalties from stormwater enforcement activities
- *Stormwater fees are collected by the City's finance department and are distributed only after the department verifying stormwater work was conducted and makes a written request.*
 Annually each City department that wants allocation of stormwater funds submits its proposed budget to the Department of Finance. The monies are allocated to either the stormwater system maintenance or stormwater quality program based on the budgets submitted. Departments that conduct various tasks for the stormwater program are to submit the appropriate paperwork to have the funds allocated to their cost centers. This creates additional paperwork for the departments that would rather have the budgeted monies allocated directly to the department at the beginning of the fiscal year based on their projected budget. The City Finance Department will not allow this to happen to ensure that only those activities conducted for stormwater are expended from this fund. According to City representatives during the audit, this procedure may have resulted in some departments not conducting their required activities for the stormwater program by claiming they were not funded when in fact they simply did not want to do the paperwork to be reimbursed. This issue can be attributed to lack of adequate management involvement and could be addressed through the implementation of a formal stormwater management structure.
 - *The City lacks a stormwater training program for staff.*
 The City has not maintained an employee training program. They do not plan to have additional training until after the City reorganization and layoffs are complete. Currently much of the staff is part-time.

2.5.2 Evaluation of Inspection Activities and Industrial Outreach
Potential Permit Violation:

- *The City’s Municipal Code apparently does not allow the City to take enforcement action against industries that are not issued either pretreatment or City-issued stormwater permits.*

City Code 12.22.11 provides authority for the City to take enforcement against industries issued pretreatment permits and City-issued stormwater permits, but not against industries that are not permitted directly by the City (e.g., some industries regulated under the State’s NPDES Industrial General Stormwater Permit). The code provides for a progressive/tiered approach that includes the issuance of a notice of violation (NOV), citations, administrative penalties, and referrals. The NOV, with a “threat” of more enforcement, has proven to be very effective; however, the enforcement program cannot be used for NPDES-permitted facilities that are not directly regulated by the City. The only enforcement mechanism available for NPDES-permitted facilities is a referral to the Regional Board. The City maintains a written log of problem sites and tries to correct the problems through all possible means, including issuing a City stormwater permit before referring a site to the Regional Board.

Federal Stormwater Regulation 40 CFR 122.26(d)(1)(ii) requires municipalities to have adequate legal authority to fully implement their programs to reduce the discharge of pollutants to their storm sewer systems. In accordance with State law, all local laws must be at least as stringent as state law. The City is not responsible for enforcing the State’s General Permit; however, the City must have adequate legal authority to control all discharges to its storm sewer system. NPDES-permitted facilities located within the City’s boundaries are facilities recognized by the Federal Regulations as facilities that do or could threaten to contribute pollutants to its storm sewer system. At a minimum, the City’s enforcement legal authority must allow them to take appropriate action against any industry, business, or person that discharges to its storm drain system, regardless of whether the facility is regulated by a State permit. The City should review and revise, if necessary, its code to provide adequate enforcement authority.

Positive Attributes:

- *The City uses trained pretreatment program inspectors to implement its stormwater inspection program.*

IPP implements the industrial inspection program for the City under the authorities established in Section 12.22 of the City’s Municipal Code. Section 12.22.090 provides the City authority to inspect facilities, collect and require sampling, require businesses and industries to verify compliance, require reporting, and issue stormwater permits. The use of IPP inspectors is an effective approach to implement the City’s industrial inspection program. These inspectors are experienced and skilled in conducting industrial site inspections.

- *The IPP issues City stormwater permits.*

The Municipal Code provides IPP staff the authority to issue stormwater permits to any industry within its jurisdiction, including sites that are regulated under state NPDES permits. The City issues permits to problem or recalcitrant facilities and have been an effective tool to bring facilities into compliance. As an incentive for compliance, the City allows a covered facility to reduce sampling or be removed from permit coverage based on improved compliance.

- *The City trains its industrial inspectors and has tools to assist staff in conducting facility inspections.*
 IPP inspectors attend the industrial inspector training courses developed and provided by the CWP. The IPP also provides annual in-house and on-the-job training as needed. The City has developed a Stormwater Inspection Report used by IPP inspectors to ensure that BMPs and industrial activities are adequately evaluated. The IPP uses a SWPPP checklist that is used by inspectors to review a facility's SWPPP. BMP fact sheets assist the inspectors in determining the appropriateness and adequacy of BMPs inspected.

- *The City inspects all state NPDES-permitted facilities and coordinates activities with the Regional Board.*
 All state NPDES-permitted facilities are inspected and SWPPPs and Annual Reports are reviewed. The City has directed some of these state-permitted facilities to change their monitoring program to better characterize their activities. The inspector asks for the annual report at the time of the inspection. To prepare for an inspection of a state-permitted facility, IPP staff requests copies of all previous inspection reports and enforcement actions from the Regional Board. This enables the City to coordinate its activities with the Regional Board. The City will refer a state-permitted facility to the Regional Board when it does not have a SWPPP.

Deficiency Noted:

- *The City does not maintain a single database for its industry/business inventory and stormwater activities.*
 The City maintains an electronic inventory of all businesses using the City's financial software package. It maintains a separate database for tracking industrial pretreatment permits and City-issued stormwater permits. Information in this database includes facility name, location, types of permits, and facility contact information. Inspections and enforcement are not maintained in any database; rather, they are logged into the GroupWise calendar and archived. According to City representatives, the City has not reported much enforcement data to the Regional Board. The City tracks state-permitted facility inspections for facilities not directly regulated by the City in a Microsoft Word table. Information includes facility name, inspector, data of inspection, type of permit if applicable, and comments. All monitoring data submitted by an industrial facility is maintained in a separate database. During the audit, City representatives indicated they would like to consolidate industrial data into an Access database. It is recommended that the City pursue a single database, including inspection information for state-permitted facilities not regulated directly by the City.

2.5.3 Evaluation of Illicit Discharge Control Activities

Potential Permit Violation:

- *City staff acknowledged that a Illicit Discharge Control Plan had been developed a while ago and that it is not currently followed.*

Performance Measure IDCA-1 requires each municipality to prepare written Illicit Discharge Control Plan to demonstrate its commitment to implementing effective investigation, tracking and elimination of illicit discharges. The Plan describes the level of effort for conducting these activities in the following fiscal year. IPP staff intends to review and revise the plan in the near future based on the City current budget. Upon completion, the pretreatment staff will distribute and assign the workload within its department and other City departments as appropriate.

Positive Attribute:

- *The City is currently putting all of its storm drainage system information into a GIS database system.*

Currently the City storm sewer system information is available on hard copy maps, which are being loaded into a GIS. The new GIS will include all City-owned storm sewer lines, open channels, manholes, inlets, catch basins, and outfalls. The GIS system will include a land use layer that will identify property owners and business names. This will assist the City in locating and identifying all industries and businesses in their community.

Deficiencies Noted:

- *The primary trigger for investigating illicit connections is based on detecting sanitary sewer leaks.*

The City tracks all non-stormwater discharges that are visually detected predominantly because of their concern with sewage leaks due to degrading sewer lines in the City. Typical testing involves indicators, such as ammonia and pH that are used to determine if the source is sewage. The City IPP program does not currently use triggers that would initiate additional investigation if the source is not sanitary sewage (for example, commercial car washing or other non-stormwater discharges). It is recommended the City develop triggers that prompt further investigation based on threat to stormwater quality.

- *The City does not maintain a database to track and monitor its illicit discharge control program.*

The City currently maintains its IPP data in a table in Microsoft Word format. IPP staff indicated they could only use a manual system because of technical problems with their computer system that will be resolved once their offices are relocated to the City's main offices. IPP refers dumps, spills, leaks, and complaints to other departments via e-mail messages and track them by archiving the e-mail messages. All e-mails, from referral to resolution, are archived. Having IPP data available electronically would allow the City to more easily identify trends and high-priority

areas in the City (Performance Measure IDCA-8). Performing analytical studies on data maintained in manual tracking systems is burdensome and time consuming. It is recommended that the City implement a comprehensive electronic database for tracking and monitoring its illicit discharge program activities that is linked to the GIS mapping system being developed by the City.

2.5.4 Evaluation of New Development and Construction Controls

Potential Permit Violations:

- *The Planning Department is not using CEQA and mitigation measures to address stormwater quality.*

Performance Measure NDCC-5 requires each municipality to evaluate the effect of new development on stormwater runoff in the CEQA review process. According to the Planning Department, developers are very resistant to stormwater quality requirements. The Planning Department indicated that they did not have adequate legal authority to require new development requirements at this time, however, sections 12.22.060 and 12.22.980(d) of the Municipal Code provides the City with authority to require BMPs for new development and redevelopment projects. Section 12.22.020(b) of the code defines the term BMP, which includes treatment of stormwater discharges to reduce pollutants in runoff. It is recommended that the City revise its CEQA review process to evaluate the effects of new development on stormwater runoff.

- *City staff were not fully aware of new development requirements required by the current Order 99-058.*

Order R2-2003-0022 amended the City's NPDES Municipal Stormwater Permit Order 99-058 to include Provision C.3, which establishes prescriptive new development BMP requirements with a time schedule for compliance. New development performance measures NDCC-9, NDCC-10, and NDCC-11, developed under Order 99-058, required the City to incorporate permanent BMPs into new development projects. Prior to the amendment, Order 99-058 required the implementation of the CWP SWMP, which included new development performance measures. During the audit City representatives acknowledged that they do not have new development standards, and they have not been establishing conditions on projects that address new development requirements. The City Engineer indicated that they have been effective in getting the development community to incorporate grassy swales into projects without conditions. Lack of staff knowledge regarding new development requirements in the current permit and Provision C.3 is an indication that the City is not adequately planning for the full implementation of new development requirements that are due in February 2005. At a minimum, the City should immediately begin preparing both management and Planning, Engineering, and Building staff for these new requirements.

- *The Planning Department does not provide outreach to the development community and does not have any manuals to be used by staff.*

Performance Measure NDCC-22 requires the City to provide educational materials to developers, contractors, construction site operators, and owners/builders as appropriate. Outreach material has been developed by other municipalities throughout the State of California and the Clean Water Program. At a minimum, the City should evaluate existing material and distribute those materials that are applicable to its program.

- *All phases of construction are inspected however building inspectors do not currently include stormwater quality as part of their building inspection activities.*

Performance Measure NDCC-17 requires site inspectors to inspect and prohibit non-stormwater discharges, visually observe the quality of stormwater runoff during and after major storm events whenever possible, and require proper implementation and maintenance of erosion control and materials/waste management BMPs. The performance measure applies to all phases of construction, including activities conducted after the clearing and grading phases are complete. Building inspectors typically inspect structures for compliance with code and are not trained in stormwater quality requirements. It is recommended that the City adequately revise its inspection program for the final phases of construction to ensure that stormwater quality requirements are adequately addressed. This could be accomplished by implementing a training program for building inspectors.

Positive Attributes:

- *The Building Department reviews and approves all SWPPPs.*
SWPPP must be submitted before a grading permit is issued. The grading permit requires a SWPPP as stringent as state permit. A copy of a site's NOI must be presented prior to grading permits being issued.
- *The Municipal Code establishes a minimum schedule for inspections during the rainy season.*
The Code requires a minimum of two site visits per week during the rainy season. The rainy season is defined in the Code as October 15 through May 31. Building officials indicated during the audit that they visit higher priority projects more often.

Deficiencies Noted:

- *The Building Department is responsible for setting appropriate conditions on all projects and conducting construction site inspections, but a staff member with the Engineering Department has been attending subcommittee meetings and CWP training, not the building inspector, who was recently laid off.*
In accordance with Provision C.3 of Order 99-058, the City is to implement treatment control measures in Group 1 projects by February 15, 2005. The City has been involved in the New Development Subcommittee with the CWP that is tasked with developing a uniform New Development Program for municipalities regulated by Order 99-058. The Building Department is responsible for setting conditions on new development projects, but staff of the Engineering Department has been attending the subcommittee meetings. At a minimum, a representative with the Building Department should attend the subcommittee meetings.

Also, the City does not have a formal training program for its staff. Performance Measure NDCC-24 requires agencies to train construction site inspectors. Building Department staff is responsible for conducting site inspections, yet the City does not provide them formal training, nor has Building Department staff attended CWP training. Staff training would improve the inspector's ability to conduct more thorough inspections.

- *City staff will require additional training and guidance on the new C.3 provisions for new development and redevelopment projects.*

The Clean Water Program is developing a *Stormwater C.3 Guidebook* to assist project engineers in complying with the C.3 requirements for new development and redevelopment performance standards. These requirements apply to projects that create one or more acres of impervious surface and are deemed complete after February 15, 2005 (the threshold drops to 10,000 square feet of impervious surface by August 15, 2006). The City will be responsible for incorporating the C.3 requirements into their own plan review procedures and training materials. The C.3 requirements are a significant change from how the City currently reviews plans for stormwater treatment controls for new developments. The City will need to ensure that clear plan review procedures are in place and staff are adequately trained on these requirements.

- *The Building Department uses one individual to review site plans, and this individual also conducts construction site inspections.*
Recent staffing reductions in the City has impacted all departments. During the audit, staff commented that the City is experiencing an increase in new development activities. It is recommended that the City evaluate resources required to fully implement its new development and construction program and adjust its workload accordingly.
- *During the past year no enforcement orders were issued.*
The City implements a progressive enforcement strategy but will bypass steps depending on severity of noncompliance. Typically noncompliant sites are issued notices of violation (NOVs) progressing to stop work orders if the site violates the NOVs. The City may refer recalcitrant sites to the City attorney or to the Regional Board as a last resort. During the past year the City had not issued any enforcement orders against construction sites. Given the general rate of noncompliance with the State of California's general construction permit throughout the State, it does not seem reasonable that all construction sites within the City were fully compliant with City and state construction site requirements. Lack of adequate enforcement could be attributed to lack of staff resources and to lack of staff knowledge and training. It is recommended the City reevaluate its enforcement strategy and implement appropriate training programs for construction site operators.
- *The City does not use a construction site inspection form.*
The use of a standard inspection form for industrial facility inspections has proven to be effective for the IPP. The Building Department should consider using this

approach as a model and develop a standard construction site inspection form to ensure its inspectors adequately evaluate the site for stormwater quality issues.

- *The City does not maintain an electronic tracking system of its construction and new development activities.*

The Building Department is planning to use Microsoft Excel to begin recording and tracking grading permits it issues. The department currently uses a Microsoft Word table to track inspections and inspection comments. It is recommended that the City implement an electronic database system to track and monitor its construction and new development program.

2.5.5 Evaluation of Municipal Maintenance Activities

Municipal activities evaluated during this inspection included street sweeping, maintenance of corporation yards, and pesticide use. Activities not evaluated were storm drainage maintenance, spill response, litter control, graffiti abatement, and road repair and maintenance. The City does not own or operate municipal golf courses.

During the course of this audit, the City Council approved a contract to privatize the operation and maintenance activities of the City’s sanitary and storm sewer lines. City management indicated the contracts included provisions to require the contractors to implement stormwater quality BMPs.

Potential Permit Violations:

- *A SWPPP for the municipal yard has not been developed.*

Performance measure MUNI-92 requires all municipalities to prepare a SWPPP for each maintenance facility. It is recommended the City develop and implement a SWPPP for the City municipal yard.

- *Inspection of the municipal yard revealed many sources of pollutants not adequately addressed by BMPs.*

During the audit the City’s municipal yard was inspected. Many performance measures required by the SWMP were not being implemented at the facility. Employees at the facility have not been trained, monitoring has not been conducted, and the facility has not been inspected. According to IPP staff, the facility is under new management, who is now fully aware of stormwater quality requirements and intends to comply.

- *A wash bay at the municipal yard was directly connected to the storm drain.*

Discharge of vehicle wash waters from the City’s wash bay to the City’s storm sewer system is a prohibited non-stormwater discharge (Discharge Prohibition A.1). The IPP staff discovered the direct connection approximately six weeks prior to the audit and immediately shut down the use of the wash bay until the drain is connected to the sanitary sewer.

Positive Attributes:

- *All storm drain inlets are cleaned annually.*
Storm drain inlet cleaning begins every year in July and is finished by October. Every inlet is cleaned. Due to environmental constraints by the California Department of Fish and Game, ditches within the City have not been cleaned or maintained. The City has recently entered into an MOU with the Department of Fish and Game that will allow the City to clean its ditches as needed and subject to the conditions of the MOU.
- *The Parks and Recreation Department has significantly reduced its use of herbicides through implementation of an Integrated Pest Management (IPM) Program.*
The Parks and Recreation Department chose to implement an IPM program not only to reduce costs, but also because they lost their primary supplier of pre-emergent chemicals. They found the IPM Program to be very effective and now use herbicides as a last resort. IPM techniques such as mulching and improved plant selection have greatly reduced the need for herbicides. The City learned of many of the adopted IPM techniques through its applicators.
- *The City has reduced its chemical use by approximately 50 percent over the past 10 years.*
The City does not use pesticides. To help further reduce the use of chemicals, the City selectively chooses where and when to apply chemicals using field observations. The City now focuses on maintaining ground cover, whereas previously chemicals were applied seasonally without regard for other criteria.

Deficiency Noted:

- *The City initiated an inventory of all of its municipal activities but has not completed this task.*
The City is undergoing significant reductions of staff and privatization of many activities. IPP staff delayed completing its inventory until the reorganization is complete. At that time the department will be able to adequately identify responsible parties for implementing municipal operation BMPs.

2.5.6 Evaluation of Public Education Activities

Potential Permit Violations:

- *City officials regularly attend only one public event annually.*

Performance Measure PEIO-11 requires a permittee of the City of Richmond's size (over 100,000 population) to participate in four outreach activities annually. City staff regularly attends the Earth Day event where they distribute handouts that focus on the use of pesticides. City representatives indicated that they do not attend as many public events as they would like because they lack resources. Currently the burden of outreach falls to the IPP staff. The City should investigate using other city staff, departments, and management to conduct additional outreach activities.

- *The City does not have a database to track its public education and outreach activities.*

Performance Measure PEIO-8 requires the City to take all reasonable attempts to track the number of program educational materials distributed with sufficient accuracy and documentation to demonstrate compliance with PEIO-9. The City does not maintain a database to track materials distributed, activities attended, inlets stenciled or maintained, or any other component of the public education program. It is recommended the City develop a comprehensive public education database to improve tracking and monitoring of its public education program.

Positive Attributes:

- *The City uses public education surveys conducted by the CWP to focus their public education efforts.*

According to IPP staff, CWP surveys have found the public to be concerned with creeks and dumping. This has become a predominant outreach component of the City's program. IPP staff spends a significant amount of time with local residential groups to promote the stormwater program and encourage public participation in the program.

- *Networking is the primary tool used by City to help implement their public education and outreach program.*

The IPP staff actively participates in almost all of the neighborhood councils' (39 councils) coordinating meetings. The City cooperates and participates with every creek and watershed organization active in their area. They have obtained county grants to help increase watershed awareness.

- *The City makes effective use of grant dollars to implement its household hazardous program.*

The City operates a curbside recycling program that is funded through waste oil grant dollars. Additional outreach is funded through an Environmental Justice Grant through the neighborhood council groups.

Deficiencies Notes:

- *Storm drain inlet stencils have not be adequately maintained.*

Originally the stenciling program was handled through the maintenance program, however, the City is planning to implement a volunteer program to maintain stencils. City representatives admitted that this program has not been maintained. The City plans to conduct a survey of its inlets during the next year to help them prioritize maintenance activities, including stenciling.

- *The City does not condition new development projects to stencil inlets.*

Storm inlet stenciling is a low-cost, effective measure that is commonly required in new development projects by municipalities regulated by NPDES stormwater permits throughout California. At a minimum the City should develop standard conditions that require stenciling in all new developments.

2.6 City of San Pablo

2.6.1 Evaluation of Program Management

Positive Attribute:

- *The City has developed a clear and efficient program management structure.*
The City stormwater program manager works closely with City departments, including Public Works, Planning, and Code Enforcement within the Police Department. The program is also well-organized, with inspection files and reports organized and tracked.

Deficiency Noted:

- *The City has not developed a separate management plan or implementation strategy to better fit the site specific needs, characteristics, and priorities of its community.*

The CWP SWMP serves as a framework for the identification, assignment, and implementation of BMPs that provides flexibility to a municipality to address specific problems associated with their community. The City simply follows the SWMP and Performance Measures developed by the CWP; it does not have a separate plan that it implements. The CWP defined the focus of its SWMP based on input from the various co-permittees, and this has become the focus for the City. The City appears to establish program priorities based on activities rather than pollutants of concern. The City evaluates current activities being conducted to determine the activities to be conducted during in the next year. The City should develop a city-specific, stormwater quality program that uses the CWP SWMP as its foundation. A City-specific SWMP or a City-specific comprehensive implementation management strategy would allow the City to prioritize the implementation of its program based on the pollutants of concern and the sources of those pollutants that are specific to the City.

2.6.2 Evaluation of Inspection Activities and Industrial Outreach

Positive Attribute:

- *The City conducts very thorough inspections of commercial businesses.*

The City has identified restaurants and automobile service facilities for inspection. All facilities are inspected bi-annually, with priority 1 facilities inspected every year. The City's stormwater inspector was very thorough during an inspection of an auto service facility. The inspector investigated all potential pollutant sources and discharge points, asked to see relevant records and spill kits, suggested options for waste disposal to the facility, and waited while the facility covered a potential pollutant source. The City also uses a detailed inspection checklist and keeps detailed inspection records.

2.6.3 Evaluation of Illicit Discharge Control Activities

Deficiency Noted:

- *The City should continue to focus on illegal dumping as a source of pollutants.*
The City has several streams running through it with homes and streets that provide easy access for illegal dumping. The City regularly removes debris from the streams and has taken steps to address this problem, such as periodic inspections, educational flyers, signs, fencing, and a dump voucher program which allows City residents to dispose of \$40 worth of debris at the landfill. However, illegal dumping continues to be a problem. The City should continue their efforts to focus on preventing illegal dumping. The City should also consider working with other nearby communities and the Clean Water Program on a more regional solution.

2.6.4 Evaluation of New Development and Construction Controls

Deficiency Noted:

- | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • <i>City staff will require additional training and guidance on the new C.3 provisions for new development and redevelopment projects.</i> |
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2.6.5 Evaluation of Municipal Maintenance Activities

Positive Attribute:

- *The stormwater coordinator provides clear and concise training to maintenance staff on stormwater requirements and BMPs.*
The stormwater coordinator holds periodic training sessions with maintenance staff to train them on specific topics. These trainings are brief but are tailored to the audience and cover topics in a clear, concise manner. Recent trainings have covered how to handle hazardous wastes and hazardous waste spill response.