Program Evaluation Report

San Diego Area Stormwater Program: Cities of Encinitas, Lemon Grove, Poway, and Santee (NPDES Permit No. CAS0108758)

Executive Summary

Tetra Tech, Inc., with assistance from the California Regional Water Quality Control Board, San Diego Region, conducted a program evaluation of 4 of the 20 copermittees implementing the San Diego Area Stormwater Program (Program) in April 2004. The twofold purpose of the program evaluation was to determine the copermittees' compliance with the National Pollutant Discharge Elimination System permit (CAS0108758 and Board Order No. 2001-01) and to evaluate the current implementation status of the copermittees' Jurisdictional Urban Runoff Management Programs (JURMPs) with respect to EPA's stormwater regulations. The program evaluation included an in-field verification of program implementation. The four copermittees evaluated were the cities of Encinitas, Lemon Grove, Poway, and Santee.

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

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

- The City of Encinitas lacks written procedures for tracking municipal maintenance activities.
- The City of Lemon Grove did not assess program effectiveness in its 2002–2003 annual report.
- The City of Lemon Grove does not require source controls and site design requirements for all SUSMP projects.
- The City of Lemon Grove is not consistently prioritizing construction sites or consistently inspecting medium- and low-priority construction sites at least twice during the rainy season.
- The City of Poway should develop a checklist for determining whether SUSMP project plans are adequate.
- The City of Santee lacks a mechanism to assign responsibility and track the maintenance of post-construction BMPs.

Several elements of the copermittees' program were particularly notable:

- The City of Encinitas has implemented numerous program elements and activities to target its priority pollutants.
- The City of Encinitas conducted a comprehensive assessment of the JURMP, assessing its effectiveness on various levels.
- The City of Lemon Grove has inspected all high-priority commercial facilities and all industrial facilities.
- The City of Poway has drafted an ordinance to address fire sprinkler water discharges.
- The City of Santee has dedicated erosion and sediment control inspectors to oversee construction projects.

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1.0 Introduction

1.1 Program Evaluation Purpose

The twofold purpose of the program evaluation was to determine the copermittees' compliance with their National Pollutant Discharge Elimination System (NPDES) permit (CAS0108758 and Board Order No. 2001-01) and to evaluate the current implementation status of the copermittees' Jurisdictional Urban Runoff Management Program (JURMP) with respect to EPA's stormwater regulations. Secondary goals included the following:

- Review the overall effectiveness of the Program.
- Identify and document positive elements of the Program that could benefit other Phase I and Phase II municipalities.
- Acquire data to assist in 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 February 21, 2001, and is scheduled to expire February 21, 2006. The current permit, the second issued to the copermittees, requires each copermittee to develop and implement a JURMP.

1.3 Logistics and Program Evaluation Preparation

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

- NPDES Permit No. CAS0108758
- City of Encinitas Jurisdictional Urban Runoff Management Program, February 2003
- City of Lemon Grove Jurisdictional Urban Runoff Management Program, February 2003
- City of Poway Jurisdictional Urban Runoff Management Program, February 2003
- City of Santee Jurisdictional Urban Runoff Management Program, February 2003
- 2002/2003 annual report of each copermittee
- Regional Board correspondence with each copermittee
- Copermittees' Web sites

On April 27–29, 2004, Tetra Tech, Inc., with assistance from the Regional Board, conducted the program evaluation. The evaluation schedule was as follows:

Monday, April 27	Tuesday, April 28	Wednesday, April 29
• Program evaluation kickoff meeting • Municipal Maintenance Activities • Construction and Land Use Planning Components, including Standard Urban Stormwater Mitigation Plans (office)	• Construction Component (field) • Industrial and Commercial Components (office) • Illicit Discharge Component (office)	• Industrial and Commercial Components (field) • Residential Component, Education and Public Participation Component • Program Effectiveness

Upon completion of the evaluation, an exit interview was held 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.

1.4 Program Areas Evaluated

The following program areas were evaluated:

- Program management, including the copermittees' assessment of JURMP effectiveness
- Municipal Component
- Industrial Component
- Commercial Component
- Residential Component
- Land Use Planning for New Development and Redevelopment Component, including Standard Urban Stormwater Mitigation Plans (SUSMPs)
- Construction Component
- Illicit Discharge Detection and Elimination Component
- Education and Public Participation Components

1.5 Program Areas Not Evaluated

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

- Wet-weather monitoring program and monitoring program details (e.g., sampling location, types, frequency, parameters).

- Other NPDES permits issued to the copermittees (e.g., industrial or construction NPDES stormwater permits).

- Inspection reports, plan review reports, and other relevant files. The program evaluation team did not conduct a detailed file review to verify that all elements of the Program were being implemented as described. Instead, observations by the evaluation team and statements from the copermittees' representatives were used to assess overall compliance with the permit requirements. A detailed file review of specific program areas could be included in a subsequent evaluation.

1.6 Program Areas Recommended for Evaluation

The evaluation team recommends the following additional assessments:

- Further evaluation of the SUSMP implementation and tracking programs of each city.
- A review of the program effectiveness/evaluation components of each city's JURMP in the next annual report.
- Additional review of the City of Lemon Grove's construction and new development planning program, including the prioritization of construction sites.

2.0 Program Evaluation Results

This program evaluation report identifies potential permit violations, program deficiencies, and positive attributes and is not a formal finding of violation. Program deficiencies are areas of concern for successful program implementation. Positive attributes indicate a copermittee's overall progress in implementing the Program. The evaluation team identified only positive attributes that were innovative (beyond minimum requirements). Some areas were found to be simply adequate; that is, not particularly deficient or innovative.

The evaluation team did not evaluate all components of each permittee's Program. Therefore, the copermittees should not consider the enclosed list of program deficiencies a comprehensive evaluation of individual program elements.

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

2.1 City of Encinitas

2.1.1 Evaluation of Program Management and Effectiveness

Positive Attributes:

- *The City has implemented numerous program elements and activities to target its priority pollutants.*

  Through its monitoring efforts, the City has repeatedly found high bacteria levels in Cottonwood Creek, which drains to the Pacific Ocean near Moonlight Beach, a popular tourist destination. To reduce beach postings and in anticipation of a Total Maximum Daily Load (TMDL) for bacteria, the City undertook a study to identify the sources of bacteria in Cottonwood Creek and developed an action plan that included the following elements:
  - Increased frequency of sanitary sewer line cleaning and maintenance in known trouble spots (e.g., commercial areas with a high concentration of restaurants) to prevent sanitary sewer overflows. Maintenance in these trouble spots is conducted as often as quarterly, compared to annually for the rest of the system.

- Implementation of a grease program for restaurants, which were identified as a significant source of private sewer lateral blockages (and subsequently public blockages) and sanitary sewer overflows. The grease program requires grease traps or interceptors for all new and major tenant improvement projects. The City augments this program by inspecting and enforcing grease bin storage and maintenance requirements during commercial inspections at restaurants, which it identified as a "high priority" under the commercial component of the JURMP.
- Installation of pet waste disposal bags at local parks to increase compliance with local pet waste disposal requirements.
- A daylighting project for approximately 650 feet of Cottonwood Creek, which flows through city parkland (based on the finding that water quality was significantly better in the aboveground portions of the creek when compared to the belowground parts).
- Installation of an ultraviolet (UV) treatment facility for bacteria at Moonlight Beach. (A description of the facility is provided in Section 2.1.4.)

- *The City conducted a comprehensive assessment of the JURMP, assessing its effectiveness on various levels.*

The copermittees developed a guidance document in October 2003 titled *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Programs*. Although this guidance was issued after the end of the reporting period, the City provided an assessment of the JURMP's effectiveness on three levels: compliance with permit activities, program strengths for each component, and water quality assessment. The City quantified activities that have been tracked to meet permit requirements (such as number of inspections and number of facilities in inventory) and provided a narrative description of awareness and behavioral changes for each program component. Finally, the City described water quality data in relation to the City's dry-weather screening and coastal water quality programs. The City is encouraged to continue to expand upon this promising start at assessing program effectiveness in future annual reports.

- *The City conducted a study to determine the economic value of beach usage.*

To garner support for beach replenishment and water quality projects, the City undertook a study to measure beach attendance using laser beam "people counters" at five beach entrance points. The City was able to track the number of visitors to local beaches 24 hours a day and monitor seasonal and daily trends. In August 2003 the City conducted a survey of beach visitors to identify the demographics of the beachgoers and determine their spending habits. Using these data, the City was able to estimate the amount of money beach users spend annually in the local economy (for both city residents and out-of-town visitors). These results were presented to city officials to support the Clean Water Program's efforts to protect water quality and reduce beach closures. Because of the success of this program, people counters will be installed in five more areas to provide full coverage of the beach access points within the city limits.

Deficiency Noted:

- *The City lacks adequate intra-city coordination.*
  Although staff members from different departments have clearly defined roles for municipal maintenance and emergency response activities, the City could benefit from regularly scheduled meetings of the relevant department heads and team leaders to focus on stormwater issues and update Clean Water Program staff on program accomplishments and additional needs. These meetings should involve the Public Works, Parks and Recreation, Planning, and Engineering departments.

2.1.2 Evaluation of Land Use Planning for New Development and Redevelopment

Deficiency Noted:

- *The City should develop a structural best management practice tracking system.*
  Currently, the City is not officially tracking post-construction BMPs installed to fulfill SUSMP requirements. To ensure that these BMPs are maintained over the long term and perform as designed, and to verify that source controls continue to be implemented at new developments (e.g., that covered waste enclosures remain covered), a database of BMP locations, types, maintenance agreements, contact information, and other pertinent information should be developed and populated with project information now and in the future. In addition, a procedure, schedule, and enforcement protocol should be developed to verify periodically that structural and source controls at new developments are properly maintained.

2.1.3 Evaluation of Construction Program

Deficiency Noted:

- *The City's construction inspectors should receive additional training on proper erosion and sediment control practices.*
  The City's engineering inspectors, who are charged with inspecting active construction sites and ensuring compliance with the City's grading ordinance, should continue to receive regular training on the importance of erosion and sediment control and the need to ensure that slope protection and perimeter controls are diligently maintained.

2.1.4 Evaluation of Existing Development: Municipal Program

Positive Attribute:

- *The City installed an in-stream ultraviolet treatment facility in a creek with chronic bacteria problems.*
  To reduce beach postings caused by high bacteria levels and in anticipation of a TMDL for bacteria, the City installed and began operating (in 2002) a $1 million UV treatment facility that diverts 85 percent of Cottonwood Creek's dry-weather flow through strainers, media filters, and two low-pressure, high-intensity UV treatment chambers, reducing bacteria levels by 99.9 percent and drastically reducing the frequency of beach postings. The facility is programmed to shut down during wet weather when high turbidity would limit the effectiveness of the UV treatment. This

treatment facility operates in concert with source control efforts in the watershed and is maintained by Clean Water Program staff.

Deficiency Noted:

- *The City lacks written procedures for tracking municipal maintenance activities.*
  A detailed NPDES database has been developed through which work orders for municipal separate storm sewer system (MS4) maintenance activities are generated and results of the work, such as amount of materials removed, labor hours required, and equipment used, are entered. The maintenance of this database and the generation and tracking of work orders are the responsibility of a single person, and this responsibility could not be easily transferred to another staff person without written guidelines and schedules of activities. The City should develop such guidelines and schedules to ensure that the maintenance activities database is consistently populated.

2.1.5 Evaluation of Existing Development: Industrial and Commercial Programs

Positive Attribute:

- *The City is inspecting the majority of high-priority facilities annually.*
  The City designated 488 high-priority commercial facilities, which include restaurants, automotive businesses, and nurseries. In past years the City has not had the capability to inspect all these facilities each year, so an additional inspector dedicated to meeting this goal was hired. Because Encinitas has very few industrial facilities to inspect, commercial inspections should be an emphasis of the Program.

2.1.6 Evaluation of Residential Program and Public Education and Participation Program

Adequate.

2.1.7 Evaluation of Illicit Discharge Detection and Elimination Program

Adequate.

2.2 City of Lemon Grove

2.2.1 Evaluation of Program Management and Effectiveness

Positive Attribute:

- *The City holds "Stormwater Advisory Team" meetings to coordinate stormwater activities.*
  City Department Directors and the water quality program manager hold periodic "Stormwater Advisory Team" (SWAT) meetings to coordinate stormwater activities. For a small city, this can be an effective method for coordinating the Program. The water quality program manager should use these meetings as an opportunity to build commitment to the Program and train staff on the City's stormwater responsibilities.

Potential Permit Violation:

- *The City did not assess program effectiveness in its 2002–2003 Annual Report.*
  Permit provision F.7 requires the City to "develop a long-term strategy for assessing the effectiveness of its individual Jurisdictional URMP" and "include an assessment of the effectiveness of its Jurisdictional URMP using the direct and indirect assessment measurements and methods developed in its long-term assessment strategy." The City has not yet developed an assessment strategy, and the City's 2002–2003 JURMP Annual Report did not assess program effectiveness, instead stating that the assessment of effectiveness will be completed during the 2003–2004 reporting period.

Deficiencies Noted:

- *The City relies largely on the water quality program coordinator to implement the stormwater program.*
  The City's water quality program coordinator is largely responsible for implementing most of the stormwater program, with the exception of municipal maintenance, some construction inspections, and the contracting out of dry-weather screenings and industrial/commercial inspections. The coordinator reviews plans for erosion and sediment controls and new development requirements, conducts follow-up inspections at some construction and industrial/commercial sites, distributes educational material, manages contracts, and oversees the program management tasks for the stormwater program, including reporting. Relying on a single person for the majority of stormwater tasks has not been a successful model in other cities. The City should investigate opportunities for other departments to play a more active role in the stormwater program. For example, the Community Development Department could review most plans for erosion and sediment controls and new development standards, involving the water quality program coordinator only when necessary.

- *The City should more specifically target the stormwater program to address pollutants of concern.*
  According to the City's JURMP, Chollas Creek, which drains three of the four drainage areas in the City, is on the Clean Water Act section 303(d) list due to metals, toxicity, and coliform bacteria. The City should more specifically target BMPs and stormwater activities to address these pollutants of concern. For example, the potential sources of these pollutants should be identified and increased, or more specific BMPs or activities (such as inspections) should be developed to address these pollutants. The stormwater BMP Handbooks available from the California Stormwater Quality Association (http://www.cabmphandbooks.org/) provide information on BMPs and pollutants of concern.

2.2.2 Evaluation of Land Use Planning for New Development and Redevelopment

Potential Permit Violation:

- *The City does not require source controls and site design requirements for all SUSMP projects.*

Permit provision F.1.b requires the City to develop and implement a local SUSMP. The City adopted its local SUSMP December 3, 2002. At the time of the evaluation, the City stated that it was not actively requiring source controls and site design requirements for all applicable SUSMP projects. The permit requires projects to implement source control BMPs and to implement site design practices where feasible. The City should begin to review plans for source controls and site design requirements immediately.

Deficiency Noted:

- *The City should develop a checklist to assist in reviewing SUSMP projects.*
  City plan reviewers rely on the local SUSMP to review applicable SUSMP projects. The City should develop a specific checklist, based on the local SUSMP, to assist plan reviewers in assessing SUSMP projects. For example, the checklist should identify the priority development project categories, the anticipated pollutants of concern in each project category, BMP requirements (including site design, source, and treatment control BMPs), and maintenance information. The City might want to develop a checklist to ensure that priority development project categories are identified for SUSMP review and then design SUSMP checklists that are specific to common project types in the City (such as retail gasoline outlets and restaurants).

2.2.3 Evaluation of Construction Program

Potential Permit Violation:

- *The City is not consistently prioritizing construction sites and is not consistently inspecting medium- and low-priority construction sites at least twice during the rainy season.*

Permit provision F.2.e requires the City to prioritize all construction sites and defines a high-priority site as a site of 50 acres or more on which grading will occur during the wet season, or a site of 5 acres or more near a tributary to a water body listed as impaired for sediment. Permit provision F.2.g requires the City to establish inspection frequencies, with a minimum frequency for high-priority sites of weekly and a minimum frequency for medium- and low-priority sites of at least twice during the wet season.

During the evaluation, the most current list of prioritized construction sites produced by the City was approximately 6 months old, and the City did not have specific criteria for prioritizing construction sites. Because of the incomplete prioritization list, the evaluation team could not determine whether all medium- and low-priority construction sites were being inspected at the frequency required in the permit. The City should develop specific criteria for each priority level and apply them regularly

to all construction activity in the City. Because the City rarely has any construction sites larger than 5 acres, it should consider redefining a high-priority site to capture more of the sites that are potential problems and should be inspected weekly (although this is not required by the permit).

The City's primary erosion and sediment control inspector inspects projects for public improvements but does not inspect sites when a grading permit is not issued or when only building permit inspections occur. This practice could exclude a number of smaller construction sites from the inspection process. For example, during the program evaluation the evaluation team visited two single-family homes under construction on a steep slope above Chollas Creek. These homes were not on the inspector's list because they were not required to apply for grading permits. The City should consider sending its primary erosion and sediment control inspector to all new construction sites (including sites issued only building permits) so he can assess each site's priority and erosion potential.

Deficiency Noted:

- *The City construction inspector should receive additional training on erosion and sediment control BMPs.*
  Although the City construction inspector was knowledgeable about erosion and sediment control practices generally, during the evaluation the inspector did not identify some implementation problems on construction sites. The City is encouraged to provide additional training opportunities to field staff to ensure that they have the tools and education necessary to ensure construction sites employ proper erosion and sediment control practices.

2.2.4 Evaluation of Existing Development: Municipal Program

Positive Attribute:

- *The City inspects storm drain inlets and major conveyances before major storm events.*
  The City inspects storm drains before major rain events and has developed a series of forms for staff to use during their inspections. These forms help ensure that all appropriate storm drains are inspected and maintained.

Deficiencies Noted:

- *The City needs to complete the mapping of its MS4.*
  The City does not have a complete, accurate map of its entire storm drain system, including inlets, pipes, outfalls, and other stormwater facilities. Attachment E to the City's permit requires the City to develop an up-to-date map of its entire MS4 for use in the dry-weather screening program. The City should complete its MS4 map as soon as practical.

- *The City needs to stencil storm drain inlets.*
  Some storm drain inlets in the City have been stenciled, but the City is deciding on the best method to use to permanently stencil inlets. The City is encouraged to consider thermoplastic or other similar markers instead of paint and is also encouraged to set a schedule and procedure for stenciling all the inlets in the City.

2.2.5 Evaluation of Existing Development: Industrial and Commercial Programs

Positive Attribute:

- *The City has inspected all high-priority commercial facilities and all industrial facilities.*

  The permit requires the City to inspect high-priority industrial facilities annually, but it allows the City to determine the appropriate inspection frequency for high-priority commercial facilities. The City has taken the initiative to conduct stormwater inspections at all industrial facilities and all high-priority commercial facilities and is beginning to conduct a second round of inspections at those same facilities. The City is encouraged to continue such inspections, especially at the commercial sites because of the large number of commercial businesses in the City.

Deficiency Noted:

- *The City should develop a fact sheet or letter for distribution to businesses during industrial and commercial inspections.*
  The City uses a contractor to conduct inspections of industrial and high-priority commercial facilities. Although the inspector verbally explains the City's stormwater program to each facility, the handouts distributed during inspections focus mostly on BMPs and do not explain the City's stormwater program, the City's stormwater ordinance, or the reason the City is inspecting the facilities. A fact sheet or letter could be distributed during the inspection, in addition to the BMP materials, to explain the reason for the stormwater inspection, summarize the City's stormwater ordinance and penalties, and provide contact information in case the facility has additional questions.

2.2.6 Evaluation of Residential Program and Public Education and Participation Program

Deficiency Noted:

- *The City should expand its public outreach efforts to reach a larger target audience.*
  The City's public education program is largely focused on distributing educational brochures from the City Hall front counter. This approach limits the potential audience for stormwater education to people who visit City Hall. The City should expand its public outreach efforts to address larger target audiences. For example, the City should consider using other mechanisms, such as direct mailings, newspaper/media articles, or local schools, to reach additional target audiences.

2.2.7 Evaluation of Illicit Discharge Detection and Elimination Program

Deficiencies Noted:

- *The City should more actively involve the code enforcement officer in resolving stormwater complaints.*
  Currently, the City's water quality program coordinator has primary responsibility for investigating stormwater complaints. The coordinator, however, is not authorized as a code enforcement officer and cannot write "tickets" for violations of the City code. The City should more actively involve the code enforcement officer when a violation of the City's stormwater code has been identified.

- *The City needs to identify a better method of following up on recommendations made in the dry-weather screening report.*
  The City contracts out its dry-weather screening activities. The contractor delivered a final report on the 2003 dry-weather screening program in August 2003 and then produced a report in December 2003 on follow-up investigations conducted based on data in the August report. The follow-up report made four recommendations for actions by the City, which consisted primarily of providing educational materials near identified hotspots. At the time of the program evaluation in April 2004, three of the four recommendations had not yet been implemented.

  The City should identify a more efficient method for following up on recommendations and data contained in the dry-weather screening reports. For example, the December 2003 follow-up investigation report contained some of the same recommendations found in the August 2003 screening report. The City should implement these recommendations and follow up on the problems identified in a timelier manner.

2.3 City of Poway

2.3.1 Evaluation of Program Management and Effectiveness

Positive Attributes:

- *The City has a stormwater committee, representing all the relevant City departments, which meets monthly.*
  The City's stormwater committee is made up of representatives from the Public Works, Engineering, Land Use, Planning, and Code Compliance departments. The committee meets monthly, and minutes are taken and submitted in the annual report each year.

- *The City assesses program effectiveness and links pollutants of concern to BMPs.*
  The copermittees developed a guidance document in October 2003 titled *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Programs*. Although this guidance was issued after the end of the reporting period, the City provided an assessment of the JURMP's effectiveness focusing on compliance with permit requirements and linking pollutants to potential BMPs. For example, the City

identified the constituents of concern (such as sediment); identified geographic areas for each pollutant, which program element addressed that pollutant, and potential sources of the pollutant; estimated the percentage of pollutant from each source; and assigned a priority. The City then identified, for each pollutant, potential BMPs to address the pollutant in each geographic area. The City also quantified activities conducted to comply with individual activity-based permit requirements. The City is encouraged to continue to expand upon this promising start at assessing program effectiveness in future annual reports.

2.3.2 Evaluation of Land Use Planning for New Development and Redevelopment

Deficiency Noted:

- *The City should develop a checklist for determining whether SUSMP project plans are adequate.*

Currently, a consultant reviews and approves the City's SUSMP projects. As the City begins to review and approve the projects, it would be beneficial to develop a checklist to ensure that staff can determine whether the projects meet the requirements specified in the SUSMP.

2.3.3 Evaluation of Construction Program

Deficiency Noted:

- *The City needs to ensure that all inspectors with stormwater responsibilities have adequate training and legal authority.*

The City uses several different types of inspectors for its construction inspection program. The City contracts out for building inspections, and the contract specifies that the inspectors are to look for violations of the Uniform Building Code, but not City ordinances. This makes using the building inspectors to ensure stormwater compliance problematic. If the City is going to use building inspectors to inspect construction sites for stormwater compliance, the City should ensure that contracted building inspectors have the authority to inspect for violations of the City's stormwater ordinance and are adequately trained to conduct such inspections.

2.3.4 Evaluation of Existing Development: Municipal Program

Positive Attribute:

- *The City has drafted an ordinance to address fire sprinkler water discharges.*

The City's draft ordinance would prohibit the discharge of fire sprinkler flush into the MS4. The fire sprinklers are flushed regularly, and the sprinkler water can be a significant source of pollutants when flushed to the storm drain. The City is preparing to present the ordinance to the City Council. If passed, this ordinance would be the first of its kind in the country.

Deficiency Noted:

- *The City's Materials Handling Yard has minor housekeeping deficiencies.*
  Wood treated with chromated copper arsenate was not covered. These materials are a potential source of stormwater pollutants and should be covered to prevent contamination of stormwater runoff.

2.3.5 Evaluation of Existing Development: Industrial and Commercial Programs

Positive Attribute:

- *The City and its consultant have developed and maintained an effective database for storing industrial/commercial facility information and inspection reports.*
  The City coordinates well with its consultant in updating and maintaining the industrial/commercial database. After an inspection, the consultant inspector updates the database by entering the inspection report. Afterward, the consultant returns the updated database to the City so that the City houses the most up-to-date information. The City also maintains a hard copy of each inspection report.

2.3.6 Evaluation of Residential Program and Public Education and Participation Program

Positive Attribute:

- *The City's residential program and public education and participation program distribute helpful information and target specific audiences.*
  The City has developed several BMP brochures specific to different activities. The most recent is a brochure focused on horses and livestock. The City has also begun to develop programs for elementary schools. The City has worked with other cities, such as Escondido and El Cajon, to help develop their program and recently purchased a watershed model to demonstrate the effects of stormwater pollution. Finally, the City distributed a special edition of its newsletter *Poway Today* to all the residences and businesses in the City. The newsletter describes the NPDES program and addresses topics like proper disposal of household hazardous materials, pollution minimization, and good housekeeping tips for restaurants, construction sites, and automobile repair shops.

2.3.7 Evaluation of Illicit Discharge Detection and Elimination Program

Positive Attribute:

- *The City has an effective dry-weather screening program.*
  The dry-weather screening program, which the City contracts out to a consultant, includes 50 sampling sites for field observations and field water quality analysis. In addition, water samples are taken at 13 sites for laboratory analysis. When analysis results exceed action levels, which were derived through a statistical analysis of previous data, the City conducts upstream follow-up investigations to determine the source of pollution. Once the City determines the source, the City educates residents in the surrounding area by distributing appropriate BMP brochures. The City

observed a decrease in exceedances of the action levels in 2003 compared to 2002 and attributes the decrease to its education efforts.

2.4 City of Santee

2.4.1 Evaluation of Program Management and Effectiveness

Positive Attribute:

- *The City is adopting an alternative funding mechanism for the stormwater program.* During in-office interviews the City staff explained that they are in the process of adopting an alternative funding mechanism for the stormwater program. The City will incorporate this funding mechanism into the trash bill or another utility bill. Taking a proactive approach to creating an alternative funding source will facilitate the City's implementation of a satisfactory stormwater program.

- *The City is taking steps to assess the effectiveness of its JURMP.* The copermittees developed a guidance document in October 2003 titled *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Programs*. Although this guidance was issued after the end of the reporting period, the City provided an assessment of the JURMP's effectiveness on three primary elements: program planning, program implementation, and effectiveness assessment. The City assessed compliance with activity-based permit requirements and provided data on dry weather monitoring trends. The City is encouraged to continue to expand upon this promising start at assessing program effectiveness in future annual reports.

2.4.2 Evaluation of Land Use Planning for New Development and Redevelopment

Positive Attribute:

- *The Community Services (municipal maintenance) Department is included in the plan review process to address and approve municipal maintenance issues.* In-office interviews with the City planning staff revealed that the municipal maintenance staff is included in the plan review process. The Planning Department oversees the plan review process and distributes the plans to other divisions, departments, and agencies for sign-off. The municipal maintenance department is responsible for addressing municipal maintenance issues associated with the plans. Prior to the approval of a plan, the municipal maintenance department must sign off on the plan.

Deficiency Noted:

- *The City lacks a mechanism to assign responsibility and track the maintenance of post-construction BMPs.*

  Section F.1.b.(2).(b).x of the municipal permit requires the copermittee to develop BMPs that "include proof of a mechanism, to be provided by the project proponent or Copermittee, which will ensure ongoing long-term structural BMP maintenance." The City lacks a mechanism to assign responsibility for the maintenance of post-

construction BMPs. The City is in the process of adopting a maintenance agreement as part of the plan approval process. The adoption of the City's maintenance agreement will facilitate assigning responsibility for routine maintenance of post-construction BMPs. The City also lacks a mechanism to track post-construction BMPs. Tracking the locations, maintenance schedules, and responsible organizations would help the City establish a routine maintenance schedule and inspection program for post-construction BMPs.

2.4.3 Evaluation of Construction Program

Positive Attribute:

- *The City has dedicated erosion and sediment control inspectors to oversee construction projects.*

The Development Services Department has dedicated erosion and sediment control inspectors who work closely with construction contractors to identify and remedy erosion and sediment control deficiencies. In addition, the inspectors work with the Planning Division to ensure that erosion and sediment control designs include adequate controls to prevent stormwater contamination. The City is encouraged to maintain routine training for the dedicated erosion and sediment inspectors to ensure that current BMPs are considered during the routine construction inspections.

Deficiencies Noted:

- *The City should develop a procedure to provide immediate feedback to construction operators regarding violations found during routine inspections.*
  Section F.2.h of the municipal permit requires the copermittee to enforce the City's ordinances and permits at all jurisdictional construction sites. Although the City has established enforcement measures in section 7.8 of its JURMP, the City lacks a mechanism to issue immediate on-site notices. Currently, the City issues a notice of violation after the fact in a formal letter signed by the City manager. The letter is usually sent to the contractor after an inspection is conducted. The City is encouraged to develop an on-site "fix-it ticket" or inspection report form that gives the City the opportunity to address on-site construction violations immediately. The fix-it ticket could be in duplicate form so that the City and the contractor each receive a copy of the notice.

- *The City lacks a formalized inventory to track activities at construction sites.*
  Section F.2.d of the municipal permit requires the copermittee to "develop and implement, prior to the rainy season, a watershed based inventory of all construction sites within its jurisdiction regardless of site size or ownership." During in-office interviews, the evaluation team discovered that the City does not have a formalized tracking system for active construction sites within its jurisdiction. Although the City retains hard copy files for all active construction sites, the City is encouraged to develop a formalized database as required by section F.2.d of the permit.

2.4.4 Evaluation of Existing Development: Municipal Program

Positive Attribute:

- *Stormwater awareness and knowledge of BMPs are widespread in the municipal maintenance department.*
  The municipal maintenance field staff interviewed during the evaluation appeared to be well trained, had access to equipment, were knowledgeable of appropriate BMPs, and displayed an overall high level of stormwater awareness. The City's municipal maintenance department had informally adopted the *California Stormwater Quality Association BMP Guidebook for Municipal Maintenance Activities*. The guidebook was available to all municipal staff and appeared to be referenced regularly. The municipal staff also had conducted weekly "tail-gate" meetings, which included the discussion of stormwater BMPs as well as other related issues. The tail-gate meetings, agendas, and attachments were documented in a binder available to all municipal staff.

Deficiencies Noted:

- *The City lacks a long-term approach for the storm drain stenciling program.*
  Section 10.1-1 of the City JURMP identifies a storm drain stenciling program that focuses on stenciling all major drains and updating stenciling on previously stenciled drains. The JURMP also indicates that the number of stencils and amount of public participation will be recorded and documented. During the in-office interviews, the evaluation team discovered that the City lacks a long-term approach to stenciling all jurisdictional storm drains. The City explained that the stenciling had been done through the "I Love a Clean San Diego" volunteer campaign. The City is encouraged to develop a more formalized storm drain labeling program that will address long-term stenciling needs.

- *Additional stormwater controls should be implemented at the City's corporation yard.*
  The evaluation team visited the maintenance yard south of Mission Gorge Road. Although the corporation yard is surrounded by impervious surface, the yard lacks some minor stormwater controls. The spoils yard lacks controls to address dust control. The fiber rolls that border the drainage runs through the yard should be replaced. The City is preparing to build a new corporation yard to replace the current yard. Until the new facility is built, the City is encouraged to address dust control and on-site sediment controls (fiber rolls).

2.4.5 Evaluation of Existing Development: Industrial and Commercial Programs

Positive Attribute:

- *The City's industrial/commercial inspectors conduct thorough inspections and the City has inspected the majority of industrial and commercial facilities.*
  The City inspectors use a thorough stormwater checklist when conducting evaluations of industrial and commercial stormwater facilities. This four-page document ensures a thorough assessment of facility BMPs and provides proper facility documentation

for compliance under City ordinances, City permits, and the MS4 permit. In addition, the City inspectors have been trained to identify stormwater controls in the field and are knowledgeable about local and state regulations. Finally, the City inspectors are equipped with education materials for facility owners regarding specific BMPs to be implemented at industrial and commercial facilities.

In addition, the City has inspected all 67 high priority industrial facilities and has identified all 372 commercial facilities as high priority. During the first year of inspection activities, the City inspected half of these commercial facilities.

Deficiency Noted:

- *The City lacks a formal mechanism to issue immediate on-site notices to industrial and commercial facilities.*
  Section F.3.b (7) and F.3.c (5) of the municipal permit require the copermittee to enforce its ordinances and permits at all jurisdictional industrial/commercial sites. Although the City has established enforcement measures in sections 3.7.1 and 4.5.1 of its JURMP, the City lacks a mechanism to issue immediate on-site notices. The City is encouraged to develop an on-site notice that gives the City the opportunity to address on-site industrial/commercial violations immediately. During the inspection of Jimmy's Family Restaurant, for example, the inspector discovered restaurant staff washing out a trash can in the driveway, open trash containers, and an open tallow bin. Although the inspector educated the restaurant owner and adequately explained that the issues encountered were in violation of City ordinances, the inspector did not provide a written notice of these violations while on-site.

2.4.6 Evaluation of Residential Program and Public Education and Participation Program

Adequate.

2.4.7 Evaluation of Illicit Discharge Detection and Elimination Program

Adequate.