# City of San José Urban Runoff Management Plan







Prepared by the Environmental Services Department **September 2004** 



## City of San José Urban Runoff Management Plan 2004

# Chapter 11: The Santa Clara Valley Urban Runoff Pollution Prevention Program

Prepared by the
Environmental Services Department
Watershed Protection Division
Urban Runoff Section
September 2004

CITY OF SAN JOSÉ • ENVIRONMENTAL SERVICES DEPARTMENT			

## **Certification Statement**

## City of San José URBAN RUNOFF MANAGEMENT PLAN UPDATED SEPTEMBER 1, 2004

#### **Certification Statement**

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**Signature by Duly Authorized Representative:** 

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**Environmental Services Department** 

Watershed Protection

## **Acknowledgements**

The City of San Jose's Urban Runoff Management Plan is a true interdepartmental effort. Our continued success is built upon the cooperation of hundreds of City employees. The future success of this plan will only be possible with the commitment and hard work of the following departments:

Department of Public Works

Department of Transportation

Department of Planning, Building and Code Enforcement

Department of Parks, Recreation, and Neighborhood Services

Department of Conventions, Arts, and Entertainment

Department of Finance

Environmental Services Department

General Services Department

San Jose International Airport

The Office of the City Attorney

The Redevelopment Agency of the City of San Jose

and

The Office of the City Manager

## **Preface**

In February 2001, the San Francisco Bay Regional Water Quality Control Board (RWQCB) re-issued the City of San José's (City) National Pollutant Discharge Elimination System municipal separate storm drain systems permit<sup>1</sup> for the discharge of stormwater to local waterbodies. The permit was issued jointly to the Co-permittees of the Santa Clara Valley Urban Runoff Pollution Prevention Program (Program); the Co-permittees include 12 other cities of northern Santa Clara County, the County of Santa Clara, and the Santa Clara Valley Water District.

The permit requires the submittal of an Urban Runoff Management Plan (URMP). The latest iteration was last submitted to Water Board in March 2002. The permit further requires that the City submit a compilation of all revisions to the URMP by September 1, 2004. This URMP has been prepared to fulfill the City's requirement for the revised plan submittal and is Chapter 11 of the Program-wide URMP.

The URMP identifies implementation activities that will be undertaken by various City Departments to comply with the federal and state requirements of the stormwater permit. These Program Elements address specific permit provisions (so called "C" Provisions 1-9). Key Program Elements, including Industrial and Commercial Inspection, Illicit Connection and Illegal Dumping, New and Redevelopment Planning Procedures, and Construction Inspection, have related Performance Standards<sup>2</sup> that define the level of effort needed to demonstrate control of stormwater discharges to the "maximum extent practicable."

The URMP guides implementation of permit requirements in the following ways:

- 1. incorporating Performance Standards into the City's implementation efforts;
- 2. updating the City's program strategy to ensure that municipal activities meet these Performance Standards; and
- 3. serving as a workplan to identify tasks, deliverables, and target dates for City programs.

The current permit stresses documentation of effort and effectiveness evaluation. To comply with this requirement, each set of Performance Standards has related milestones, a five-year workplan with targeted completion dates, and identification of responsible City Department(s). This structure allows the City to document actions and elicit the feedback needed to fulfill the continuous improvement process contemplated by the permit.

This feedback loop is completed through the Annual Reporting process that details milestone accomplishments during the reporting period and serves to update the City's

<sup>&</sup>lt;sup>1</sup> NPDES Permit Number CA S029718, Water Board Order No. 01-024, adopted on February 21, 2001.

<sup>&</sup>lt;sup>2</sup> Performance Standards are set forth for municipal activities that have the potential to affect the quality of stormwater discharged into the storm drain collection system, i.e., New Development Planning procedures; Construction Inspection procedures; Public Streets, Roads and Highways Operation and Maintenance (O&M); Storm Drain System O&M; Industrial and Commercial Inspections; Illicit Connections and Illegal Dumping; Water Utility O&M, and Public Information and Participation. The assumption is that its ownership and responsibility for system operation and maintenance places the municipality in the best position to control inputs to the system.

URMP workplan over the period of the permit. The Co-permittee Annual Report serves as both an internal and external check on planned activities such that the City may evaluate its use of program funds, target resources, and improve integration of the program with evolving watershed planning efforts.

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## 1. Background

The City of San José (City) has been charged with preserving one of the most important estuaries in the United States alongside a socially and economically complex urban community. Some of the strategies the City has developed to meet this challenge, along with a detailed description of the community framework, are presented below.

## A. Community Setting

Located at the southern end of San Francisco Bay, San José encompasses much of eastern Santa Clara Valley (Valley). Framed by the Santa Cruz mountains to the southwest and the Diablo Range to the east, San José contains broad expanses of both valley floor and steep hillsides. From the adjacent hills, a number of perennial and intermittent streams flow northward through the valley to South San Francisco Bay (South Bay). These streams and most of San José are within the Coyote Creek Watershed and the Guadalupe River Watershed<sup>3</sup>. The Coyote Creek Watershed includes the following streams:

- Upper and lower Penitencia Creek from the Diablo Range,
- Silver Creek, also from the Diablo Range, and
- Fisher Creek flowing from the west side of the Coyote Valley.

The Guadalupe River Watershed drains the southwestern side of the Valley. Los Gatos and Alamitos Creeks flow from the Santa Cruz Mountains into San José's downtown via the Guadalupe mainstem.

Over the last fifty years, San José has grown from a farming community to the largest city in northern California and the eleventh largest city in the nation. The relatively rapid shift from an agricultural economy to its current diverse manufacturing and residential base has brought major changes to the area's rivers and creeks. Urbanization has meant significant hydrologic modifications to the watershed. Streams have been filled, culverted, and channelized. As more impervious parking lots, roads, and rooftops were built, riparian vegetation was removed to accommodate increasing flows and runoff levels.

## B. Growth Pattern

Understanding San José's growth and land use patterns provides insight into the complexities of managing urban runoff. Between 1950 and 2000, San José's population saw a nine-fold increase, as shown in Figure 1. The City of San José encompasses 113,750 acres, of which approximately 89,000 acres are within the Urban Service Area (USA).

To manage growth, the City instituted an "Urban Service Area" (USA) concept in its General Plan '75. Under the USA concept, urban services, including storm sewers, are provided to properties within the USA but not outside it. As a result, more recent

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<sup>&</sup>lt;sup>3</sup> Hydrological areas 205.30 and 205.40, respectively.

residential developments have been confined to the lower foothills, infill encouraged, and light industry "campuses" channeled into two main zones in the north and south, along major freeway corridors. The City of San Jose's land use patterns are presented in Table 1, including vacant land which accounts for approximately 5.3% of the total land area.

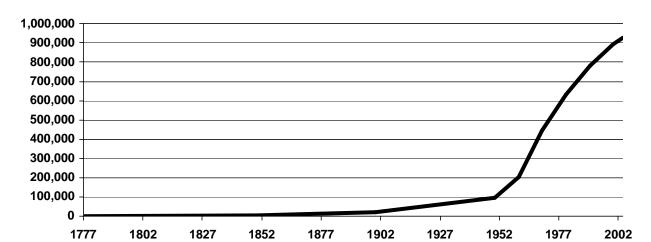


Figure 1. San Jose Population Growth

Table 1. San Jose Incorporated Area by Land Use

	Land Area, Acres	
Land Use Category	(approx)	Percent of Total
Residential		
Single-Family	30,500	26.8%
Multi-Family	5,500	4.8%
Two-Family	2,000	1.8%
Mobile Home	750	0.7%
Subtotal	38,750	34.1%
Non-Residential		
Industrial	11,000	9.7%
Commercial	4,000	3.5%
Subtotal	15,000	13.2%
<u>Other</u>		
Roadways	17,500	15.4%
Hillsides/Open Space <sup>1</sup>	17,500	15.4%
Baylands/Wildlife Refuge <sup>1</sup>	8,500	7.5%
Parks	6,500	5.7%
Vacant	6,000	5.3%
Schools	4,000	3.5%
Subtotal	60,000	52.7%
Total	113,750	100.0%

<sup>&</sup>lt;sup>1</sup>Category delineated July, 2004 and not within USA.

Runoff from urban uses typically flows untreated to storm drain inlets and is conveyed to the nearest stream or open channel through an outfall. San José has approximately 28,000 storm drain inlets, 935 miles of storm drain lines and 1,130 outfalls throughout its urban service area.

The historic and current growth patterns create several challenges and opportunities for urban runoff management; they include:

- a) The older storm drain system infrastructure is located in San José downtown, along the lower mainstream of the Guadalupe, where flows are most often concentrated during storm events. Undersized and aging storm drains can result in additional maintenance costs and problems during large rainfall events.
  - A program that addresses storm drain infrastructure needs as well as maintenance is key to protecting and maintaining the lower reaches of the Guadalupe River.
- b) A large proportion of the housing stock, industrial and commercial development, and transportation infrastructure was constructed in an era when the impacts of urban runoff on watercourses and aquatic habitats were not a concern. Consequently, the storm drain system was designed to convey stormwater with a maximum of efficiency, but without any knowledge of modern environmental considerations.
  - An aggressive public education program that encompasses pollution control practices designed for the general public is key to curtailing contamination from entering the storm drains.
- c) Current development and future new development provide an excellent opportunity to apply pollution prevention practices during the planning and design phases of the project. This will help minimize or eliminate urban runoff during construction and after the project is complete.

## C. "General Plan" Policies

To ensure that the community's vision is achieved, the City has also adopted, in its *San José 2020 General Plan*<sup>4</sup>, goals and policies aimed at land use and future development. Several of the Plan's major goals are designed to protect the watershed resources within San José, including:

<u>Riparian Corridor and Upland Wetland Protection</u>: Preserve, protect and restore riparian corridors and upland wetlands.

<u>Bay and Baylands Protection</u>: Preserve and restore natural characteristics of the Bay and adjacent lands, and recognize the role of the Bay's vegetation and water area in maintaining a healthy regional ecosystem.

<u>Hillside Development</u>: Preserve the valuable natural resources of the hillsides.

3 BACKGROUND

<sup>&</sup>lt;sup>4</sup> San José 2020 General Plan, August 1994. City of San José, Planning, Building and Code Enforcement Department.

Soils and Geologic Conditions: Protect the community from the hazards of soil erosion, weak and expansive soils and geologic instability.

Urban Design: Require the highest standards of architectural and site design, and encourage the use of "Green Building" techniques for all development projects, both public and private.

Water Resource Protection: Protect water resources because they are vital to the ecological and economic health of the region and its residents.

The General Plan provides a framework from which land use policies and ordinances are developed and implemented. The General Plan is updated annually and policies and ordinances are revised or created based on needs identified through this annual process. The URMP implementation process provides a channel to gather information and identify needed land use and/or development policies and ordinances that need to be considered as part of General Plan updates and implementation processes. The URMP Annual Reporting process requires analysis of the City's performance on Program Elements contained herein. This analysis allows the City to identify problem areas and sources and propose solutions that can be linked back to policies and procedures carried out by other departments such as Planning, Building and Code Enforcement.

## D. Stormwater Management in San Jose

When the stormwater management program began nearly 15 years ago, little was known or understood about how such a program might work. The City and its co-permittees were among the first cities in the nation to be permitted. The initial approach centered on collecting existing data and coordinating existing municipal activities. The City's Urban Runoff Management program has since evolved into a driver for a number of City activities and area-wide programs.

## **D-1.** The Permit Landscape

The City along with the 12 other municipalities in Santa Clara County, the Santa Clara County, and the Santa Clara Valley Water District (SCVWD) applied for, and were jointly issued, the first Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit in 1990<sup>5</sup> issued by the San Francisco Bay Regional Water Quality Control Board (RWQCB or Water Board). To coordinate permit compliance, the co-permittees entered into a Memorandum of Agreement<sup>6</sup> (MOA), establishing the Santa Clara Valley Nonpoint Source Pollution Control Program (the "Program," now known as the Santa Clara Valley Urban Runoff Pollution Prevention Program) in 1990. The Program submitted the first draft Stormwater Management Plan<sup>7</sup> (SWMP) in 1991, as a means to fulfill permit requirements.

<sup>&</sup>lt;sup>5</sup> Regional Water Quality Control Board Order No. 90-094, issued on June 20, 1990

<sup>&</sup>lt;sup>6</sup> The City Council approved entering the MOA on September 5, 1989, effective upon issuance of the permit. Formal MOA approval came on June 26, 1990.

Draft submitted to the RWQCB January 1, 1991. Stormwater Management Plan. Santa Clara Valley

Nonpoint Source Pollution Control Program.

The 1991 SWMP contained programs for area-wide and individual discharger implementation of control measures. The area-wide SWMP was administered by the Program and contained a variety of activities such as monitoring, model ordinance development, industrial discharger identification, pilot studies, and public education that were considered most effective if undertaken on a regional level. At that time, the City entered into an agreement, which is still in effect, to provide the Program with 30% of its budget.

The City's 1991 SWMP<sup>8</sup> focused on developing organizational capacity to implement control measures that could be most appropriately carried out at the municipal level. These control measures included:

- a) establishing an illicit connection and illegal dumping elimination program aimed at strengthening and enforcing regulations to control littering, improper connections to storm drains, and cross connections to the sanitary sewer system;
- b) initiating an inspection and permitting program focused on targeted industries;
- c) implementing public agency programs that would establish the frequency of catch basin cleaning, provide programs for disposal of oil and hazardous waste, and curbside yard debris pick-up programs; and
- d) public awareness campaigns such as storm drain inlet stenciling, and oil and waste recycling fact sheets.

The second SWMP was submitted in 1995 as the permit application for the second round permit issued in August 1995. This SWMP contained a commitment to develop Performance Standards for each Control Measure or Program Element required in the permit.

## D-2. URMP Development 1997

With the issuance of the second NPDES permit in 1995, the City was required to submit an updated plan detailing the following basics:

- programs that would be implemented;
- Performance Standards to establish a level of effort for program activities; and
- a work plan with a schedule for completion.

The purpose of this document is to fulfill the above requirements. It is titled the Urban Runoff Management Plan (URMP) and serves as a perpetual work plan for all of the City-committed responsibilities. The URMP will be updated in the co-permittee Annual Report every September. The Annual Report will detail accomplishments, lessons learned, and needed work plan revisions to ensure compliance with the terms of the NPDES permit for the applicable reporting period.

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Background

<sup>&</sup>lt;sup>8</sup> City of San Jose's Program was included in final submittal to the RWQCB: *Addendum to Draft Stormwater Management Plan: Summary of Community Specific Activities*, coordinated by the Santa Clara Valley Nonpoint Source Pollution Control Program.

<sup>&</sup>lt;sup>9</sup> SFRWQCB Order No. 95-180 issued August 23, 1995 to the Santa Clara Valley Nonpoint Source Pollution Control Program and the municipalities as co-permittees.

## D-3. URMP Development 2002 to Present

With the issuance of the third NPDES permit in 2001<sup>10</sup>, the City continued its previous reporting requirements and the purpose of the URMP remained as stated above. The URMP was updated in 2002 to address new Program Elements contained in the permit in addition to new or revised performance standards. Such updates covered pesticide management, mercury, PCBs, dioxin, and construction inspection enhancements.

Subsequent URMP revisions are detailed in this submittal. They include new or revised performance standards for New and Redevelopment Planning Procedures and to address Rural Public Works. Revised or new SOPs have also been included for a host of program elements to conform to the revised performance standards and reflect current business practices.

BACKGROUND 6

<sup>&</sup>lt;sup>10</sup> SFBRWQCB Order No. 01-024 adopted February 21, 2001 to the Santa Clara Valley Urban Runoff Pollution Prevention Program and the municipalities as co-permittees and issued March 28, 2001.

## 2. Components

This section addresses format and contents of the URMP, the City organizational structure, internal and external coordination of the various Program Elements, other related programs, program assessment, and budget allocation.

## A. Format and Contents

The URMP contains several Program Elements (also referred to as Control Measures); they are listed below and described in section B:

- 1. Illicit Connection/Illegal Dumping
- 2. Industrial/Commercial Discharges
- 3. New and Redevelopment
- 4. Construction Inspection
- 5. Public Streets, Roads & Highways Operations & Maintenance
- 6. Storm Drain System Operations & Maintenance
- 7. Water Utilities Operations & Maintenance
- 8. Pesticide Management
- 9. Mercury
- 10. Copper & Nickel Action Plans
- 11. Trash
- 12. Monitoring
- 13. Municipal Compliance
- 14. Public Information & Participation

Each Program Element follows a set of guidelines, as illustrated in the URMP Program Element Flowchart. For applicable elements, the Performance Standard associated with a Program Element is used as the basis for determining permit compliance. Other elements are driven by permit language. A Performance Standard is defined as "the level of implementation necessary to demonstrate the control of pollutants in storm water to the maximum extent practicable."

Each set of Performance Standards has related workplan tasks, a schedule of deliverables, and targeted completion dates. This structure allows the City to document actions and elicit feedback needed to fulfill the continuous improvement process contemplated by the permit. This feedback loop is completed through the annual reporting process that details milestone accomplishment during the reporting period.

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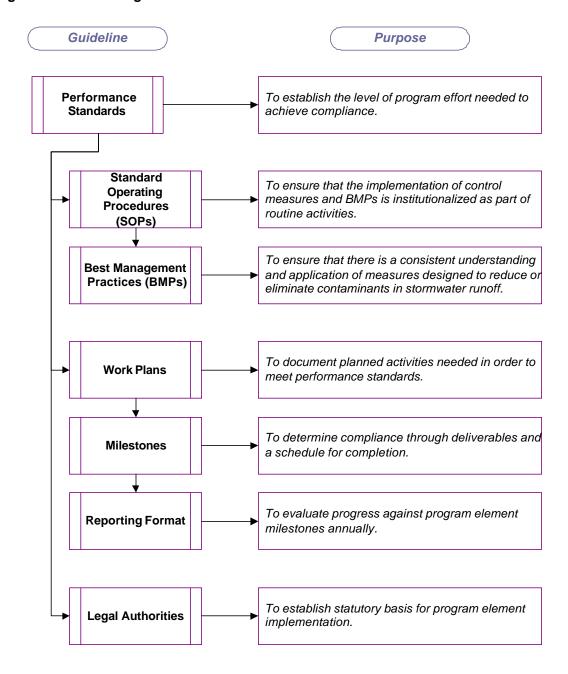


Figure 2. URMP Program Element Flowchart

## **B.** Coordination

ESD's Watershed Protection Division provides oversight of the stormwater permit and coordinates activities across departments. Individual Program Elements are implemented in those City Departments where existing responsibilities are consistent with the work that is required. For each Program Element, there is a lead group responsible for achieving the Performance Standard and meeting the associated "Milestone(s)." The

internal (City) and external (outside agencies) coordination process for the various Program Elements is illustrated in Table 2 and described below.

Table 2. URMP Coordination – City of San Jose

	PROGRAM ELEMENT	DEPARTMENTS OR ESD SECTIONS	OUTSIDE AGENCIES/ORGANIZATIONS
1.	Illicit Connection/Illegal Dumping	ESD Watershed Enforcement Hazardous Incidence Team, Fire Dept Department of Transportation Planning, Building & Code Enforcement	Santa Clara Valley Water District Regional Water Quality Control Board Santa Clara County DA's Office Department of Fish & Game CA Dept of Motor Vehicles
2.	Industrial/Commercial Discharges	ESD Watershed Enforcement Hazardous Incidence Team, Fire Dept ESD Source Control	
3.	New and Redevelopment	Planning, Building & Code Enforcement Public Works Redevelopment Agency ESD Watershed Enforcement	
4.	Construction Inspection	Public Works Planning, Building & Code Enforcement ESD Watershed Enforcement	
5.	Public Streets, Roads & Highways Operations & Maintenance	Department of Transportation General Services Parks, Recreation & Neighborhood Services	
6.	Storm Drain Operations & Maintenance	Department of Transportation Department of Public Works	
7.	Water Utilities Operations & Maintenance	ESD Municipal Water	
8.	Pesticide Management	General Services Department of Transportation Public Works Parks, Recreation & Neighborhood Services	SCVURPPP
9.	Mercury	General Services ESD Integrated Waste Management ESD Marketing & Communications	SCVURPPP Clean Estuary Partnership Santa Clara County Household Hazardous Waste Program
10.	Copper & Nickel Action Plans	ESD Marketing & Communications ESD Watershed Enforcement Planning, Building & Code Enforcement	South Bay POTWs SCVURPPP
11.	Trash	Department of Transportation Parks, Recreation & Neighborhood Services General Services ESD Integrated Waste Management	SCVURPPP Santa Clara Valley Water District
	Monitoring Municipal Compliance	Department of Transportation	SCVURPPP
	Public Information & Participation	General Services ESD Marketing & Communications	SCVURPPP BASMAA, BAPPG, WMI

## **B-1.** Illicit Connections/Illegal Dumping (ICID)

The purpose of this Program Element is twofold:

- identifying and eliminating illicit connections to the storm drain system and crossconnection to the sanitary sewer system; and
- prevention, detection, and clean-up of illegal discharges and dumping into the storm drains and streams.

Implemented by ESD's Watershed Enforcement, the section has two full-time staff equivalents and maintains special internal arrangements for response to spills and containment of illegal dumping incidents with the following City Departments:

- a) Fire Department's Hazardous Incidence Team, and
- b) Department of Transportation.

Enforcement staff consults with the Planning Division of the Department of Planning, Building and Code Enforcement for identification of legal code-conforming solutions to existing illicit connections.

The Division routinely coordinates with the following outside agencies:

- a) Santa Clara Valley Water District;
- b) Regional Water Quality Control Board;
- c) Santa Clara County District Attorney's Office Environmental Crimes Unit and the Office of Toxics Enforcement;
- d) Department of Fish and Game; and
- e) State Department of Motor Vehicles (DMV).

## **B-2.** Industrial/Commercial Discharges (IND)

This Program Element is designed to assess the compliance of San José businesses with federal, state, and local regulatory requirements regarding discharges to the storm drain system. The Watershed Enforcement section takes the lead in conducting this program. Enforcement inspectors inspect more than 2,500 businesses throughout the City per year. Enforcement has ten full-time inspectors performing inspections of a wide variety of companies with the potential to impact the storm sewer system. These include companies required to file a Notice of Intent (NOI) and prepare Storm Water Pollution Prevention Plans (SWPPPs) under federal and state law per the General Industrial Activity Stormwater Discharge Permit (GIASP) and those businesses not subject to specific permit requirements in targeted Standard Industrial Code (SIC) categories, such as restaurants, construction and others with a high exposure potential. The Enforcement inspectors provide the following services:

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- inspections;
- outreach on stormwater issues and best management practices;
- enforcement in response to municipal code violations, where needed; and
- documentation of the above activities.

Ongoing coordination occurs with the City's Hazardous Materials (Hazmat) and ESD's Pretreatment Programs who conduct inspections of facilities with hazardous materials or industries with pretreatment requirements.

## **B-3.** New and Redevelopment (NRD)<sup>11</sup>

Implementation of this program element is primarily the responsibility of the Department of Planning, Building and Code Enforcement (PBCE) under its Planning Division. Planning reviews private development projects, as well as projects proposed by the Redevelopment Agency, for compliance with stormwater requirements. Public Works is responsible for integrating stormwater requirements into the design and implementation of City projects.

Planning procedures have been established to ensure that siting, design, and engineering of developments conform to existing BMPs per the New and Redevelopment Performance Standard. These procedures had previously been incorporated into the Planning Department's permit review process in 1996. 12 In response to the expanded requirements for new development in the 2001 permit, SCVURPPP revised the New and Redevelopment Performance Standard in 2003<sup>13</sup>. The City has in turn incorporated changes into related policies and procedures. In October 2003, the revised City Policy on Post-Construction Urban Runoff Management was approved by City Council to reflect the new permit provisions. These provisions require revision of guidance documents for use by Planning Division staff and outside developers to incorporate numeric hydraulic sizing criteria into stormwater treatment measures.

The permit also requires that the City implement a program to verify the ongoing operation and maintenance of stormwater treatment measures. Planning and ESD's Watershed Enforcement will coordinate on this component. Workplans for meeting these requirements had been initiated with the March 2002 workplan submittal and are ongoing.

As implementation matures, new development provisions will impact the services and policies of other City departments. ESD and Planning coordinate with the departments of Transportation (DOT); General Services (GS); and Parks, Recreation, and Neighborhood Services (PRNS) to address policy and maintenance issues. ESD remains responsible for providing guidance and monitoring the Planning Division's progress in complying with revised permit provisions as well as reporting progress internally through the Core Service Performance Measures and externally to the Water Board in the Annual Report.

#### B-4. **Construction Inspection (CON)**

PBCE carries out planning site reviews and referrals for construction sites deemed to pose a high potential to discharge sediment. The Plan Implementation Division informs developers of the requirement to prevent sediment and other construction pollutants from entering the storm drains or the creeks, and includes the requirements as conditions in

Formerly abbreviated as NDC.
 Annual Report, September 1, 1996. Santa Clara Valley Nonpoint Source Control Program, FY 95-96.

<sup>&</sup>lt;sup>13</sup> Planning Procedures for New Development and Redevelopment, SCVURPPP, December 18, 2003.

development permits and tentative map approvals. Once a development project moves into the construction phase, the responsibility for ensuring that BMPs and erosion control measures are implemented falls largely to the units that inspect construction sites as part of their routine duties - Public Works (PW) and PBCE Building Division. The Environmental Services Department performs follow up inspections for escalated enforcement.

For private development projects, PW issues grading permits and requires that sites with high potential to discharge sediment (e.g. greater than 1 acre and/or hillside sites) to provide Erosion Control Plans and Storm Water Pollution Prevention Plans (SWPPPs). As part of their inspection duties, PW inspectors are responsible for ensuring conformance with the City's grading ordinance and for ensuring that private developers submit, and comply with, required Erosion Control Plans during grading and installation of infrastructure on the site. Inspectors enforce City regulations by issuing verbal warnings or written Notices of Unsatisfactory Conditions, and can refer sites to ESD inspectors to observe and cite.

Beginning in 2003, PBCE building inspectors identify and correct stormwater issues at sites where repeated inspections are a part of Building inspector responsibilities. Although this function excludes mechanical, electrical, and plumbing inspectors, all Building Division inspectors have been trained to report problems they encounter on an active site.

ESD's Watershed Enforcement inspectors assigned to the ICID program also respond to construction inspection referrals; these calls are treated much the same way as any ICID call. Referrals come from the public and other City staff, including PBCE and PW inspectors. ESD inspectors employ a tiered enforcement response plan, including education and cooperation (this lowest tier of enforcement response is also conducted by PBCE and PW inspectors), official warning notices, and penalty application - administrative or misdemeanor citations.

For public projects, the responsibility for ensuring BMPs are implemented during construction projects falls to the Public Works divisions responsible for construction project management.

ESD continues to provide training support to PW, PBCE, and ESD inspection groups and the development community regarding erosion control and good housekeeping BMPs.

# B-5. Public Streets, Roads and Highways Operation and Maintenance (PSR)

The City's Department of Transportation (DOT) operates and maintains, directly or through contractual work, the streets, roads, and traffic systems within the City limits. This excludes County-maintained expressways and state-maintained (Caltrans) highways and freeways. This maintenance includes:

- road repair;
- resurfacing and reconstruction;
- striping; and
- maintenance of bridges and medians.

The goal of this program element is to further institutionalize the application of BMPs into SOPs for the wide range of activities associated with road maintenance and operations. ESD has worked with Transportation to identify applicable BMPs and SOPs and provide training to field staff.

ESD continues to provide training to Transportation staff on specific activities that could impact stormwater quality and good housekeeping BMPs that require continual implementation.

In December 2002, a new Performance Standard for Rural Public Works (RPW) was added to PSR<sup>14</sup>. The goal of the RPW Performance Standard is to minimize water quality impacts resulting from public works maintenance and support activities in rural areas.

The initial list of rural public works facilities under the jurisdiction of the City of San Jose was compiled<sup>15</sup> to include the largest City parks, which were reviewed for the following criteria:

- 1. Not serviced by an integrated municipal storm drain system; and
- 2. Not serviced by curbs and gutters; and
- 3. Contains roads or trails that are intended to be passable for a maintenance vehicle (i.e. 1/2 ton pick up truck or larger)

The Departments of Transportation; General Services; and Parks, Recreation and Neighborhood Services are responsible for RPW activities at the initial facilities identified. ESD has collaborated with the relevant departments to develop new SOPs and continues to support training sessions on the SOPs.

## **B-6.** Storm Drain System Operations and Maintenance (SDO)

The City's Department of Transportation (DOT) operates and maintains the storm drain system. Operation and maintenance of the system include the following activities:

- a) Sweeping of City streets to prevent pollutants and debris from entering the system;
- b) Cleaning of storm drain inlets; and
- c) Removal of debris from the stormwater lines.

Construction of new portions of the storm drain system is the responsibility of the Department of Public Works. The City has a Storm Drain Improvement Masterplan that identifies system needs and priorities for inclusion in the five-year Capital Improvement Plan.

<sup>&</sup>lt;sup>14</sup> Rural Public Works Maintenance and Support Activities, SCVURPPP, December 19, 2002.

<sup>15 2002-2003</sup> URMP Annual Report. Parks identified were Almaden Lake, Alum Rock, Emma Prusch Farm, Guadalupe River, Kelley, Lake Cunningham, Montgomery Hill, and Overfelt Gardens.

## **B-7.** Water Utility Operations and Maintenance (WUOM)

The San José Municipal Water System (Muni Water) operates a drinking water supply treatment and conveyance system subject to this Performance Standard. Muni Water is part of the Businesses Services Division within ESD and is responsible for developing the Water Utility Pollution Prevention Plan (WUPPP), SOPs, and BMPs required for meeting this performance standard.

The City of San Jose's Water Utility Pollution Prevention Plan (WUPPP), including SOPs, and BMPs, was developed in June 1999. Muni Water staff continues to implement the Plan.

## **B-8.** Pesticide Management (PM)

The goal of this program element is to reduce or eliminate the impact of pesticide use on water quality. This program is implemented as a cooperative effort among several departments. The City's General Services and Transportation Departments are responsible for pest, rodent and weed control at neighborhood and regional parks, road medians, rights of way, highway backups and streets. The City (ESD; DOT; General Services; Public Works; Convention, Arts and Entertainment; and the Redevelopment Agency) also utilizes the services of contractors for certain turf, ornamental and structural pest control.

The City has a Pesticide Management Committee (PMC) which consists of City staff from the following Departments: Transportation; General Services; Environmental Services; and Parks, Recreation & Neighborhood Services. The PMC collaborated to revise the Pollution Prevention Policy<sup>16</sup> to add a section on Integrated Pest Management (IPM). City Council approved the revised policy, which solidifies the City's commitment to apply IPM techniques in its approach to pest control and to require the same of contracted pest control operators. The PMC developed SOPs and BMPs for City operations, which include IPM measures. These departments coordinate to ensure that employees responsible for applying pesticides receive proper training on the IPM policy, SOPs and BMPs.

In addition, ESD is responsible for coordinating outreach to the public on pesticide use. Most outreach activity is conducted in conjunction with the Santa Clara Valley Urban Runoff Pollution Prevention Program or other regional groups.

## **B-9.** Mercury (M)

The goal of this program element is to reduce the amount of mercury in urban runoff by minimizing the use of mercury-containing products in municipal operations, providing proper disposal services for mercury-containing products for residents and small businesses, and participating in monitoring efforts associated with TMDL development.

<sup>&</sup>lt;sup>16</sup> A Resolution of the Council of the City of San Jose Approving the Revised City Council Policy for Pollution Prevention, adopted June 24, 2003.

In June 2003 the City revised its Pollution Prevention policy to minimize the release of pollutants into the water and air and reduce the generation of hazardous wastes. All City departments that procure and/or dispose of products and materials, or are involved in activities with the potential to cause water quality impairment, air pollution, or generation of hazardous wastes, will be responsible for implementing the provisions of this policy to the maximum extent practicable.

General Services Purchasing Division is responsible for the procurement of services and products for the City. Purchasing, often in cooperation with departments, establishes specifications for goods or services to be purchased. ESD and Purchasing work together to implement the City's Environmentally Preferable Purchasing Policy (EPPP) adopted by City Council in 2001. The EPPP is purposed to "minimize the negative environmental impacts of the City's activities by ensuring the procurement of services and products that reduce toxicity; conserve natural resources, material and energy; maximize recyclability and recycled content."

The County of Santa Clara administers the Household and Small Business Hazardous Waste (HHW) Program, which provides disposal of hazardous materials, including mercury-containing products, for residents and small businesses. The City, including ESD's Integrated Waste Management Division, supports the HHW Program activities by participating in coordination activities and providing a permanent space for the County to hold hazardous waste drop-off events.

ESD is also responsible for coordinating outreach to the public on mercury. Most outreach activity is conducted in conjunction with the Santa Clara Valley Urban Runoff Pollution Prevention Program or other regional groups.

In addition, the City has operated and maintained the National Mercury Deposition Network (MDN) site since January 2000, collecting samples, recording data, and sending both to the national MDN laboratory. The City also continues its support of the San Francisco Bay Regional Monitoring Program, AB 982 TMDL Public Advisory Group, WMI Guadalupe River Mercury TMDL<sup>17</sup> Workgroup, and the Clean Estuary Partnership. The City continues its commitment to work with the Water Board and stakeholders toward TMDLs that are technically defensible and feasible for implementation.

## **B-10.** Copper & Nickel Action Plans (CNAP)

The purpose of this program is to implement the relevant baseline activities in the Copper and Nickel Action Plans. Activities in these action plans are attributed largely to the South Bay POTWs and to SCVURPPP as the responsible entities. Some activities, however, require specific actions by the SCVURPPP co-permittees or specified municipalities. The City implements activities pursuant to implementation of the baseline actions included in the Copper and Nickel Action Plans. These activities are in addition to those undertaken by SCVURPPP as a program.

Generally, the measures that require implementation at the municipal level are integrated into ongoing program elements. For example, outreach to industrial facilities is

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<sup>&</sup>lt;sup>17</sup> Total Maximum Daily Load

implemented through the Industrial/Commercial Inspection Program. ESD coordinates with other City departments as needed to ensure baseline activities are implemented.

## **B-11.** Trash (TRA)

The purpose of this program element is to identify new and existing strategies to address litter problem areas having an impact on urban streams and waterways, and to respond to the November 14, 2001 Water Board 303(d) Staff Report which indicates an expectation for municipalities to assess trash impairments before the next 303 (d) listing cycle. ESD is responsible for coordinating this effort and works primarily with the Santa Clara Valley Urban Runoff Pollution Prevention Program (and its co-permittees, including the Santa Clara Valley Water District) to assess and address problem areas.

ESD coordinates with many City departments that administer programs providing clean-up services in public areas that may impact creeks and waterways. The Department of Parks, Recreation and Neighborhood Services (PRNS) is responsible for administering the Anti-litter, Adopt-a-Park and Adopt-a-Trail programs, which recruit volunteers to assist with litter clean-up citywide. PRNS, as a member of the Creek Connections Action Group, also assists with the coordination of Adopt-a-Creek activities including annual creek clean-up events.

The General Services Department is responsible for the maintenance of parks (including litter removal). The Department of Transportation (DOT) administers the Adopt-a-Street volunteer program and is responsible for maintaining landscaped medians, roadsides, and storm drain inlets.

ESD's Integrated Waste Management Division (IWM) is responsible for managing the collection of garbage and recycling from residential homes and City facilities (See section C-1 for further details on the Solid Waste Program). ESD also coordinates with PRNS, General Services, DOT and the Solid Waste Program to obtain information regarding trash management practices.

## **B-12.** Monitoring (MON)

The City, in conjunction with the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) is required per permit provision C.7.b of NPDES Permit CAS029718 to submit to the Water Board, a Five-Year Receiving Waters Monitoring Plan. The Program submitted the final version of the plan on August 5, 2002 and a draft revised multi-year Receiving Waters Monitoring Plan on March 1, 2004. The Plan covers a number of pollutant control programs required by provisions C.7 and C.9 of the permit.

Additionally, the City supports ambient water quality monitoring through monetary contributions to SCVURPPP, the Regional Monitoring Program (RMP), and the CEP. City staff also chairs the Technical Committee of the CEP. Local stream monitoring has largely been undertaken by SCVURPPP and the SCVWD on behalf of the Program, although the City provides occasional staff support and monitoring equipment. Long-term characterization of the water quality of the South Bay has been the function of the

RMP, however as part of the SJ/SC WPCP NPDES permit<sup>18</sup> and Copper and Nickel Action Plans, the City carries out the required dry season monitoring for these pollutants.

The monitoring program will continue to develop in conjunction with the Santa Clara Basin Watershed Management Initiative (WMI). To ensure that the WMI goals are addressed, ESD staff is assigned to serve on various groups, including Watershed Assessment and Monitoring Subgroup, Bay Monitoring and Modeling Subgroup, and TMDL workgroups.

## **B-13.** Municipal Compliance (MC)

The City owns and operates several Corporation Yards. Municipal facilities are required to comply with stormwater regulations. Efforts to reduce contaminated discharges from City facilities (Corporation Yards) must be similar to those required of private businesses. There are six yards that are assessed annually by ESD for stormwater compliance; three are managed by General Services (GS) and three are managed by the Department of Transportation (DOT). The Corporation Yards are: Central Service Yard (GS), Mabury Yard (DOT), Main Yard (GS), Municipal (or Police) Garage (GS), South Yard (GS), and West Yard (DOT).

In addition to the annual inspection conducted by ESD, GS conducts quarterly hazardous material inspections which include stormwater issues. Each Corporation Yard is required to maintain a Stormwater Pollution Prevention Plan (SWPPP).

ESD also coordinates with various departments to ensure that municipal training is conducted in support of the applicable program elements.

## **B-14.** Public Information and Public Participation (PIP)

To meet the Permit requirements of changing specific behavior that negatively impacts stormwater quality and to increase the understanding and appreciation of creeks and the Bay, the City crafts its outreach to:

- educate citizens on behaviors which adversely affect water quality;
- increase understanding and appreciation of the South Bay watershed;
- promote reasonable alternatives to pollutant causing behavior; and
- provide citizens with opportunities to become involved in watershed protection.

The City's outreach efforts are aimed at the four audiences described in the NPDES Permit: General audiences, Targeted audiences, Citizen Participation and Education. Outreach efforts also support all other Program Elements, as required.

The City coordinates its outreach efforts with local and regional groups, including the SCVURPPP, Bay Area Stormwater Management Agencies Association (BASMAA), Bay Area Pollution Prevention Group (BAPPG), and the WMI. The goal is to develop and implement consistent, effective outreach and education programs. The City provides significant resources for region-wide outreach through these local and regional groups.

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<sup>&</sup>lt;sup>18</sup> San Jose / Santa Clara Water Pollution Control Plant, NPDES Permit No. CA0037842.

## C. Other Related Programs

Two existing City programs that are not a part of the URMP, yet integral to urban runoff management, are explained below.

## C-1. Solid Waste

The City's solid waste programs are managed by ESD's Integrated Waste Management Division (IWM). IWM programs serve more than 285,000 households and 21,000 businesses and institutions. This program contracts with private companies to provide services that are essential to the URMP, specifically:

- yard trimmings collection;
- used motor oil recycling;
- garbage, recyclables and large item collection; and
- disposal services for the City's street sweeping, qualified creek clean-ups, and illegal dumping collection programs.

Finally, ESD supports the County of Santa Clara HHW and Conditionally Exempt Small Quantity Generator Hazardous Waste Disposal programs, providing City residents and small businesses with a means of safely disposing hazardous waste.

## C-2. Vehicle Trip Reduction

In an effort to address traffic congestion and pollution problems, the City implemented several programs focused on reducing commuter trips generated by its roughly 6,700 employees. The Department of Transportation is responsible for planning and managing these programs. Specific activities are conducted through designated transportation coordinators in all departments within the City.

Major programs include:

- a) Ecopass and Subsidized Transit Passes: This program allows unlimited use of public transit. Passes are issued to participating full and part-time City employees.
- b) Guaranteed Ride Home Program: This program assures emergency transportation for employees who use commute alternatives to get to work. Taxi service is provided to these employees in the event that they encounter a work or personal emergency that requires immediate or unanticipated transportation to their home or other destinations related to the emergency.

## D. Tracking and Evaluation

ESD's Watershed Protection (WP) Division is responsible for managing the urban runoff management program to achieve permit compliance. WP is the liaison with the areawide SCVURPPP Management Committee, the co-permittees, and internal City Departments performing activities under the URMP. Within WP, the Urban Runoff Section is responsible for updating and reviewing workplan activities and coordinating annual reporting for each Program Element.

The URMP prescribes a framework for program implementation and identifies "milestones" that are to be completed by specified dates. Annual reports identify milestones achieved during the fiscal year using a standard reporting format<sup>19</sup>. The guiding principle for these activities is for City Departments to 1) document efforts undertaken; 2) provide evaluation of efforts and feedback on effectiveness of the activities; and 3) provide suggestions on ways to improve their programs and efforts.

Suggest Improvements

Annual Report (September)

Evaluate Effectiveness of Efforts

Figure 3. Continuous Improvement Cycle Flowchart

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<sup>&</sup>lt;sup>19</sup> The standard format for annual reporting includes four subsections for each Program Element: 1) Self Evaluation Matrix, which provides the status of work plan activities; 2) Program Evaluation; 3) Responses to Water Board comments received; and 4) Additional Tables or Information as needed to demonstrate accomplishments or fulfills program-specific reporting requirements. See City of San José Urban Runoff Management Plan, *Annual Report 2002-2003*.

## E. Funding

The City understands that addressing urban runoff problems takes long-term commitment and ongoing resources. Early on in the program, a funding mechanism was developed to provide the financial basis for program efforts.

In April 1991, the City Council adopted an ordinance establishing a Storm Drainage Service Use Charge.<sup>20</sup> The purpose of the charge was to provide: a method for payment of all or any part of the cost and expense of improving the quality of storm and surface water runoff, the cost and expense of maintaining and operating the storm drainage system, and for constructing and improving the system within the City. These fees are billed on the property tax bill. Of the \$14 million, a majority of funding is devoted to direct and indirect program costs through the City's annual budget cycle. This allows the City flexibility to adapt program funding to near-term needs. Table 3 below gives approximate annual allocation of the budget<sup>21</sup>.

The stormwater permit requires that Annual Work Plans be submitted to the Water Board each March in advance of the fiscal year. This precedes conclusion of the City's annual budget adoption process. Work Plan submittals are therefore subject to City appropriation of funding which occurs in June of each year.

Table 3. Annual Budget Allocation

Activities	City of San Jose Departments	Annual Budget
Street Cleaning & Storm Sewer O&M	Transportation	\$ 7.6 Million
Pollution Control & Permit Compliance (Includes	Environmental Services	
URMP oversight, enforcement inspection	Public Works	
programs, studies, training, outreach, watershed	Planning, Building & Code	
management activities, and other support	Enforcement	
activities)		\$ 5.2 Million
Storm Sewer Improvements	Storm Drain Capital Fund	\$ 1.8 Million
	Total Budget	\$ 14.6 Million

<sup>&</sup>lt;sup>20</sup> Ordinance No. 23781, amending Chapter 15.16 of Title 15 of the San José Municipal Code, adding a new Part 6

<sup>&</sup>lt;sup>21</sup> Based on 2004 Funds Management Report, ESD, January 2004.

## 3. Program Element Performance Standards

This section sets forth the Performance Standards and the associated milestones that the City will work to achieve. A Performance Standard Matrix has been included for each of the Program Elements identified in the NPDES permit. The Matrix is modeled after the conditionally approved Performance Standards and has distinct references to the Standard Operating Procedures (Refer to Appendix B). Each Performance Standard Matrix is preceded by an introduction of the goals of the corresponding Program Element.

## A. Illicit Connection & Illegal Dumping

The goal of this Program Element is to identify and eliminate illicit connections (IC) to storm drains and illegal dumping (ID) of non-stormwater into the storm drain system.

The ICID Program Element sets up a framework for timely response to complaints, referrals, and proactive investigations of ICID activities. The ESD Watershed Enforcement Section is responsible for the program and coordinates its activities with City Departments such as Fire, Public Works, and Transportation, and outside agencies such as the County HazMat Team. Inspectors in other agencies and departments may be in a position to observe an ICID activity in the course of their inspections. These inspectors routinely refer observed problems to Watershed Enforcement for resolution.

Environmental Inspectors within Watershed Enforcement conduct field activities and respond to complaints. Environmental Inspectors have the authority to enforce Title 1, Chapter 1.08, of the San José Municipal Code. They also have the authority and discretion to take progressive enforcement actions including issuance of inspection warrants, official notices of violation, and citations. City procedures preclude direct 911 calls; police or fire dispatchers receive calls and refer incidents to ESD. Most other calls are directed to the (408) 945-3000 number. This phone number is stenciled on the nearly 28,000 storm drains throughout the City.

All complaints are documented in the Environmental Enforcement Data Management System (EEDMS) database that is maintained by the Watershed Protection Division, in which Watershed Enforcement is included. The database enables the City to characterize complaints by type, location, and other information, as well as summarize the status of all cases into a table format. The City currently provides this information in the City's Annual Report and to the Santa Clara Valley Urban Runoff Pollution Prevention Program for compilation in the Program-wide Annual Report.

The effectiveness of activities under this Program Element is reviewed annually. The following information is collected and analyses provided in the City's Annual Report: analysis of types of problems identified; problem resolution; program development including outreach and education activities; and trends over time to support long-term solutions potentially including infrastructure replacement and structural retrofit.

## **ICID Performance Standard Matrix**

#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
ICID 1.	The City will respond to complaints regarding ICID dumping activities into the storm drain system and will ensure that the activity has ceased or is on a time schedule to cease.	<ul> <li>Refine and implement SOPs for responding to ICID complaints/referrals.</li> <li>Review effectiveness of the SOPs.</li> <li>Document complaint activity and follow up conducted.</li> </ul>	As Needed (First completed in 1990) Annually Annually
ICID 2.	The City will conduct investigations of high priority areas. High priority is defined as areas with a high potential for non-stormwater discharges to the City's collection system.	<ul> <li>Maintain database to track ICID complaint information.</li> <li>Target areas for monitoring based analysis and trends observed.</li> <li>Conduct investigations of the high priority areas based on the results of the monitoring and/or historical complaint information.</li> </ul>	Ongoing (First completed in 1990) Annually Ongoing
ICID 3.	The City will ensure that ICID Inspectors are adequately trained in inspection procedures, documentation, and enforcement related to stormwater pollution prevention.	<ul> <li>Conduct training for ICID inspectors.</li> <li>Evaluate performance of inspectors and training protocols and modify the training program as needed.</li> </ul>	Annually (First completed in 1990) Annually, in July
ICID 4.	The City will distribute outreach and technology transfer material containing applicable control measures and/or BMPs to target parties responsible for ICID activities.	<ul> <li>Audit existing outreach and technology transfer material.</li> <li>Determine the need for new and/or revised BMPs, and develop the material as necessary.</li> </ul>	Annually, in August (first completed in 1996) Annually
ICID 5.	The City's Watershed Enforcement staff will review and evaluate the effectiveness of its SOPs in responding to complaints regarding illicit connections and illegal discharge dumping activities into the storm drain system.	◆ Document and evaluate effectiveness of SOPs, noting what worked well and what needs improvement	Annually

## B. Industrial/Commercial Discharges

The goal of the Industrial/Commercial Discharger (IND) Control Program Element is to prevent unauthorized industrial and commercial sources of pollutants from entering the South Bay via the storm drain system.

Section 402 (p) of the Clean Water Act requires that specific types of industrial/commercial facilities obtain a permit to discharge storm and non-storm water. The State Water Resources Control Board, through its California Stormwater Quality Task Force, has developed a statewide permit known as the General Industrial Activity Stormwater Discharge Permit (GIASP), to regulate such discharges. The Water Board met with the co-permittees and other interested stakeholders to interpret the GIASP requirements as applied to local industrial activities. This process also identified additional industries subject to regulations. The results of the process are reflected in the 1996 Water Board conditionally approved Performance Standard for Industrial/Commercial Discharger Control Program. The most recent GIASP was adopted by the Water Board in 1997.

The City has since modified its IND inspection program to reflect provisions in the City's 2001 stormwater permit<sup>22</sup>. Implemented by ESD's Watershed Enforcement Section, the performance standard for this program element incorporates the City's regulation of industrial and commercial facilities and the City's support of the State GIASP program. This performance standard defines a level of effort for facility inspection activities that will result in pollutant load reduction to the maximum extent practicable.

The City supports the State's implementation of the GIASP by inspecting new filers within one year, based on data available from the State. These inspections include:

- verification that an NOI has been filed;
- verification that the facility has a SWPPP, as required; and
- if not in compliance with the City's municipal code, review of BMPs and control measures in accordance with SWPPP.

The City also inspects new facilities added to the inventory (based on a business license database and selected SIC codes) for the potential that these facilities are required to file for coverage under the GIASP. Listed facilities are initially inspected to determine whether they pose a significant potential for discharging pollutants. The initial inspection involves identification of facility pollutants, possible contributions, and recommendations for control measures. Facilities found to pose a significant potential for pollutant discharge require ongoing inspection as a City-regulated facility, regardless of the requirement for coverage under the GIASP.

The potential to contribute pollution is thereafter used as a means to assign an inspection frequency to the facility. Inspection frequencies are determined according to the number of Areas of Concern (AOCs) identified at a site during inspection. An AOC is defined as a violation, or warning about a potential violation, issued to a facility during an inspection.

<sup>&</sup>lt;sup>22</sup> SFBRWQCB Order No. 01-024 adopted February 21, 2001

There are a large number of facilities that require inspection; managing and tracking the data for these facilities is crucial to the ongoing efficacy of the inspection program. The database, EEDMS, is maintained by ESD's Watershed Protection Division and is frequently updated to add new facilities and delete facilities that have closed or moved. Facility information is obtained primarily through the City business license database. This information is supplemented through periodic review of yellow pages, reverse address directories, business directories, and inspector referrals.

## EEDMS includes such information as:

- number and types of facilities inspected;
- number of facilities required/not required to submit NOIs;
- numbers and types of pollution problems identified;
- remedial actions taken; and
- numbers and types of enforcement actions.

Watershed Enforcement coordinates with other City departments and local agencies to implement, follow-up on, and enforce discharge requirements as needed.

## **IND Performance Standard Matrix**

#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
IND 1.  IND 2.	NOI Filers: The City will conduct inspections of those facilities that have filed an NOI with the State and appear on a list provided by the State.  Non Filer Investigations:	<ul> <li>◆ Conduct and document initial inspections of NOI Filers within one year.</li> <li>◆ Maintain a database to track the inspection information.</li> <li>◆ Identify new NOI filers and conduct inspection.</li> <li>◆ Identify industrial facilities that conduct activities with the</li> </ul>	Ongoing (First completed in 1997) Ongoing (First completed FY 93-94) Annually Annually
	The City will inspect industrial facilities that may be subject to general permit requirements but are not found on the NOI filer list provided by the State and that conduct activities identified by the following SIC codes: 5015: Automobile Dismantlers 5093: Other Recycling Industries 3200 series: Stone Clay and Concrete Products Industry 4100 & 4200 series: Trucking Facilities that perform on-site vehicle repair, maintenance or washing.	<ul> <li>SIC codes listed.</li> <li>◆ Conduct and document initial inspections of industrial facilities with the SIC codes listed.</li> <li>◆ Maintain a database to track the inspection information.</li> <li>◆ Develop a priority list of facilities targeted for inspection during upcoming year.</li> </ul>	(First completed FY 94-95) Annually (First completed in 1997) Ongoing (First completed FY 93-94) Annually
IND 3.	City Regulated Facilities: The City will conduct inspections of City Regulated facilities identified below:  Food service facilities: 2 or more AOCs* over a rolling three year time period – Every year 1 AOC over a rolling three year time period – Every two (2) years 0 AOCs over a rolling three year time period – Every three (3)years All Other City Regulated facilities: 2 or more AOCs over a rolling five year time period – Every year 1 AOC over a rolling five year time period – Every two (2) years 0 AOCs over a rolling five year time period – Every five (5) years 0 AOCs over a rolling five year time period with no exposure or potential for exposure – No further inspections Facilities for which a referral or ICID complaint is received: Immediately for violations and every year until they meet the above criteria. *AOC = Area of Concern	<ul> <li>◆ Identify commercial facilities listed.</li> <li>◆ Maintain a database to track the inspection information.</li> <li>◆ Conduct and document inspection of the various facilities listed.</li> </ul>	Annually (First completed FY 95-96) Ongoing (First completed FY 93-94) Annually

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#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
IND 4.	Compliance: The City will conduct industrial/commercial inspections to determine the existence of discharges or potential discharges which are illegal under local ordinances. The facility operator will be notified of observed areas of concern to be corrected and/or if official action on violations is necessary, it will take place under local enforcement procedures.	<ul> <li>Develop, and update as needed, an inspection frequency plan.</li> <li>Document enforcement actions taken as a result of inspections.</li> </ul>	(First completed FY 95-96 & Last updated in 2002) Annually
IND 5.	Training: The City will ensure that industrial/commercial inspectors are adequately trained in inspection procedures, documentation, and enforcement related to stormwater pollution prevention	<ul><li>◆ Maintain a training plan.</li><li>◆ Conduct training for industrial/commercial inspectors.</li></ul>	Ongoing (First completed in 1997) Annually (First completed in 1990)
IND 6.	Outreach: The City will help develop and distribute outreach and technology transfer material containing applicable control measures and/or BMPs to industrial/commercial facility operators responsible for IND activities.	<ul> <li>Audit existing outreach and technology transfer material.</li> <li>Develop and/or modify existing outreach material, as needed.</li> </ul>	Annually, in August (First completed in 1996) Annually
IND 7.	NOI Filers Effectiveness Evaluation: The City's Watershed Enforcement staff will review and evaluate the effectiveness of its inspections procedures and database tracking system.	<ul> <li>Document and evaluate the effectiveness of inspection procedures.</li> <li>Document and evaluate the effectiveness of the inspection database tracking system.</li> </ul>	Annually Annually

## C. New and Redevelopment

The goal of this Program Element is to institute post-construction planning and inspection procedures that abate water quality impacts resulting from new development. These post-construction procedures are intended to minimize stormwater pollution, erosion, and sedimentation to the maximum extent practicable and to meet new hydraulic sizing requirements for projects that create or replace one or more acres of impervious surface effective October 15, 2003.

The revised New and Redevelopment (NRD) Performance Standard is a high priority because the City anticipates a steady growth rate in the future, primarily in the form of infill development within the City's Urban Service Area. According to the City's General Plan, only 5.3 percent of the City's 113,500 acre incorporated area is vacant or unused and is designated for development. The majority of the City is already developed and has urban services and improvements. Typical new development in San José takes the form of infill development by way of demolition of existing structures on small, developed parcels and constructing new development that increases the density and height on the property. Land use decisions can impact water quality; therefore, this Program Element seeks to implement planning procedures and policies that minimize such impacts.

Pollution prevention is achieved through the application of site design, source control and treatment best management practices (BMPs) during the planning review phase of both private development and public projects.

The planning phase subjects proposed development projects to review for conformance with City policies, procedures and design guidelines. The review ensures that project plans include appropriate site design, source control measures, treatment BMPs, and environmental mitigation in the initial stage of the project and ultimately, as part of its design specifications.

The planning phase for private development is conducted by Department of Planning, Building, and Code Enforcement (PBCE) staff with review by other departments, including Public Works - Development Services Division, Fire, and Environmental Services. The Architectural Engineering Division of Public Works conducts the planning phase for public projects. It is during the planning phase that appropriately sized postconstruction measures that prevent ongoing pollution are incorporated into the site design. Because post-construction measures must be identified during the planning phase, the NRD Performance Standard is focused on design review procedures and ensuring that 1) the City develops policies for including post-construction measures and mitigation (see Appendix B NRD SOPs); 2) City Planning staff and developers are aware of alternatives and appropriate technologies that can be used to reduce urban runoff pollution (see Attachment 1, NRD Work Plan)); and 3) these technologies are evaluated for their effectiveness. Accordingly, the Planning Department has updated its design review procedures and drafted revisions to the Guidance Manual on Selection of Stormwater Quality Control Measures. The Department also will continue to formulate new policies and ordinances as new technologies are proven effective at preventing urban runoff pollution.

The Performance Standards for Planning Procedures contained in this element were originally based on the Water Board's recommendations, which incorporated the mandates from the following publications:

- EPA's stormwater regulations<sup>23</sup>;
- the Coastal Zone Act Reauthorization Amendments <sup>24</sup>; and
- the San Francisco Bay Estuary Project's Comprehensive Conservation and Management Plan<sup>25</sup>.

These current Performance Standards are consistent with the goals and objectives of the NRD Activities component of SCVURPPP's URMP. Each Performance Standard element has a milestone that provides a basis for documenting performance and evaluating the effectiveness of the City's planning process.

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<sup>&</sup>lt;sup>23</sup> Title 40, Part 122, Code of Federal Regulations

<sup>&</sup>lt;sup>24</sup> Coastal Zone Management Reauthorization Amendments of 1990, 6217

<sup>&</sup>lt;sup>25</sup> San Francisco Estuary Institute. Comprehensive Conservation and Management Plan. June 1994. Prepared under Cooperative Agreement #CE-009486-02 with the U.S. Environmental Protection Agency by the Association of Bay Area Governments.

## **NRD Performance Standard Matrix**

#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
NRD 1.	The City (Co-Permittee) will have adequate legal authority to implement new development control measures, including all applicable requirements of Provision C.3, as part of its development plan review and approval procedures and other appropriate new development and redevelopment permitting procedures (Permit Provision C.3.a.i.).	♦ Complete review, evaluation, and modification, as necessary, of the existing legal authority.	Done 10/03 Revise by 04/05
NRD 2.	The City will provide developers with information and guidance materials on site design guidelines, building permit requirements, and BMPs for stormwater pollution prevention early in the application process, as appropriate for the type of project and location (C.3.m.).	◆ Develop and implement a procedure to provide, early in the application process, the development community with information and guidance materials related to construction and post-construction activities, site design guidelines, and other stormwater mitigation measures.	Ongoing
NRD 3.	The City will ensure that environmental documents required for those projects that fall under CEQA or NEPA review address both significant and cumulative stormwater quality impacts during the life for the project, and relevant permit requirements. These documents include EIRs, negative declarations and initial study checklists.	♦ Complete review, evaluation, and modification, as necessary, of the existing environmental documents.	Ongoing
NRD 4.	The City will encourage developers of all projects subject to design review under its development plan review and approval procedures to consider incorporating appropriate source control and site design measures that minimize stormwater pollutant discharges to the maximum extent practicable.	<ul> <li>Develop and implement a procedure to provide the development community with information and guidance materials related to site design and source control, and other stormwater mitigation measures.</li> <li>Identify and document existing site design standards and guidance documents and policies and revise if necessary.</li> </ul>	Ongoing Ongoing
NRD 5.	<ul> <li>The City will require developers of Group 1 projects deemed complete<sup>26</sup> on or after October 15, 2003, to design and implement the following measures to reduce stormwater pollution to the maximum extent practicable:</li> <li>Site design shall include measures to minimize impervious land coverage, maximize infiltration (where appropriate and designed to protect groundwater quality) and provide detention or retention as part of landscaping where feasible (C.3.b.i. and C.3.j.);</li> <li>Source controls shall be required to limit pollution generation, discharge, and runoff as appropriate (C.3.k), including measures to discourage pesticide use (C.9.d.ii.);</li> <li>Stormwater treatment measures shall be designed in accordance with the numeric design criteria in Provision C.3.d.</li> </ul>	<ul> <li>Develop and implement a procedure to provide the development community with information and guidance materials for Group 1 projects related to site design, source control, treatment measures, and other stormwater mitigation measures, including the HMP when approved by the Water Board.</li> <li>Develop criteria and checklist to aid PBCE and PW in determining whether a development project should be required to incorporate post-construction treatment control measures and their related operation and maintenance requirements.</li> <li>Identify and document existing site design standards and guidance documents and policies and revise if necessary.</li> </ul>	Ongoing  Done 05/04  Done 09/03 and ongoing

<sup>&</sup>lt;sup>26</sup> "Deemed completed" is defined as the date on which a development permit application is received by the City with the applicant's signature and all fees paid.

#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
	■ Increases in peak runoff flow and volume shall be managed for appropriate projects by implementing the guidance in the Program's Hydromodification Management Plan (HMP) for the specific stream receiving the discharge, following approval of the HMP by the Water Board (C.3.f.)	<ul> <li>Identify and document existing source control measures, guidance documents, and conditions of approval and revise if necessary.</li> <li>Propose revisions to current Policy on Post-Construction Urban Runoff Management as necessary to incorporate hydraulic sizing design criteria.</li> <li>Refine and modify development approval procedures as necessary to accommodate HMP implementation.</li> </ul>	Done 09/03 and Ongoing  Done 10/03. Revise 04/05.  To be revised upon approval of HMP.
NRD 6.	The City will require developers of projects that disturb a land area of one acre or more to demonstrate conformance with the State General Construction Activity Storm Water Permit including filing of NOI, development of a SWPPP, et al.	◆ Complete review, evaluation, and modification, as necessary, of the existing Public Works and Planning procedures.	Done FY 02-03 and Ongoing
NRD 7.	The City will require developers of projects with potential for significant erosion and planned construction activity during the wet season to prepare and implement an effective erosion and/or sediment control plan or similar document prior to the start of the wet season.	♦ Complete review, evaluation, and modification, as necessary, of the existing Public Works and Planning procedures.	Ongoing
NRD 8.	<ul> <li>The City will implement an operation and maintenance (O&amp;M) verification program that includes: (C.3.e):</li> <li>Compiling a list of private and public properties and responsible operators for all stormwater treatment measures;</li> <li>Inspecting a subset of prioritized treatment measures for appropriate O&amp;M, on an annual basis, with appropriate follow-up and correction;</li> <li>Requiring legally enforceable agreements or other mechanisms assigning responsibility for O&amp;M of treatment measures.</li> </ul>	<ul> <li>Draft policy and procedures necessary for an operation and maintenance verification program.</li> <li>Track and compile a list of priority projects inspected and inspection results.</li> <li>Draft summary of details of operation and maintenance verification program.</li> <li>Include as a condition of approval a requirement that developers of projects that include installation of permanent structural stormwater controls are required to establish and provide proof or operation and maintenance of such structural controls.</li> </ul>	Policy done 10/03 and procedures drafted 06/04 Ongoing Drafted 06/04 Ongoing
NRD 9.	The City will ensure that municipal capital improvement projects include stormwater quality control measures during and after construction, appropriate for each project, and that contractors comply with stormwater quality control requirements during construction activities and maintenance activities (C.3.a.v.).	<ul> <li>Develop a procedure to ensure that contractors include stormwater quality control measures appropriate for each project, during and after construction.</li> <li>Begin tracking required data on public projects subject to C3 hydraulic sizing criteria requirements for Annual Report.</li> </ul>	Ongoing Ongoing
NRD 10.	The City will provide training at least annually to its planning, building, and public works staff on planning procedures, policies, design guidelines, and BMPs for stormwater pollution prevention (C.3.a.vi).	◆ Modify current training program, as appropriate, and implement an annual training program for Planning, Public Works, Building, and Transportation staff.	Ongoing

## D. Construction Inspection

The new Construction Inspection Performance Standards (CON) define the level of implementation that the City must attain to demonstrate that its construction inspection program controls stormwater quality to the maximum extent practicable. This performance standard forms the basis for measuring the City's construction inspection and enforcement program compliance.

Construction sites must include stormwater mitigation measures to conform to the City of San Jose's NPDES permit. City ordinance requires that a grading and drainage plan to be included in the project application. An Erosion Control Plan (ECP) may be required as a part of the grading and drainage plan, if the project is expected to have significant erosion potential. The City requires all construction sites greater than or equal to one acre to have a Storm Water Pollution Prevention Plan (SWPPP) and a copy of the Notice of Intent to conform to State General Permit for Construction Activities.

For private development projects expected to have significant erosion potential, City project managers and engineers require pre-construction meetings to be held prior to September 10th. At this meeting, the Department of Public Works (PW) project engineer and inspector discuss project construction schedules and erosion and sediment control expectations and strategies. The developer must describe his/her erosion control plan and procedures; potential revisions are discussed and agreed upon. By September 20th, a final erosion and sediment control plan must be submitted and approved by PW before wet weather operations are allowed. Other types of private development, which will have some activity but are not considered to have erosion potential, are sent a letter describing the City's expectations and requirements in order for work to be allowed to continue into the wet season.

All public projects, which are bid and awarded by PW, require contractors to include stormwater control measures for the project. This information is included in the bid specifications.

Per the City's SOPs, City construction inspectors are included in the erosion and sediment control review process, and their expectations (regarding grading operations, etc.) are conveyed to the general contractor and his/her subcontractor(s). During construction, the inspectors regularly inspect the site to ensure those grading operations and public infrastructure installations are conducted properly per the City's grading ordinance and Water Board guidance on erosion and sediment control. Specifically for erosion and sediment control inspections, inspectors review milestones such as making sure the site is protected and progressing as expected in the erosion control plan and narrative approved by the PW project engineer. All slopes and construction entrances are inspected regularly for stabilization. Inlet protection, creek outfalls, and sediment basin construction are all assessed. Before and after significant rainfall, all BMPs are checked for necessary dredging or other maintenance to ensure that they can adequately prevent pollutants from entering the storm sewer system or creeks. Failing BMPs are required to be redesigned or repaired.

Construction sites with inadequate erosion/sediment controls are given verbal or written notice of the inadequacies, according to the City's enforcement procedures, and followed

up with action(s) commensurate with the risk of pollutants entering City storm drains or waterways. Written notices and follow-up actions are tracked and summarized in the City's Annual Report to the Water Board.

During structural construction, housekeeping practices at construction sites are key to preventing pollutants from entering storm drains. For this element, Building Code Inspectors from the Department of Planning, Building and Code Enforcement (PBCE) are responsible for field observation of BMP compliance. Since these inspectors frequently inspect sites as part of routine building permit compliance, they are in the best position to identify housekeeping problems at construction sites. Building Code Inspectors have been trained by Environmental Service Department's Watershed Enforcement Inspection staff on how to spot poor housekeeping practices and inform developers and contractors of observed problems.

The SOP for this program element includes procedures to guide the referral and transfer of project information between inspection staff from PBCE, PW, and the Watershed Enforcement (WE) inspectors. WE inspectors are available to provide escalated enforcement to achieve compliance at construction sites.

## **CON Performance Standard Matrix**

#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
CON 1.	The City ensures through a construction inspection program that construction contractors properly store, use, and dispose of construction materials, chemicals, and wastes at construction sites and prevent illicit discharges to storm drains and watercourses.	◆ Track and document incidents of housekeeping at construction sites.	Ongoing (First completed in 2002)
CON 2.	For development projects with significant erosion potential and planned construction activity during the wet season, the City ensures, through a construction inspection program, that erosion and/or sediment control measures are implemented in accordance with local ordinances and project conditions of approval and maintained as needed during construction.	◆ Identify needed ordinance changes including timeline for revised grading ordinance.	As Needed (Completed in 2003)
CON 3.	The City inspects construction sites for adequacy of stormwater quality control measures. The frequency of inspections for active sites is at least once per month, or more frequently based on the size of the project, site conditions, precipitation, and the project's potential impact on stormwater quality.	♦ Document inspections of active construction sites.	Ongoing (First completed in 2001)
CON 4.	Prior to the beginning of the wet season each year, the City inspects all sites requiring erosion and/or sediment control plans, to ensure that measures have been taken to minimize erosion and discharges of sediment from disturbed areas.	◆ Document pre-season inspection of construction sites to ensure adequate implementation of winterizing BMPs, prior to the wet season.	Ongoing (First completed in 2001)
CON 5.	Construction sites with inadequate erosion/sediment controls are given verbal or written notice of the inadequacies, according to the City's enforcement procedures, and followed up with action(s) commensurate with risk of pollutants entering City storm drains or waterways. Written notices and follow-up actions are tracked and summarized in the City's Annual Report to the Water Board.	◆ Track and summarize notices and follow-up actions for annual reports.	Annually (First completed in 2001)
CON 6.	The City provides training annually to its construction inspection staff on inspection procedures, documentation, and enforcement related to stormwater pollution prevention. All inspectors receive training on the latest construction-related stormwater pollution prevention techniques and appropriate follow-up actions at least once every two years. The City keeps documentation that inspectors have received training.	◆ Track and document that inspectors have received training.	Annually (First completed in 1998)
CON 7.	The City provides outreach materials to contractors, developers, and municipal staff on construction BMPs and compliance with the State General Construction Activity Storm Water Permit.	◆ Evaluate outreach program and make improvements, as necessary.	Annually (First completed in 2001)
CON 8.	The City will develop and implement a process to ensure that contractors hired to construct public works projects have adequate erosion control plans and use appropriate Best Management Practices (BMPs) adopted by the Department of Public Works.	◆ Track the number of Public Works projects with these requirements.	Annually (First completed in 1998)

## E. Public Streets, Roads, & Highways

Integrally connected to the City's storm drain system are the 2,250 miles of public streets, roads, and highways (PSR) that are maintained by the City. Operation and maintenance of these roads, sidewalks, medians, and other related structures occurs year-round regardless of weather conditions.

Like the storm drain system, road surfaces are impermeable, making them an efficient means of channeling water and pollutants to the storm drain system. In addition to surface runoff, street maintenance activities such as road repair and resurfacing, landscape maintenance, and road striping painting, are potential sources of stormwater pollution.

Section C.2 pursuant to NPDES Permit CA S029718, requires the City to submit, to the Executive Officer of the Water Board, a program element that identifies control measures to reduce pollutants in stormwater discharges from Public Streets, Roads, and Highways Operations and Maintenance. "Model" Performance Standards were developed by SCVURPPP, including provisions to routinely remove pollutants from City streets via street sweeping operations, as well as to control pollutants from regular operation and maintenance activities by carefully controlling water runoff from work activities and spills.

The City has been implementing Public Streets, Roads and Highways model BMPs and SOPs from the SCVURPPP Performance Standards as part of ongoing permit compliance efforts. These measures and their associated work plans are designed to provide a measurable and systematic approach to ensure compliance with the letter and intent of the permit.

In December 2002, a new Performance Standard for Rural Public Works (RPW) was added to the PSR program element. The goal of RPW Performance Standard is to minimize the water quality impacts resulting from public works maintenance and support activities in rural areas.

## **PSR Performance Standard Matrix**

#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
PSR 1.	The City will implement Best Management Practices (BMPs) for street, road, and highway operation and maintenance (O&M) activities to reduce pollutants in stormwater and eliminate illicit discharges to the maximum extent practicable.	<ul> <li>◆ Produce SOPs and implement BMPs.</li> <li>◆ Distribute and review SOPs annually. Incorporate SOP/BMP evaluation into annual training events.</li> </ul>	(Done FY 98-99) Annually (First completed in 1999)
PSR 2.	The City will develop and implement a process to ensure that contractors employed to perform street, road, and highway O&M activities use appropriate BMPs.	◆ Train contract managers for PSR O&M contracts on related stormwater BMPs.	Annually (First completed in 2002)
PSR 3.	The City will provide annual training to its municipal staff in use of appropriate BMPs. The City will also provide a mechanism for obtaining feedback from staff on implementation and effectiveness of the BMPs and Control Measures.	<ul> <li>Develop a training and staff feedback curriculum.</li> <li>Incorporate curriculum into tailgate meetings and other existing training opportunities.</li> </ul>	(Done FY 00-01) Ongoing (First completed in 2001)
PSR 4.	The City will inform other parties (e.g., CalTrans, County of Santa Clara, and public utilities) conducting jurisdictional street and highway O&M activities of requirements to implement pollutant reduction BMPs and Control Measures in stormwater to maximum extent practicable and eliminate illicit discharges.	◆ Develop a procedure to inform other agencies (particularly PG&E and CalTrans) regarding relevant NPDES requirements.	(Done FY 99-00)
PSR 5.	As part of annual review process, the City will evaluate the effectiveness of its BMPs in reducing pollutants in stormwater and eliminating illicit discharges. The review and evaluation will include input from the municipal maintenance staff that implement the BMPs.	♦ Establish a procedure to evaluate and incorporate any needed improvements in BMPs.	(Done FY 01-02)
PSR 6.	The City will extend its control measure strategy for PSR to address water quality impacts resulting from public works maintenance and support activities in rural areas.	<ul> <li>Identify City-owned properties that are applicable.</li> <li>Develop SOPs and BMPs for rural public works activities.</li> <li>Distribute and review SOPs annually. Incorporate SOP/BMP evaluation into annual training events.</li> </ul>	Ongoing (First completed in 2003) (Done FY 03-04)  Annually (First completed in 2004)

## F. Storm Drain System O&M

The City storm drain system is designed to be an efficient means of conveying stormwater runoff away from City streets. Unfortunately, any pollutants that may be present in stormwater runoff can also be conveyed to the creeks as well. Pollutants can often bind to sediments, which can then accumulate in drain lines and catch basins. For this reason the cleaning of storm drain lines and catch basins is a key activity for controlling pollutants.

The City's program for operations and maintenance reaches all 157 square miles of the City and includes more than 850 miles of storm drain lines and 27,900 catch basins. The oldest parts of this infrastructure are in the central part of the City, along the Guadalupe River. Consequently, this older portion of the system, with its limited design capacity, is in need of constant maintenance.

Section C.2, pursuant to NPDES Permit CA S029718, requires the City to submit, to the Executive Officer of the Water Board, a program element that identifies control measures to reduce pollutants in stormwater discharges from Storm Drain Operations and Maintenance. This program must include provisions to address inlet and line maintenance, solid waste management, and opportunities for structural retrofit.

The Performance Standards developed by the SCVURPPP have set forth two levels of effort for routine inspection and cleaning - Tier I and Tier II. The City has committed to achieving Tier II level of maintenance both as a means to control pollution and to provide better flood control for its citizens.

The principle difference between Tiers I and II is the frequency of inspection and cleaning. While Tier I requires that all inlets/catch basins be inspected and cleaned (as needed) every other year and problem areas cleaned every year, Tier II requires inspection and cleaning every year with Problem Areas to be cleaned more than once a year. A Problem Area is defined as a storm drain inlet or catch basin and area surrounding the drain which floods as a result of normal rainfall or as a problem noted during routine inlet cleaning. A tracking system to address and document Problem Areas is included in the SDO Workplan.

For emergency response to spills and illegal dumping incidents, the Department of Transportation has prepared an Emergency Operations Manual. Elements of the Manual set forth steps which include containment and notification of appropriate agencies including the Fire Department's Hazardous Incidence Team and the ICID inspectors of the ESD Watershed Protection division.

## **SDO Performance Standard Matrix**

#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
SDO 1.	The City will implement BMPs for the storm drain system O&M to reduce pollutants in stormwater to the maximum extent practicable. Specific BMPs for each type of O&M activity are listed in the City's Workplan BMPs and Control Measures (Appendix B).	◆ Develop and implement an SOP and BMPs for storm drain system O&M that require attainment of Tier II level of maintenance.	Ongoing (First completed in 1999)
SDO 2.	The City will develop and implement processes for tracking problem areas and ensuring that appropriate BMPs and SOPs will be implemented for storm drain operation and maintenance activities.	◆ Develop a Storm Drain Operation & Maintenance procedure that includes implementation of BMPs and a procedure for tracking Problem Areas.	(Done FY 99-00)
SDO 3.	The City will develop and implement a process to ensure that contractors employed to perform storm drain O&M activities use the appropriate BMPs.	◆ Train contract managers for SDO O&M contracts on related stormwater BMPs.	Annually (First completed in 2002)
SDO 4.	The City will provide annual training to its municipal staff in use of appropriate BMPs and/or Control Measures. The City will also provide a mechanism for obtaining feedback from staff on implementation and effectiveness of the BMPs and Control Measures.	<ul> <li>Deliver a training curriculum for City staff to be incorporated into existing training opportunities.</li> <li>Create a feedback mechanism to improve implementation and BMP effectiveness.</li> </ul>	Annually (First completed in 98-99) (Done FY 01-02)
SDO 5.	As part of the annual review process, the City will evaluate data regarding cleaning activities and unusual flows observed during inspection. The review and evaluation will include consideration of storm drain structural retrofit.	<ul> <li>Develop procedures for documenting storm drain O&amp;M activities (including inspections and review/evaluation of BMPs).</li> <li>Develop measures to evaluate cleaning activities and future planning and design.</li> </ul>	(Done FY 98-99)  Ongoing (First completed in 2002)
SDO 6.	As part of the annual review process, the City will review and evaluate the effectiveness of its BMPs in reducing pollutants in stormwater and eliminating illicit discharges.	◆ Distribute and review SOPs annually. Incorporate SOP/BMP evaluation into annual training events.	Annually (First completed in 1999)

#### G. Water Utilities O&M

The City's Municipal Water System (Muni Water) serves the areas of Alviso, Evergreen, Edenvale, Coyote Valley, and North San José. Muni Water supplies 26,000 customers, including approximately 102,000 individuals in residential, commercial, and industrial sectors.

Muni Water operation and maintenance activities involve treatment, conveyance and storage of water. Muni Water facilities include pumps to reservoirs, water lines, electrical controls, and treatment equipment. These activities have the potential to impact ambient water quality.

This Performance Standard is being implemented for water utilities operations and maintenance (WUOM) through several steps:

- a) identify discharges of concern;
- b) identify and evaluate control measures to reduce these discharges;
- c) develop a Water Utility Pollution Prevention Plan (WUPPP), including Best Management Practices (BMPs) and an implementation schedule;
- d) develop a curriculum and an implementation plan for training staff and contractors on the WUPPP elements;
- e) develop a plan for annually evaluating the effectiveness of the WUPPP and gathering feed back from City staff.

This Performance Standard only applies to the City's Municipal Water System. San José Water Company and Great Oaks, which are both privately owned and operated water companies, are not included in or subject to the Performance Standard. These entities are responsible for their own storm water management plan, pursuant to state and federal requirements.

The water supply systems subject to this Performance Standard extend from the Municipal Water's source of supply to its customers' points of connection, and include treated and untreated potable water supply systems, reclaimed (recycled) water supply systems, raw water systems, and non-potable water.

## **WUOM Performance Standard Matrix**

#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
WUOM 1.	The City will conduct an inventory of all key operations and maintenance	♦ Deliver the survey of organizational units.	Annually
	activities, and identify routine and unplanned non-stormwater discharges	-	(First completed in 1998)
	from these activities. This inventory will be conducted every three years.	◆ Update list of O&M activities that result in discharges.	Every 3 years. Next
	In addition, an evaluation of these activities will be done at least once a		inventory due 3/06.
	year.		(Last completed 3/03)
WUOM 2.	The City will implement the pollution control measures identified in the	◆ Deliver the San Jose Municipal Water System WUPPP	Annually
	Water Utility Pollution Prevention Plan (WUPPP) to manage chlorine,	including O&M BMPs and implementation schedule.	(First completed in 1998)
	biocides, and algaecides and prevent erosion and sedimentation.	-	
WUOM 3.	The City will conduct annual training for applicable staff and coordinate	◆ Deliver a curriculum and implementation plan for staff	Annually
	WUPPP elements with water utility project planning, including applicable	and contractor training which includes coordination of	(First completed in 1998)
	WUPPP elements (BMPs, conditions, specifications, etc., in contract and	other performance standards.	
	service agreements).	•	
WUOM 4.	The City will evaluate the effectiveness of the WUPPP annually, maintain	◆ Deliver a plan for documenting annual feedback from City	Annually
	accurate documentation, and revise, as necessary, to achieve the goals of	staff responsible for implementing the WUPPP.	(First completed in 1999)
	the URMP.		

## H. Pesticide Management

The goals of the Pesticide Management program are to minimize pesticide use (particularly organophosphate pesticides) and to reduce the amount of pesticides in stormwater and landscape runoff. These control measures apply to pest management on municipally owned property performed by municipal employees and/or by commercial applicators that contract with the municipality. The control measures include outreach to other users within the City's jurisdiction regarding less toxic pest control methods and proper disposal of pesticides.

Pesticides are applied, or contracted to be applied, by the following departments: Transportation; General Services; Parks, Recreation & Neighborhood Services; Public Works; Convention, Arts & Entertainment; Environmental Services; and the Redevelopment Agency. In all cases the City's policy is to use the least toxic method consistent with adequate pest management. Organophosphate pesticides (OPs) are no longer used by the City of San José for any purpose. Commercial pest control services contracted by the City are instructed on City policy, which prohibits the use of OP insecticides. Most contract services themselves no longer carry or use these products.

As required by section C.9.d, of NPDES Permit CA S029718, the City is required to submit, to the Executive Officer of RWQCB, a plan for controlling pesticide use. This plan includes provisions to address municipal use of pesticides, and education and outreach on the use of pesticides by other sources in the City jurisdiction. The plan includes provisions to implement Integrated Pest Management (IPM) practices that minimize pesticide use and water quality impacts from pesticides. The City's plan is also consistent with the goals and objectives of the SCVURPPP Urban Runoff Management Plan (URMP, 1997, revised October 2000). The basic elements of the plan include:

- A process for tracking pesticide use on municipal property.
- A process to ensure that contractors employed by the City adhere to IPM practices.
- A City IPM policy.
- Development of BMPs and SOPs for implementing an IPM policy.
- Expansion of training, outreach, and monitoring activities to cover IPM issues and pesticide concerns.

The City pesticide management plan contains provisions to discourage pesticide use at new development sites by encouraging pest-resistant landscaping, minimization of impervious surface and other design strategies, and education of individuals who perform design and environmental reviews.

## **PM Performance Standard Matrix**

#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
PM 1.	The City will adopt an Integrated Pest Management (IPM) policy and/or ordinance requiring use of IPM techniques in the agency's operations; and, minimization of pesticide use, particularly organophosphate and copperbased pesticides, by agency staff and contractors.	◆ Develop an ordinance section stating City IPM policy for inclusion in Pesticide Management Plan.	(Done FY 02-03)
PM 2.	The City will develop and implement a Pesticide Management Plan with the goals of minimizing pesticide use and reducing the amount of pesticides in stormwater and landscape runoff to the maximum extent practicable.	<ul> <li>Draft a CSJ Pesticide Management Plan (PMP).</li> <li>Publish CSJ PMP in URMP.</li> </ul>	(Done FY 01-02) (Done FY 01-02)
PM 3.	The City will develop and implement standard operating procedures (SOPs) and best management practices (BMPs) for implementing the IPM Policy.	<ul> <li>Develop SOPs and BMPs for implementing IPM policy, with provisions that will reduce water quality impacts from pesticide use.</li> <li>Update City URMP to incorporate model Pest Management Performance Standard, including description of legal authority (IPM policy and contract language), work plan elements, BMPs, and SOPs needed for implementation.</li> </ul>	(Done FY 02-03) (Done FY 02-03)
PM 4.	The City will ensure that employees receive pest management training by implementing the following:  a) Employees who apply pesticides for the City will obtain the appropriate training as required by County Ag. Commissioner and State Department of Pesticide Regulation (DPR);  b) Employees within departments responsible for pesticide application will receive annual training on appropriate portions of City IPM Policy, SOPs, and BMPs, and latest IPM techniques;  c) Employees who are not authorized to apply pesticides will be annually trained not to use over-the-counter pesticides at workplace, consistent with IPM Policy.	<ul> <li>Ensure that employees who apply pesticides for the agency obtain the appropriate training required by County Ag. Commissioner and State DPR.</li> <li>Provide annual training on IPM Policy, SOPs, and BMPs, and latest IPM techniques to employees within departments responsible for pesticide application.</li> </ul>	Annually (First completed prior to 2001) Annually (First completed in 2002) Annually (First completed in 2002) Annually (First completed in 2003)

#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
PM 5.	The City will develop and implement a process to ensure that contractors employed to conduct pest control and pesticide application on municipal property engage in pest control methods consistent with City IPM Policy. Specifically, the City will require contractors to: follow City IPM policy, BMPs, and SOPs; provide evidence of current IPM training, when feasible; and provide documentation of pesticide use on City property to the City in a timely manner.	<ul> <li>Develop and implement a process to ensure contractors employed to conduct pest control/pesticide application on municipal property engage in methods consistent with City IPM policy.</li> <li>Require through contract specifications that PCOs contracted for municipal applications to use pest control methods consistent with City's IPM policy. Specifically, require contractors to: a) follow City IPM policy, BMPs, and SOPs; b) provide evidence of current IPM training, when feasible; and c) provide documentation of pesticide use on City property to the City in a timely manner.</li> <li>Monitoring Mechanism III.A.1. Document numbers of PCOs receiving presentations and/or training on pesticide use by PCOs on municipal property.</li> </ul>	Ongoing (First completed in 2003)  Ongoing (First completed in 2003)  Annually (First completed in 2001)
PM 6.	The City will identify in annual work plan, outreach activities it will conduct consistent with Program Pesticide Management Plan. Work plan elements will address outreach to residential and commercial pesticide users, pesticide retailers, and special districts. Information will be provided on less-toxic pest control practices, proper disposal of pesticides, and the City's own IPM practices, as applicable.	<ul> <li>Increase awareness of IPM so target audiences recall less toxic pest management messages and adopt IPM behaviors. Target audiences include residential and commercial users, pesticide retailers, municipal employees, and special districts. (Goal)</li> <li>Develop and implement education programs that target commercial businesses.</li> <li>Monitoring Mechanism: Document or estimate numbers of residents reached by outreach efforts, including events, web promotion, municipal employee outreach, and media advertising. Monitor responses to outreach efforts by documenting calls to the Program's general and watershed campaign hotlines.</li> <li>Monitoring Mechanism IV.A.1. Document outreach efforts targeting businesses, as recommended in the work plan to be developed by the Program. Implement the evaluation component of the work plan.</li> </ul>	Annually (First completed in 2002)  Annually (First completed in 2002)  Annually (First completed in 2002)  Annually (First completed in 2002)

#	PERFORMANCE STANDARD	ACTIVITIES	MILESTONE
PM 7.	The City will coordinate with household hazardous waste (HHW) collection agencies to support, enhance, and help publicize programs for proper pesticide disposal.	<ul> <li>Work with HHW collection agencies to support, enhance, and publicize programs for pesticide disposal.</li> <li>Ensure that adequate pesticide disposal services exist for residents and conditionally exempt small quantity commercial generators.</li> <li>Provide hazardous waste disposal information to residents, through distribution of materials (e.g., utility bill insert, city newsletter, community events, etc.) or advertising in local media.</li> <li>Monitoring Mechanism V.A.1. Document that HHW collection programs adequately serve residents and</li> </ul>	Annually (First completed 2002) Annually (First completed 2002)  Annually (First completed 2002)  Annually (First completed 2002)
PM 8.	The City will develop and implement a process for tracking pesticide use on municipally-owned property.	<ul> <li>businesses and that any exchange programs do not exchange organophosphate or banned pesticides.</li> <li>Develop and implement a process for tracking pesticide use on municipally owned property. Include reporting and justification for use of OP pesticides and BMPs employed during OP pesticide use.</li> <li>Monitoring Mechanism I.A.1. Document completion of</li> </ul>	Done FY 01-02 Annually (First completed 2002) Annually
PM 9.	The City will conduct periodic City-wide search of its chemical inventory for pesticides no longer legal for application per EPA, State, and/or local requirements. These pesticides, if found, will be properly disposed	tasks in annual reports. Use pesticide tracking process to document pesticide use.  ◆ Conduct periodic City-wide search of chemical storage areas for pesticides no longer legal for application per EPA, State, and/or local requirements. Properly dispose	(First completed 2002)  Annually (First completed 2002)
PM 10.	pursuant to appropriate waste disposal regulations.  As part of annual reporting process, the City will review and evaluate,	of any such pesticides pursuant to appropriate waste disposal regulations.  • Review and continuously improve the goals, actions, and	Annually
	with input from municipal staff, the effectiveness of its Pest Management Plan and IPM Policy in achieving the goals of the Plan to the maximum extent practicable.	monitoring mechanisms of the work plan considering results of self-evaluations, comments from Water Board staff and other interested parties, and results of local performance review meetings if any.  Monitoring Mechanism IX.A.1. Complete revised work plan that incorporates continuous improvement items, and report on completion of work plan tasks.  Monitoring Mechanism VII.A.1. Summarize types of pesticide reduction measures required (such as by conditions of approval) for new development and significant redevelopment projects, and percentage of new development / significant redevelopment projects for which pesticide reduction measures were required. (Draft Permit Provision C.3.n.)	(First completed 2001)  Annually (First completed 2002)  Annually (First completed 2002)

## **Legal Authority**

The following is a list of the City of San Jose's legal authority and local regulations that are used to assist in the implementation of the URMP. Copies of the full text of these ordinances, policies, and other documents are available to review during regular business hours at the Environmental Services Department; call (408) 945-3000 to make an appointment. Ordinances can also be found on the City of San Jose's website at <a href="https://www.sanjoseca.gov">www.sanjoseca.gov</a>.

### **Ordinances**

1.08.010	General Code Enforcement Authority
1.14.010	Administrative Compliance Orders
9.10.410	General Requirements
9.10.510	Sidewalks and Public Ways – Duty of Owners or Occupiers of Property
13.20.070	Depositing Articles Likely to Injure Vehicles Prohibited
13.44.190	Water Pollution Prohibited
15.10.200	Water Waste Prevention
15.14.515	Discharge into Storm Drain Prohibited
15.14.530	Protection from Accidental Discharge
15.14.625	Garbage
15.14.630	Oil and Grease Removal Devices
15.14.690	Power to Inspect
15.14.720	Civil Penalties
17.04.300	Excavation & Grading
17.04.430	Erosion Control
17.04.440	Grading Inspection
20.10.430	Construction Clean-Up
20.10.470	Storm Water Management – Projects disturbing less than one acre
20.10.480	Storm Water Management – Projects disturbing more than one acre

### General Plan Policies

Water Resources Policies #1, 3, 5, 6, 7, 8, 9, 12

Bay and Bayland Policies #1, 2, 5, 6

Riparian Corridors and Upland Wetlands Policies #1, 2, 3, 4, 5, 8

Parks & Rec. Policy #5

Level of Service, Storm Drainage & Flood Control Policy #12



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## References

Following is a list of literature and sources for more information.

Alameda County Urban Runoff Clean Water Program. Storm Inlet Pilot Study. 1994.
CASQA. 2003. California Storm Water Best Management Practices Handbooks (for Industrial, Municipa Construction, and New Development Activities).
City of San Jose, Environmental Services Department. Water Policy Framework. 1996.
Council Policy #4-6, Environmentally Preferable Procurement Policy. 2001
1994. Riparian Corridor Study.
1994. San Jose 2020 General Plan.
1994. City Council Resolution No. 6352, adopted June 28, 1994. Effective July 1, 1994.
Ordinance No. 23781, amending chapter 15. 16 of Title 15 of the San Jose Municipal Code, adding a new part 6.
City Council. 1989. City council approved entering the MOA on September 5, 1989, effective upon issuance of permit. Formal MOA approval came on June 26, 1990.
Department of Planning, Building and Code Enforcement. Information based on 2000 Census and State Department of Finance.
<ul> <li>Streets and Traffic Operations and Maintenance, Activities of Concern and Runoff Pollution         Controls.         Prepared by Genevieve Fire, P.E. April 1999.     </li> </ul>
City of San Jose Water Utility Operation and Maintenance Discharge Pollution Prevention Plan. 1999.
Department of Planning, Building & Code Enforcement. <u>Residential Design Guidelines</u> , Adopted 1997, Revised April 1999.
. Industrial Storm Water Monitoring Pilot Program. September 1998.
Ordinance No. 26995 amending Title 20 adding a new Chapter 20.95.
Department of Public Works, Standard Specifications, <u>Section 10-2: Storm Water Pollution Prevention</u> . Revised 2004.
<u>Pollution Prevention Policy</u> (Policy No. 4-5, Revision adopted by City Council Resolution No. 71691), June 24, 2003.
Code of Federal Regulations. Title 40, Part 122.
Michael Bills, City of San José PBCE Data Management Team. 2000 Census. 2004.
San Francisco Bay Estuary Project. Comprehensive Conservation and Management Plan. 1994.
San Francisco Bay Regional Water Quality Control Board. NPDES Permit CA S029718. 2001 & Amendment.
1994. Letter from L. Barsamian to J. Christie; Staff Recommendations for New and Redevelopment Controls for Storm Water Programs.
1990. Order No. 90-094.
Santa Clara Valley Urban Runoff Pollution Prevention Program. <u>1997 Urban Runoff Management Plan, Chapters 1-4, Program Activities and Framework.</u> September 1, 1997, updated October 2000.

47 REFERENCES

·	Joint Stormwater Agency Project – Year Two, Investigation of Urban Sources of Mercury, PCBs and Organochlorine Pesticides. May 25, 2001.
·	Interim Draft, Multi-Year (Five-Year) Receiving Waters Monitoring Plan & FY 01-02 Annual Monitoring Plan. June 29, 2001.
·	Multi-Year Receiving Waters Monitoring Plan, March 1, 2002 (Revised August 5, 2002)
·	Draft Revised Multi-Year Receiving Waters Monitoring Plan, March 1, 2004
·	$\frac{Preliminary\ Draft,\ Pest\ Management\ Performance\ Standard\ and\ Guidance\ Documents}{20,2001}.$ November 20, 2001.
·	Metals Control Measures Plan (Vol. I) and Evaluation of Nine Metals of Concern (Vol. II). prepared by Woodward-Clyde Consulting, EOA, Inc. and Michael Drennan Associates. 1997.
	C.3 Handbook. July 2004
·	Performance Standard and Supporting Documents for Construction Inspection. January 2002.
·	<u>Evaluation of Watershed Watch Campaign Effectivness – 2003 Public Opinion Survey &amp; Focus Groups.</u> November 17, 2003
Santa C	ara Valley Nonpoint Source Control Program. FY 95-96 Annual Report. 1996.
·	1995. Proposed Storm Water Management Plan for NPDES Permit Period 1995 - 2000.
State of	California. 1996. Proposition 218, the Right to Vote on Taxes Act.
	1990. Coastal Zone Act, Coastal Zone Reauthorization Amendments of 1990, § 6217.

REFERENCES 48

## Acronyms, Abbreviations, and Definitions

#### **ACRONYMS & ABBREVIATIONS**

BAPPG Bay Area Pollution Prevention Group

BAASMA Bay Area Stormwater Management Agencies

BMPs Best Management Practices

CalTrans California Department of Transportation
CETA Cleaning Equipment Trade Association

CNAP Copper/Nickel Action Plans

CON Construction Inspection

DMV Department of Motor Vehicles
DOT Department of Transportation

DPR California Department of Pesticide Regulation

DTSC Department of Toxic Substances Control
DMV California Department of Motor Vehicles

ESD Environmental Services Department

EPPP Environmentally Preferable Purchasing Policy

FY Fiscal Year

GCASP General Construction Activity Storm Water Discharge Permit
GIASP General Industrial Activity Storm Water Discharge Permit

GS General Services

HHW Household Hazardous Waste

ICID Illicit Connection/Illegal Dumping

IND Industrial/Commercial Discharger Inspection Program

IPM Integrated Pest Management

M Mercury

Marcom Marketing and Communications

MC Municipal Compliance

MDN Mercury Deposition Network
MEP Maximum Extent Practicable
MOA Memorandum of Agreement

MON Monitoring

Muni Water San Jose Municipal Water System

NRD New and Redevelopment

NEPA National Environmental Protection Act

NOI Notice of Intent

NPDES National Pollutant Discharge Elimination Program

NPS Nonpoint Source PollutionO&M Operation and MaintenanceOP Organophosphate pesticides

PBCE Planning, Building and Code Enforcement

PCO Pest Control Operator
PG&E Pacific Gas and Electric

PIP Public Information and Participation

PM Pesticide Management

PMC Pesticide Management Committee

PMP Pesticide Management Plan

PRNS Parks Recreation and Neighborhood Services

Program SCVURPPP

PSR Public Streets, Roads and Highways

PW Public Works

RDA Redevelopment Agency

RMP Regional Monitoring Program

RPW Rural Public Works

RWQCB Regional Water Quality Control Board (Water Board)
SCBWMI Santa Clara Basin Watershed Management Initiative

SCC Santa Clara County

SCVURPPP Santa Clara Valley Urban Runoff Pollution Prevention Program

SCVWD Santa Clara Valley Water District

SDO Storm Drains Operation and Maintenance

SFEI San Francisco Estuary Institute
SIC Standard Industrial Classification

SJ San Jose

SJPD San Jose Police Department
SOPs Standard operating Procedures
SWMP Storm Water Management Plan

SWPPP Storm Water Pollution Prevention Plan

The City The City of San Jose

TMDL Total Maximum Daily Load

TRA Trash

UR Urban Runoff

URMP Urban Runoff Management Program

USA Urban Service Area

WE Watershed Envorcement

WMI SCVWMI

WUOM Water Utilities Operations and Maintenance WUPPP Water Utility Pollution Prevention Program

#### **DEFINITIONS**

**ACTIVITIES** Individual tasks, that when combined with others, form a Work

Plan to achieve a Milestone for a given Performance Standard.

ADVERSE IMPACT A detrimental effect upon water quality or beneficial uses caused

by a discharge or loading of a pollutant or pollutants. See also

"Impact."

AOC See Area of Concern.

AREA A violation based on the San Jose Municipal Code 15.14.530

**OF CONCERN** issued to a facility during a storm water inspection.

**BENEFICIAL USES** Existing or potential uses of receiving waters in the permit area as

designated by the Regional Board in the Basin Plan.

**BMP** See Best Management Practice.

BEST MANAGEMENT PRACTICE

(BMP)

Activities, practices, facilities, and/or procedures that when implemented to their maximum efficiency will prevent or reduce pollutants in discharges. Examples of BMPs may include public education and outreach efforts, proper planning of development projects, proper clean out of catch basin inlets, and proper waste

handling and disposal, among others.<sup>27</sup>

CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE

HANDBOOKS

The technical manuals prepared under the direction of the California Stormwater Quality Association. Comprising four volumes -- Municipal, Industrial, New Development and Construction -- they provide guidance for selecting BMPs to reduce pollutants in storm water discharges. The most recent volumes are available at www.cabmphandbooks.com.

CITY OF SAN JOSE URBAN RUNOFF MANAGEMENT PLAN (SJURMP) The City of San Jose's portion of the Countywide Urban Runoff Management Plan. This section of the Management Plan forms the implementation program to control storm water pollution within the city limits. The SJURMP identifies, among others, specific Program Elements, Performance Standards for these elements, and milestones, which measure whether performance standards have been met. The SJURMP identifies implementation actions necessary to identify pollutant sources, control measures and management practices that will result in reduction of pollutants in storm water discharges to maximum extent practicable. San Jose's URMP is one part of the overall URMP for the Santa Clara Valley.

CITY-REGULATED FACILITY

An industrial/commercial facility that is covered by the City of San Jose's Urban Runoff Industrial Inspection Program.

**COMPLIANCE** 

Meeting all applicable conditions of the State's NPDES General Industrial Permit, the City of San Jose Municipal Code, Best Management Practices, and local standards as confirmed by a City inspection. No unauthorized non-storm water discharges occur from the site.

<sup>27</sup> This definition is derived from a compilation of Guidance Specifying Management Measures for Sources of NPS Pollution in Coastal Water. 1993. USEPA & NOAA. EPA-840-B-92-002, Final NPS Guidance, 12/17/87. USEPA, Washington, D.C, and Los Angeles, RWQCB Order No. 96-054.

# CONDITIONALLY EXEMPTED DISCHARGES

Non-storm water discharges that need not be prohibited if identified by the Dischargers or the Executive Officer as not being sources of pollutants to receiving waters or if appropriate control measures to minimize the adverse impacts of such sources are developed and implemented under the URMP in accordance with Provision C.8.c.

#### CONSTRUCTION ACTIVITY

Clearing, grading, or excavation that results in soil disturbance. Construction activity does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility, nor does it include emergency construction activities required to immediately protect public health and safety.

**CONTROL** 

To minimize, reduce or eliminate by technological, legal, contractual or other means, the discharge of pollutants from an activity or activities.

CONTROL MEASURE

Technically and economically feasible practices, equipment or other activities required to reduce and abate metals and other toxics as required per Waste Discharge Requirements <sup>28</sup> and issued pursuant to Section 304(l) of the Clean Water Act.

**DISPOSAL** 

Intentional act in the placement of wastes or other materials to be thrown out or thrown away.

**DISTURBED AREA** 

That area altered as a result of clearing, grading, and/or excavation of earth.

ECONOMICALLY FEASIBLE

Measures which reflect the greatest degree of pollutant reduction achievable at the least amount of investment taking into consideration technical, design, procedural and operation and maintenance costs 29

**EFFECTIVENESS** 

A direct or indirect measure or indicator of how well a program, plan, or BMP achieves its intended purpose. Measures or indicators of effectiveness include, but are not limited to, detailed accounting of program accomplishments, funds expended, staff hours utilized, field surveys, amount of pollutants reduced, biosurveys, and quantitative data from water quality and sediment sampling.

**EROSION** 

The wearing away of land surface primarily by wind or water. Erosion occurs naturally as a result of weather or runoff but can be accelerated by many activities, including clearing, grading, or excavation of the land surface.

**EROSION CONTROL PLAN (ECP)** 

A set of BMPs designed to control surface runoff and erosion to prevent sediment movement offsite before, during, and after construction-related land disturbances.

FOOD SERVICE FACILITIES

Commercial or industrial facilities that prepare food for the public or for institutional patrons, and use or generate grease when preparing this food. "Food Service Facilities" do not include any facilities that do not use or generate grease in cooking or

<sup>&</sup>lt;sup>28</sup> San Francisco Regional Board Cease and Desist Order No. 93-164.

<sup>&</sup>lt;sup>29</sup> This definition derived from Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Water. 1993. USEPA & NOAA, EPA-840-B-92-002.

preparing food, such as facilities that prepare food for off-site cooking and consumption.

GENERAL CONSTRUCTION ACTIVITY STORM WATER DISCHARGE PERMIT (GCASP) The NPDES permit adopted by the State Water Resources Control Board, authorizing the discharge of storm water from construction sites under certain conditions.

GENERAL INDUSTRIAL ACTIVITY STORM WATER DISCHARGE PERMIT (GIASP) The NPDES permit adopted by the State Water Resources Control Board, authorizing the discharge of storm water from industrial sites under certain conditions.

GOOD HOUSEKEEPING PRACTICE

A common practice related to the storage, use, or clean-up of materials performed in a manner that minimizes the discharge of pollutants. Examples include purchasing only the quantity of materials to be used at a given time, use of alternative and less harmful products, cleaning up spills and leaks, and storing materials in a manner that will contain any leaks or spills.

HAZARDOUS MATERIAL

Any material defined as hazardous by Chapter 6.95 of the

California Health and Safety Code.

HAZARDOUS SUBSTANCE

Any substance designated pursuant to 40 CFR 302.

HAZARDOUS WASTE

A 'Hazardous Substance' or 'Hazardous Material' that is to be discharged, discarded, recycled, or processed.

HIGH PRIORITY AREAS

Areas suspected to have high incidence of Illicit Connection/Illegal Dumping activities based on historical information and results of monitoring studies.

ILLICIT CONNECTION

Any human-made conveyance that is connected to the storm drain system without a permit, excluding roof-drains and other similar type connections. Examples include channels, pipelines, conduits, inlets, or outlets that are connected directly to the storm drain system.

ILLEGAL DISCHARGE

Any discharge to the storm drain system that is prohibited under local, state, or federal statutes, ordinances, codes or regulations. This includes all non-storm water discharges except discharges pursuant to an NPDES permit and discharges that are exempted in accordance with San Jose Municipal Code Chapter 15.

ILLEGAL DISPOSAL

Any disposal, either intentional or unintentional, of material(s) or waste(s) that can pollute storm water or urban runoff.

**IMPACT** 

Any actual or potential effect caused either directly or indirectly by the discharge of pollutants.

INDUSTRIAL ACTIVITY

"Industrial activity" as defined in 40 CFR 122.26(b)(14) refers to 11 categories of activities. Each of these activities is required to obtain a NPDES permit for storm water discharges associated with "industrial activity" as required by 40 CFR 122.26(c). See also General Construction Activity Storm Water Discharge Permit.

INDUSTRIAL/COMMERCIAL FACILITY

Any facility involved and/or used in the production, manufacture, storage, transportation, distribution, exchange or sale of goods and/or commodities, and any facility involved and/or used in providing professional and non-professional services. This category of facility includes, but is not limited to, any facility

## INTEGRATED PEST MANAGEMENT (IPM)

defined by the Standard Industrial Classifications (SIC). Facility ownership (federal, state, municipal or private) and profit motive of the facility are not factors in this definition.

An ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and the use of resistant varieties. Pesticides are used only after monitoring indicates that they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risk to human health, beneficial and non-target organisms, and the environment.

**IPM** 

See Integrated Pest Management.

JURISDICTION

The geographic area within the boundaries of the City of San Jose subject to Municipal ordinance and regulation. The term is not intended to include facilities which the City is preempted or otherwise precluded from regulating.

LEGAL AUTHORITY

The ability of the City of San Jose to impose and enforce statutes, ordinances, and regulations to require control of pollutant sources and regulate the discharge of pollutants to the storm drain system, and to enter into interagency agreements, contracts, and memoranda of understanding. These powers are derived from the City Charter in accordance with the General Laws of the State. These powers are promulgated by the City through its municipal codes, ordinances, and statutes duly adopted by the City Council.

# MAXIMUM EXTENT PRACTICABLE (MEP)

The standard for implementation of storm water management programs to reduce pollutants in storm water. MEP refers to storm water management programs taken as a whole. The implementation of MEP takes into account equitable consideration and competing facts, including, but not limited to the gravity of the problem, potential or actual public health risk, environmental benefits, pollutant removal effectiveness, regulatory compliance, public acceptance, implementability, cost and technical feasibility.<sup>30</sup>

#### **MILESTONE**

Deliverable designed to demonstrate compliance with the Performance Standard. Conventions for the description of the frequency include:

- As Needed: Activity is conducted when necessary with no commitment to specific frequency.
- Ongoing: Activity is conducted as a matter of routine business, throughout the year.
- Annually: Activity is conducted typically once per year or during a season.

#### MONITORING

Activities, programs or tasks designed to obtain information,

<sup>&</sup>lt;sup>30</sup> Section 402(p)(3)(B)(iii) of the Clean Water Act requires that municipal permits "4shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."

evaluate and/or document status of URMP measures and milestones. The term "monitoring" as used is primarily one of three types:<sup>31</sup>

**Implementation monitoring** which assesses whether activities were carried out as planned.

Effectiveness monitoring which evaluates whether specific activities achieved the desired result.

**Project monitoring**, the type of monitoring which assesses the impact of a particular activity or project on water quality.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

See Storm Drain System.

**NPDES** See National Pollutant Discharge Elimination System.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

A permit issued by the USEPA, SWRCB or SFBRWQCB pursuant to the Clean Water Act section 402(p) that authorizes discharges to waters of the United States and requires the reduction of pollutants in the discharge.

**NOI FILERS** Facilities that have filed for coverage under the State's NPDES

General Permit for Discharges of Storm Water Associated with

Industrial Activity.

**NON-NOI FILERS** Facilities regulated under the State's NPDES General Permit for

> Discharges of Storm Water associated with Industrial Activity that have not filed for coverage under this permit and have not applied for an individual permit and/or an exemption certification,

when required.

NONPOINT SOURCE (NPS) **POLLUTION** 

Pollution caused by diffuse sources normally associated with agricultural, silvicultural, urban runoff, and runoff from construction activities, etc. Such pollution results in the humanmade or human-induced alteration of the chemical, physical, biological, or radiological integrity of water. In practical terms, nonpoint source pollution does not result from a discharge at a specific, single location (such as a single pipe) but generally results from land runoff, precipitation, atmospheric deposition, or percolation. In the past, the City of San Jose Urban Runoff Management Program was known as the Nonpoint Source Program. The City has changed the name to more clearly convey the focus of the program's efforts on urban generated pollution reduction.

NON-SIGNIFICANT FACILITIES

Facilities determined to be non-significant contributors to storm water pollution based on the number of Areas of Concern (AOC) the facility has been issued over a rolling 3 year (food service) or five year (all other City Regulated facilities) time period. One AOC or less constitutes a non-significant facility.

NON-STORM WATER DISCHARGE Any discharge to a municipal separate storm sewer that is not composed entirely of storm water.

**OUTREACH AND EDUCATION PROGRAMS** 

Any planning, activities, materials, media, and other management practices designed to effect behavior that prevents or reduces

<sup>&</sup>lt;sup>31</sup> See Monitoring Guidelines to Evaluate the Effects of Forestry Activities on Stream in the Pacific Northwest and Alaska. 1991. L. MacDonald. USEPA, Region 10, EPA/910/9-91-001.

#### PERFORMANCE STANDARDS

**POLLUTANT** 

#### pollutants in storm water/urban runoff discharges.

#### \_ . . . .

Level of implementation necessary to demonstrate the control of pollutants to the maximum extent practicable 32

Those "pollutants" defined in Section 502(6) of the federal Clean Water Act (33 U.S.C. § 1362(6)), or incorporated into California Water Code §13373. Examples of pollutants include, but are not limited to the following:

- Commercial and industrial waste such as fuels, solvents, detergents, plastic pellets, hazardous substances, fertilizers, pesticides, slag, ash and sludge;
- Metals such as cadmium, chromium, copper, lead, nickel, silver, zinc, and non-metals such as phosphorus and arsenic;
- Petroleum hydrocarbons such as fuels, lubricants, surfactants, waste oils, solvents, coolants, and grease;
- Excessive eroded soils, sediment, and particulate materials in amounts which may adversely affect the beneficial uses of the receiving waters, flora or fauna of the state.
- Animal wastes
- Substances having characteristics such as pH less than 6 or greater than 9, or unusual coloration or turbidity, or excessive levels of fecal coliform, or fecal streptococcus, or enterococcus.
- The term "pollutant" shall not include uncontaminated storm water, potable water or recycled water generated by a lawfully permitted water treatment facility.
- The term "pollutant" also shall not include any substance identified in this definition if, through compliance with the best management practices available, the discharge of such substance has been eliminated to the maximum extent practicable.

#### POLLUTANTS OF CONCERN

Pollutants that exhibit one or more of the following characteristics:

- Current loadings or historic deposits of the pollutant are impacting the beneficial uses of a receiving water;
- Elevated levels of the pollutant are found in sediments of a receiving water and/or have the potential to bioaccumulate in organisms; or
- The detectable inputs of the pollutant are at a level high enough to be considered potentially toxic to humans and/or flora and fauna.

Pollutants of concern may be different for each receiving water. For South San Francisco Bay, several studies have identified particular "pollutants of concern" these include copper, mercury, nickel, silver and selenium.<sup>33</sup>

#### **POLLUTION PREVENTION**

Any planning, schedules of activities, prohibitions of practices, implementation maintenance procedures or other management practices to prevent or reduce pollutants in storm water/urban

<sup>&</sup>lt;sup>32</sup> San Francisco Bay RWQCB Order 95-180. NPDES Permit No. CAS029718.

<sup>&</sup>lt;sup>33</sup> Metals Control Measures Plan (Vol. 1), 1996. Prepared by Woodward-Clyde Consultants, EOA, Inc. and Michael Drennan Associates for the Santa Clara Valley Nonpoint Source Pollution Control Program.

runoff discharges.

POST-CONSTRUCTION ACTIVITY Permanent storm water or erosion control techniques that remain

in place after land construction has been completed.

**POTABLE WATER SOURCES** Flows from drinking water storage, supply and distribution

systems including flows from system failures, pressure releases, system maintenance, well development, pump testing, fire hydrant flow testing; and flushing and dewatering of pipes, reservoirs,

vaults, and wells.

**PROPER DISPOSAL** The act of disposing of material(s) in a lawful manner which

ensures the protection of water quality and beneficial uses of

receiving waters.

**REGIONAL BOARD** The Governing Board of the California Regional Water Quality

Control Board; the State agency with primary responsibility for the protection and maintenance of water quality. For purposes of this document, this means the California Regional Water Quality

Control Board, San Francisco Bay Region.

**RECEIVING WATERS** All surface water bodies within the permit area that are identified

in the Basin Plan.

**RUNOFF** Storm water and dry-weather flows from a drainage area that

reaches a receiving or sub-surface waterbody.

**SIC** See Standard Industrial Classification.

**SWRCB** State Water Resources Control Board.

**SEDIMENT** Organic or inorganic material carried by, or suspended in, water

and settles to form deposits in the storm drain system or receiving

waters.

SIGNIFICANT EROSION

POTENTIAL

Risk of depositing sediment into watercourses or storm drains.

**SIGNIFICANT FACILITIES** Facilities determined to be potentially significant contributors to

storm water pollution based on the number of Areas of Concern (AOC) the facility has been issued over a rolling 3 year (food service) or five year (all other City Regulated facilities) time period. Two AOCs or more constitutes a significant facility.

**SIGNIFICANT NON-COMPLIANCE** One or more of the following conditions at any facility: 1) An

unauthorized non-storm water discharge to the storm sewer; 2) Negligent gross failure to implement BMPs; 3) Failure to meet

compliance schedule milestones within 90 days after a

compliance schedule date; and 4) Any other violation or group of violations which the City determines will adversely effect

receiving waters.

SIGNIFICANT STORMWATER

POLLUTION POTENTIAL

A project which causes substantial or potentially substantial adverse change in the quantity and/or quality of storm water

runoff generated from the site.

SOURCE CONTROL The primary approach to urban runoff management. Methods

vary depending on the type of problem, examples include:

- Reducing or eliminating the introduction of pollutants to a land

area. Examples include reduced nutrient and pesticide

application.

- Preventing pollutants from leaving the site during landdisturbing activities. Examples include construction practices that minimize erosion.
- Preventing interaction between precipitation and introduced pollutants. Examples include diverting runoff from areas of land disturbance at construction sites, and parking lots.
- Protecting riparian habitat and other sensitive areas. Examples include protection and preservation of riparian zones, shorelines, wetlands, and highly erosive slopes.
- Protecting natural hydrology. Examples include the maintenance of pervious surfaces in developing areas (conditioned based on ground-water considerations), riparian zone protection, and water management.<sup>34</sup>

#### **SOURCE MINIMIZATION**

Planning or operational practices that reduce the amount of materials used and stored at a site.

# STANDARD INDUSTRIAL CLASSIFICATION (SIC)

The statistical classification standard, organized by industry, underlying all establishment-based federal economic statistics. The SIC of a particular industry is determined using the latest Standard Industrial Classification Manual, prepared by the federal Office of Management and Budget. The SIC Code is useful for pollution prevention programs in that similarly categorized industries tend to use similar processes and chemicals.

## STANDARD OPERATING PROCEDURES

Routine steps or actions that, if properly carried out, reduce the likelihood of pollutants entering the receiving waters.

#### STORM DRAIN SYSTEM

Streets, gutters, conduits, natural or artificial drains, channels and watercourses, or other facilities that are owned, operated, maintained or controlled by the City of San Jose and used for the purpose of collecting, storing, transporting, or disposing of storm water.

#### **STORMWATER**

Water that originated from atmospheric moisture (rainfall or snowmelt) and that falls onto land, water, or other surfaces.

# STORM WATER MANAGEMENT PLAN (SWMP)

The original strategy and framework submitted by the Santa Clara Valley Urban Runoff Pollution Prevention Program to outline countywide efforts of all the co-permittees to comply with the Phase I NPDES permit.

# STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

A plan required of Industry and Construction Projects (disturbing one acre or more) by, and for which contents are specified in, the State of California General Permit for Storm Water Discharges Associated with Industrial Activities, and the General Permit for Storm Water Discharges Associated with Construction Activities. The purpose of such plans is to identify potential sources of pollution that can affect of the quality of storm water discharges from a site and to describe and ensure the implementation of practices to reduce pollutants in storm water discharges.

#### STORM WATER/URBAN RUNOFF

The part of precipitation (rainfall or snowmelt) which travels via

<sup>&</sup>lt;sup>34</sup> This definition derived from Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Water. 1993. USEPA & NOAA. EPA-840-B-92-002.

flow across a surface to the storm drain system or receiving waters. Examples of this phenomenon include the water that flows from a building's roof or parking lot when it rains (runoff from an impervious surface); and the water that flows from a vegetated surface when rainfall is in excess of the rate at which it can infiltrate into the underlying soil (runoff from a pervious surface).

TECHNOLOGY TRANSFER

Communications performed primarily by inspection staff, using outreach and education materials, in addition to any other media which conveys technical information on activities, practices, facilities, and/or procedures that meet the criteria of the Best Management Practices.

TIERED ENFORCEMENT

Progressive process of enforcement with escalating tiers of response based on the severity or persistence of a violation. Enforcement typically begins with voluntary approaches using education and cooperation. Higher tiers entail more formal communication and potential financial fines or other administrative actions.

TIME SCHEDULE FOR COMPLIANCE

A written plan of action, including a timeline, approved by the City, to bring a facility into compliance with storm water

requirements.

TOXIC MATERIALS

For the purpose of this Plan, toxic materials means any material(s) or combination of materials which directly or indirectly cause(s) either acute or chronic toxicity in the water column.

TOXIC POLLUTANT

Those "pollutants," or combination of pollutants, defined in Sections 502(13) or 307(a)(1) of federal Clean Water Act (33 U.S.C.§ 1362(13)).

TRAINING

Curricula, activities, materials, media, and other information pertaining to performance of one's job, Standard Operating Procedures, and BMP implementation training designed to ensure employees understand application of measures to reduce pollutants in storm water/urban runoff discharges.

URBAN RUNOFF

See Storm Water/Urban Runoff.

**USEPA** 

United States Environmental Protection Agency.

VEHICLE SERVICE FACILITIES

Publicly and privately owned facilities that repair, fuel, clean, service or dismantle cars, trucks, boats, airplanes or other motor

vehicles.

WET SEASON

Typically the period of rainfall from October 15 to April 15.

WORK PLAN

A set of specific activities necessary to achieve Performance

Standard Milestones.