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THE CITY OF SAN DIEGO

# *Statement of Certification*

**RE: STATEMENT OF CERTIFICATION for the City of San Diego Jurisdictional Urban Runoff Management Plan**

I certify under penalty of law that the City of San Diego Jurisdictional Urban Runoff Management Plan was prepared under my direction or supervision in accordance with a system designed to assure 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 knowingly submitting false information, including the possibility of fine and imprisonment for knowing violations.

Andrew Kleis — 3/20/08

**DREW KLEIS**
Acting Deputy Director
Storm Water Pollution Prevention Division
General Services Department
City of San Diego

Date

DIVERSITY

# *Executive Summary*

This Jurisdictional Urban Runoff Management Plan (URMP) is a total account of how the City of San Diego plans to protect and improve the water quality of rivers, bays and the ocean in the City of San Diego. The City of San Diego is committed to reducing storm water pollution for the protection of human health and safety and the natural environment. Potentially harmful viruses, parasites and bacteria, along with soil particles, solids, debris, litter, oil, and chemical compounds, can runoff the urban environment and into our receiving waters because our storm drain system is designed to convey storm water— without it being treated— to the nearest canyon, creek, beach or bay. Pollutants from daily human activities in storm water runoff is not only a problem during rainy seasons, but also year-round due to activities such as over irrigation runoff, illegal dumping, littering, and failing to pick up after pets because pollutants from those activities enter the storm drain system and are conveyed untreated to our canyons, creeks, beaches and bays.

The Storm Water Pollution Prevention Division in the General Services Department is the lead office for the City of San Diego's efforts to reduce pollutants in urban runoff and storm water to the maximum extent practicable. It is the mission of the Storm Water Pollution Prevention Division to:

*Mission Statement:*
*"Protect and improve the water quality of rivers, bays and the ocean for the citizens of San Diego and future generations by eliminating and reducing pollutants in urban runoff and storm water in an efficient, effective and professional manner as part of a high-performing team through public education, employee training, watershed collaboration, field testing, investigations, enforcement, regional programs, and coordination."*

With the help of other City departments, the Storm Water Pollution Prevention Division developed this Urban Runoff Management Plan. It explains how the City intends to comply with Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems (MS4) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District, hereafter referred to as the "Municipal Permit." The Municipal Permit was issued by the San Diego Regional Water Quality Control Board on January 24, 2007 and has a five-year life span. The effective implementation date for this document and all of its requirements by the City of San Diego is March 24, 2008 through March 24, 2013.

The City's URMP Program must meet the requirements of the Municipal Permit, summarized below in Table 1.

**Table 1. Municipal Permit Requirements – Jurisdictional Urban Runoff Management Program.**

| Permit Section | Requirement (Summary) | Compliance Date |
|---|---|---|
| J.1 | Submit to the Principal Permittee an individual Jurisdictional URMP document which describes all activities it will undertake or is undertaking to implement the requirements of the Municipal Permit. | Prior to 365 days after adoption of Municipal Permit (1/24/08) |
| D. | Take appropriate actions to reduce discharges of pollutants and runoff flow during each of the three major phases of development, i.e. the planning, construction, and existing development (or use) phases and that addresses the following:<br>• Land-Use Planning for New Development and Redevelopment<br>• Construction<br>• Existing Development (Municipal, Industrial/Commercial, Residential)<br>• Illicit Discharge Detection and Elimination<br>• Education<br>• Public Participation<br>• Effectiveness Assessment<br>• Fiscal Analysis | 365 Days after adoption of Municipal Permit (1/24/08) |
| J.3 | Submit a Jurisdictional URMP Annual Report detailing how the City met the Municipal Permit requirements during the fiscal year. | By September 30, 2008 and annually thereafter |

To meet the above Municipal Permit requirements, the Storm Water Pollution Prevention Division, with the help of City departments, developed the City of San Diego's Jurisdictional Urban Runoff Management Program Plan, adopted by the Mayor and City Council on January 22, 2008. See Section 1.0, "Introduction" for a summary of the URMP's contents.

Since the last Municipal Permit was issued in January of 2001, many improvements have been incorporated into the URMP. Many of the changes are mandated by the Municipal Permit, while some of the changes were initiated by the City to improve effectiveness, efficiency, and streamline resources. A summary of the changes is outlined in Section 14.0, "Modifications to the URMP." Notable changes include:

- Each department made significant improvements to internal water quality protection practices and procedures.
- The City will conduct a second inspection of municipal areas and facilities each year to ensure proper maintenance and use of good housekeeping practices and other best management practices (BMPs).
- For both public and private new development/ redevelopment projects, the Storm Water Standards Manual has been updated with increased BMP requirements and inspection schedules.

- Increased staff education and training will occur across the City.
- Street Division will significantly increase its storm drain cleaning and street sweeping programs.
- The Storm Water Pollution Prevention Division will significantly increase efforts in all of its core programs including facility inspections, enforcement, water quality monitoring, education and outreach, and municipal coordination.

Finally, and most importantly, the City must address several state- and federally-mandated storm water quality programs now and in the coming years. In addition to Municipal Permit requirements, the City must comply with State-mandated Areas of Special Biological Significance, or ASBS, requirements in the La Jolla Shores area, and future storm water quality regulations called Total Maximum Daily Load programs, or TMDLs. Drawing from the Clean Water Act, TMDL programs will set numeric or concentration based pollutant discharge limits at every storm drain outfall within the City. Though compliance costs are not definitively known, it is clear that achieving these requirements and protecting our valuable natural surface and recreational water resources will dwarf current Municipal Permit program costs.

The City is committed to protecting and improving water quality in the San Diego region. Updating and improving the URMP document is but one component to the Storm Water Pollution Prevention Division's overall efforts; the Storm Water Pollution Prevention Division recognizes the critical importance of integrating various regulatory programs to maximize efficiencies and pollution prevention efforts. The Storm Water Pollution Prevention Division has begun planning efforts to strategically and comprehensively address pending and future storm water quality regulations. The City recently completed a "Strategic Plan for Watershed Activity Implementation" (July 2007). This strategic planning document outlines a process for piloting a series of coordinated activities and assessing and improving their effectiveness so that the City can both maximize the efficiency of individual activities (such as street sweeping efforts) and also implement the most effective combination of activities to maximize overall water quality protection efforts. After improving activities through pilot programs, the City will implement these activities City-wide through this URMP program.

In conclusion, the City of San Diego is committed to its mission to protect and improve the quality of its receiving waters through the implementation of this URMP. The Storm Water Pollution Prevention Division has established an iterative implementation strategy that most efficiently obtains its goals through continual program planning, implementation, assessment and improvement. The Storm Water Pollution Prevention Division is continuing to shift its activities towards a watershed approach and this effort will eventually result in more prioritizing of efforts into specific areas of concern over the next five years.

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# 1.0 Introduction

It is important to prevent storm water pollution for protection of human health and safety and to protect the natural environment. Urban runoff pollution is not only a problem during rainy seasons, but also year-round due to human activities such as over-irrigation, littering, and hosing down or blowing yard clippings and other waste into the street where it eventually travels into the storm drain system. While the impact of urban runoff pollution may not be immediately realized, the cumulative effects can be dramatic. Bacteria are commonly found in our coastal waters along with soil particles, solids/debris, litter, oil, and chemical compounds that kill aquatic organisms and can cause human illness. Potential storm water contaminants include harmful viruses and parasites that cause human illness. Oil and grease from parking lots and roads, leaking petroleum storage tanks, pesticides, cleaning solvents, and other toxic chemicals can contaminate storm water and be transported into water bodies and receiving waters harming aquatic organisms. Fertilizer constituents from lawns and golf courses and leaking septic tanks can cause algal blooms and encourage microbial growth to cause eutrophication. Disturbances of the soil from construction can allow silt to wash into the storm drain system and receiving waters making them muddy, turbid, and inhospitable to natural aquatic organisms. Sediment and trash also can transport bacteria downstream. Many artificial surfaces of the urban environment such as galvanized metal, paint, or preserved wood that contain heavy metals, can contribute to storm water pollution because the surfaces corrode, flake, dissolve, or decay. Heavy metals are toxic to aquatic organisms and may bio-accumulate, resulting in negative impacts to aquatic life activities such as sport fishing and the seafood industry.

The Storm Water Pollution Prevention Division is the lead office for the City's efforts to reduce pollutants in urban runoff and storm water to the maximum extent practicable. It is the mission of the Storm Water Pollution Prevention Division, General Services Department, to:

> "Protect and improve the water quality of rivers, bays and the ocean for the citizens of San Diego and future generations by eliminating and reducing pollutants in urban runoff and storm water in an efficient, effective and professional manner as part of a high-performing team through public education, employee training, watershed collaboration, field testing, investigations, enforcement, regional programs, and coordination."

The Storm Water Pollution Prevention Division has led the City's efforts to update this document, the Jurisdictional Urban Runoff Management Plan (URMP), which details the activities the City will undertake to improve water quality in the region and comply with the California Regional Water Quality Control Board San Diego Region Order No. R9-2007-0001 NPDES No. CAS0108758 Water Discharge Requirements for Discharges of Urban Runoff from Municipal Separate Storm Sewer Systems Draining Watersheds of

the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District (referred to as “Municipal Permit”).

In order to comply with the Municipal Permit and implement the URMP, the Storm Water Pollution Prevention Division is actively engaged in a number of activities that will cumulatively result in cleaner water quality. These activities, include but are not limited to, public education, employee training, water quality monitoring, source identification, code enforcement, storm water best management practices (BMP) development, and BMP implementation within the City of San Diego’s jurisdictional boundaries (see Appendix VII, “High Priority Residential Areas Inventory”). In addition, the Storm Water Pollution Prevention Division provides technical expertise and guidance to all City departments to ensure implementation and compliance with the Municipal Permit. The Storm Water Pollution Prevention Division represents the City on Municipal Permit issues before the Regional Water Quality Control Board. Furthermore, the Storm Water Pollution Prevention Division prepares and transmits an annual report of all City activities and is the responsible agent that certifies that the City is in compliance with all federal, state, and local laws.

## 1.1 Background

The 1972 Clean Water Act established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to waters of the United States. Since then, considerable strides have been made in reducing conventional forms of pollution, such as from sewage treatment plants and industrial facilities, through the implementation of the NPDES program and other federal, state, and local programs. The adverse effects of some of the persistent toxic pollutants were addressed through manufacturing and use restrictions and through cleanup of contaminated sites. However, non-point source pollution from storm water runoff was largely unabated until the 1987 Clean Water Act amendments, which established a framework for regulating non-point source pollutants. Storm water now contributes a larger portion of many kinds of pollutants than the more thoroughly regulated sewage treatment plans and industrial facilities.

Because of the intermittent, variable, and unpredictable nature of storm water runoff the U.S. Environmental Protection Agency (EPA), which administers the Clean Water Act, reasoned that the problems caused by storm water discharges were better managed at the local level through non-point source controls such as the use of specific management practices to prevent the pollutants from entering storm water and urban runoff. These practices are called storm water best management practices (BMPs). The US EPA has delegated its authority to the State of California. The State exercises its delegated authority through its agency, the State Water Resources Control Board, which uses a system of regional entities (the Regional Water Quality Control Boards) to enforce the Clean Water Act.

The Municipal Permit, originally issued in 1990, by the San Diego Regional Water Quality Control Board (Regional Board) was significantly revised when it was renewed on February 21, 2001 as Order No. 2001-01, NPDES No. CA0108758, The current Municipal Permit (Order No. R9-2007-0001, see Appendix I, "Municipal Permit") was reissued on January 24, 2007. The Municipal Permit was reissued to San Diego County, San Diego Unified Port District, San Diego Airport Authority, and 18 cities, including the City of San Diego. The Municipal Permit contains a requirement for the City to update and implement a jurisdictional URMP.

In 1993, the City of San Diego enacted the Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance") §43.03, et seq. The Storm Water Ordinance seeks to ensure the health, safety, and general welfare of San Diegans by describing prohibited and allowed non-storm water discharges. The Storm Water Ordinance was amended in 2001 and again in January 2008 (see Appendix II, "Storm Water Ordinance").

In addition, the City Council adopted revisions to the City's Grading Regulations (Land Development Code [LDC] §142.0146, and Drainage Regulations LDC §142.0146, which have been renamed the Storm Water Runoff Control and Drainage Regulations. The changes to the regulations were approved by the California Coastal Commission on November 16, 2001.The objectives of the ordinance revisions are to define and adopt storm water BMPs necessary to control storm water pollution from sediments, erosion, and construction materials to the maximum extent practicable during construction and during the use of developed sites. The City adopted these "construction" and "post-construction" BMPs in the Storm Water Standards Manual in December 2002. The City will be updating the Storm Water Standards Manual to incorporate new requirements in Municipal Permit Order No. 2007-0001.

## 1. 2 Purpose and Objectives

This URMP is a total account of how the City plans to protect and improve the water quality of rivers, bays and the ocean, and to comply with the Municipal Permit and the Clean Water Act.

The City's Program must meet the requirements of the Municipal Permit, summarized below in Table 1. The Permit requirements are fully enforceable via the Storm Water Ordinance §43.03.

**Table 1. Municipal Permit Requirements**

| Permit Section | Requirement (Summary) | Compliance Date |
|---|---|---|
| D. | Take appropriate actions to reduce discharges of pollutants and runoff flow during each of the three major phases of development, i.e. the planning, construction, and existing development (or use) phases and that addresses the following:<br>• Land-Use Planning for New Development and | 365 Days after adoption of Municipal Permit (3/24/08) |

| Permit Section | Requirement (Summary) | Compliance Date |
|---|---|---|
| | Redevelopment<br>• Construction<br>• Existing Development (Municipal, Industrial, Commercial, Residential)<br>• Illicit Discharge Detection and Elimination<br>• Public Participation<br>• Assessment of URMP Effectiveness<br>• Fiscal Analysis | |
| J.1 | Submit to the Principal Permittee an individual Jurisdictional URMP document which describes all activities it will undertake or is undertaking to implement the requirements of the Municipal Permit. | Prior to 365 days after adoption of Municipal Permit (3/24/08) |
| J.3 | Submit a Jurisdictional URMP Annual Report detailing how the City met the Municipal Permit requirements during the fiscal year. | Prior to September 30, 2008 and annually thereafter |

Each City department is responsible for implementing the Municipal Permit requirements applicable to their activities. Each department will perform the following:

- Certify acceptance of this URMP
- Identify a staff member to coordinate with the Storm Water Pollution Prevention Division and oversee implementation of the department's storm water policies and procedures
- Comply with the minimum and activity-specific BMPs in the URMP
- Maintain records as required by the Municipal Permit
- Provide staff training
- Report the status of the URMP implementation to the Storm Water Pollution Prevention Division
- Annually certify compliance with all Municipal Permit requirements that apply to its department

## 1.3 Structure of the URMP

As the blueprint for the City's actions to protect and improve water quality, the URMP first describes the programs and activities that the Storm Water Pollution Prevention Division will implement to identify and abate sources of pollution, second, the URMP describes the construction and post-construction BMPs and procedures the City implements on development projects, and third, identifies the storm water BMPs that will be implemented by various City departments in order to ensure that the City will reduce pollutants in urban runoff and storm water to the maximum extent practicable while conducting their daily activities. There are 15 sections within the URMP:

1.0 Introduction
2.0 Administrative and Legal Procedures

3.0 Non-Storm Water Discharges
4.0 Development Planning Section
5.0 Construction Section
6.0 Municipal Section (see Sub-Sections below)
7.0 Industrial and Commercial Section
8.0 Residential Section
9.0 Illicit Discharge Detection and Elimination Section
10.0 Education Section
11.0 Public Participation Section
12.0 Fiscal Analysis Section
13.0 Effectiveness Assessment Section
14.0 Modifications to the JURMP
15.0 Conclusions and Recommendations

Within the Municipal Section, the City of San Diego includes sub-sections for its relevant municipal functions:

6.1 Introduction
6.2 Airports
6.3 Buildings/Parking/Landscaping
6.4 City-Owned Leased Properties
6.5 Household Hazardous Waste
6.6 Non-Emergency Fire-Rescue Activities
6.7 Non-Emergency Police Activities
6.8 Metropolitan Wastewater Collection
6.9 Metropolitan Wastewater Treatment and Maintenance
6.10 Recreational Lands and Facilities
6.11 Solid Waste Management
6.12 Special Events
6.13 Stadium
6.14 Streets/Storm Drain System
6.15 Vehicle Maintenance/Operations Yards
6.16 Water Systems

This format is intended for ease of use by City departments and to facilitate review by the Regional Board.

## Contact List

### City of San Diego

**Storm Water Pollution Prevention Division** (Main Number)…… (619) 525-8647

Storm Water Hotline in the City of San Diego…… (619) 235-1000

Drew Kleis …… (619) 525-8623
Deputy Director (Acting)

Yvonne Alcoser…… (619) 525-8642
Associate Management Analyst

Antonius Evans……..(619) 525-8683
Supervising Code Compliance Officer (enforcement and investigations)

Ruth Kolb…… (619) 525- 8636
Storm Water Specialist (special projects)

Drew Kleis…….. (619) 525-8623
Storm Water Specialist (jurisdictional and watersheds)

Sumer Hasenin…… (619) 525-8634
Senior Civil Engineer

Andre Sonksen……..(619) 525-8563
Biologist III (water quality monitoring)

Vacant
Storm Water Specialist

Vacant
Supervising Public Information Officer

**Spill Response Agencies**

Sewer Emergency – Metropolitan Wastewater…… (858) 515-3525
Hazardous Materials discharges…… 911

**Recycling, Hazardous Waste Disposal, and Reporting Illegal Dumping**

Environmental Services Hotline…… (858) 694-7000

**Clogged Catch Basin**

Street Division…….. (619) 527-7500

### Regional Resources

County-wide Storm Water Hotline ……..888-THINKBLUE

# 2.0 Administrative and Legal Procedures

## 2.1 Department Roles and Responsibilities

The City's organization chart is presented in Figure 2-1[1]. Within the City's structure, those departments that perform activities that may affect storm water quality have adopted best management practices (BMPs) and procedures, as outlined in this Jurisdictional Urban Runoff Management Plan (URMP), that they are responsible for implementing Plan (see Table 2-1).

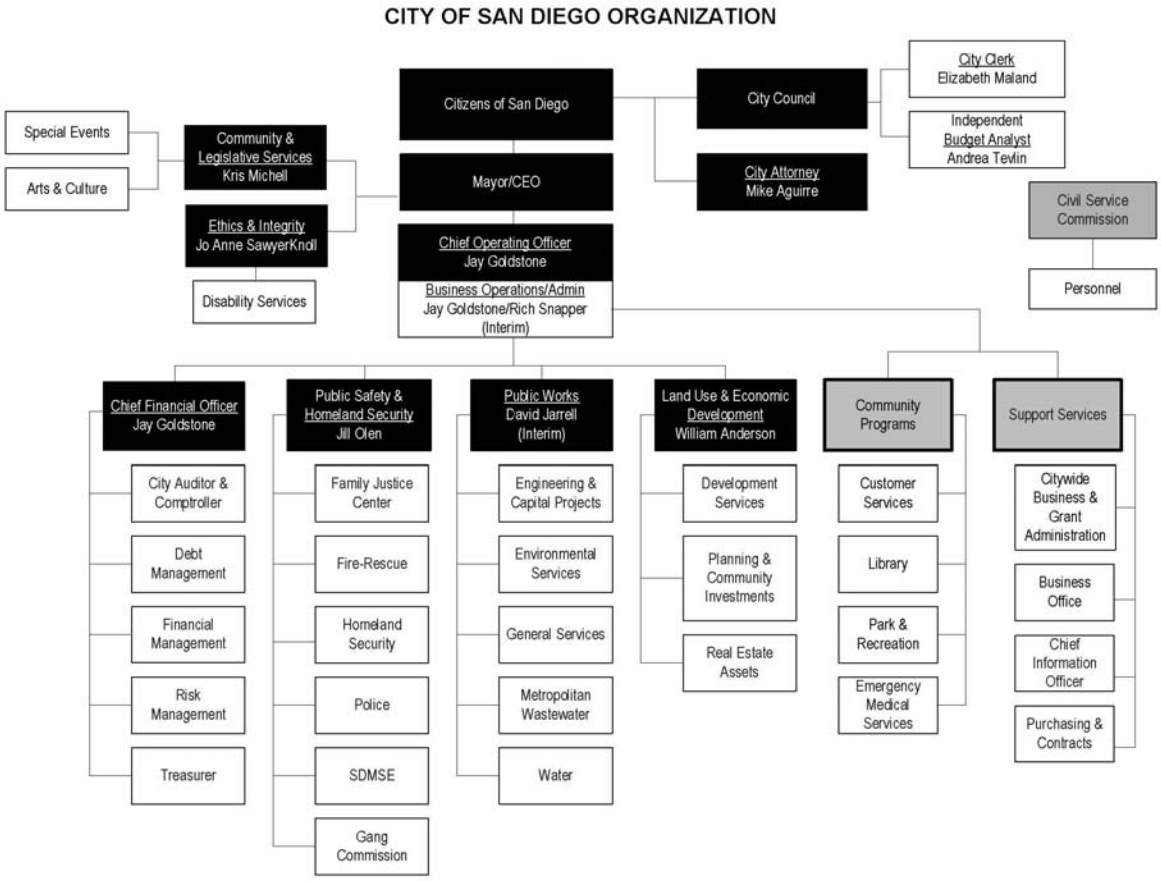


**Figure 2-1. The City's Organization Chart.**

In addition, the Storm Water Pollution Prevention Division in the General Services Department is the lead office for the City's efforts to reduce pollutants in urban runoff

[1] Because of Business Process Reengineering at the City, the organization chart may change in the upcoming fiscal years. The Storm Water Pollution Prevention Division will update the chart through the annual reporting process.

and storm water to the maximum extent practicable, and in overseeing compliance with the Municipal Permit (See Figure 2-2).

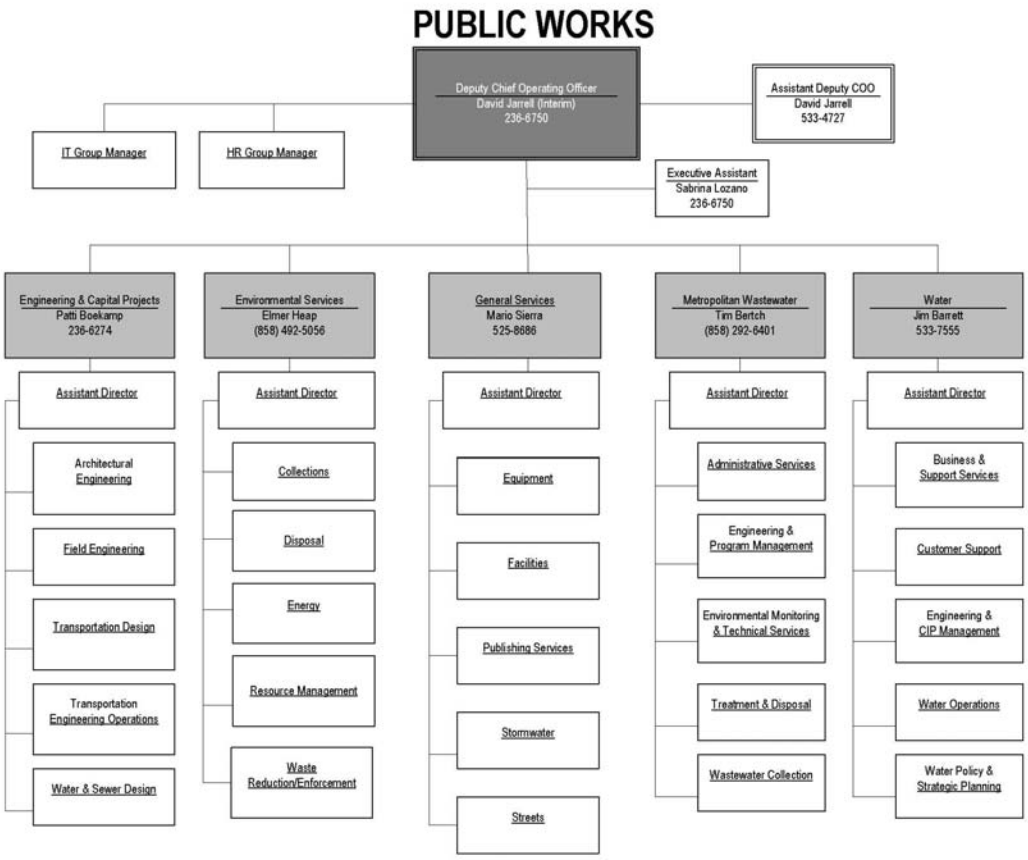


**Figure 2-2. Public Works organization chart.**

The Municipal Permit (Order No. R9-2007-001, "Municipal Permit" (see Appendix I), requires that City departments that could potentially impact storm water quality through their activities identify and implement BMPs to the maximum extent practicable. The goal for all departments is zero pollutant discharge to the storm drain system or receiving waters.

Table 2-1 indicates which departments have primary or supporting BMP responsibilities according to each of the sections of this URMP document. Every department has a "home base" section in which their primary BMP responsibilities and administrative requirements (e.g., annual reporting requirements) are included. In addition, many departments share the same secondary responsibilities. To avoid repetition in the document, departments are referred to certain activity-specific BMPs outside their primary chapter.

**Table 2-1. Department Roles and Responsibilities.**

| Note:<br>"P" = Primary responsibility<br>"S" = Supporting responsibility | Storm Water Pollution Prevention | Police | Environmental Services | Park & Recreation | Metropolitan Wastewater | Qualcomm Stadium | Street | Community Service Centers | Homeless Services | Special Events | IT&C | Library | Purchasing and Contracting | Treasurers | Parking Meter Services | Water | Fire-Rescue | Planning | Econ Development/ Redevelopment Agency | Fleet Services | Real Estate Assets | Facilities Maintenance | Development Services | Engineering & Capital Projects | City Attorney's Office |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.0 Administrative And Legal Procedures | S | | | | | | | | | | | | | | | | | | | | | | | | P |
| 3.0 Non-Stormwater Discharges | P | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.0 Development Planning Component | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.2 Land Use Planning | S | | | | | | | | | | | | | | | | | P | | | | | | | |
| 4.3 Environmental Review Process | | | | | | | | | | | | | | | | | | | | | | | P | | |
| 4.4 Development Project Approval and Verification Process | S | | | | | | | | | | | | | | | | | | | | | | P[2] | P[3] | |
| 5.0 Construction Component | S | | | | S | | S | | | | | | | | | S | S | | | | | | P | P | |
| 6.0 Municipal Section | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.2 Airports | S | | | | | | | | | | | | | | | | | | | | P | | | | |
| 6.3 Buildings/Parking/Landscaping | S | S | S | | S | S | S | P | P | | | P | P | | P | S | S | | P | S | S | P | | | |
| 6.4 City-Owned Leased Properties | S | | P | | | | | | | | | | | | | | | | | | | | | | |
| 6.5 Household Hazardous Waste | S | | | P | | | | | | | | | | | | | | | | | | | | | |
| 6.6 Non-Emergency Fire-Rescue Activities | S | | | | P | | | | | | | | | | | | | | | | | | | | |
| 6.7 Non-Emergency Police Activities | S | | | | P | | | | | | | | | | | | | | | | | | | | |
| 6.8 Metropolitan Wastewater Collection | S | | | | | P | | | | | | | | | | | | | | | | | | | |
| 6.9 Metropolitan Wastewater Treatment and Maintenance | S | | | | | | | | | | | | | | | | | | | | P | | | | |

[2] Private Projects
[3] Public Projects

| Note:<br>"P" = Primary responsibility<br>"S" = Supporting responsibility | Storm Water Pollution Prevention | Police | Environmental Services | Park & Recreation | Metropolitan Wastewater | Qualcomm Stadium | Street | Community Service Centers | Homeless Services | Special Events | IT&C | Library | Purchasing and Contracting | Treasurers | Parking Meter Services | Water | Fire-Rescue | Planning | Econ Development/ Redevelopment Agency | Fleet Services | Real Estate Assets | Facilities Maintenance | Development Services | Engineering & Capital Projects | City Attorney's Office |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.10 Recreational Lands and Facilities | S | | | | | | P | | | | | | | | | | | | | | | | | | |
| 6.11 Solid Waste Management | S | S | P | S | S | S | S | | | | S | S | | | | S | S | | | P | | S | | | |
| 6.12 Special Events | S | | | | | | | | | | | | | | | P | | | | | | | | | |
| 6.13 Stadium | S | | | P | | P | | | | P | | | | | | | | | | | | | | | |
| 6.14 Streets/Storm Drain Conveyance System | S | | P | | | | | | | | | | | | | | | | | | | | | | |
| 6.15 Vehicle Maintenance/Operations Yards | S | P | | | | | | | | | | | | | | | | | | | | | | | |
| 6.16 Water Systems | S | | | | | | | | | | | | | | | | P | | | | | | | | |
| 7.0 Industrial And Commercial Component | P | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 Residential Component | P | | | | | | | | | | | | | | | | | | | | | | | | |
| 9.0 Illicit Discharge Detection And Elimination Component | P | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | P |
| 10.0 Education Component | P | | | | | | | | | | | | | | | | | | | | | | | | |
| 11.0 Public Participation Component | P | | | | | | | | | | | | | | | | | | | | | | | | |
| 12.0 Fiscal Analysis Component | P | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S |
| 13.0 Effectiveness Assessment Component | P | | | | | | | | | | | | | | | | | | | | | | | | |

## 2.2 Legal Authority

### 2.2.1 Certification of Legal Authority

The City of San Diego has the legal authority to implement the requirements of the Municipal Permit as stated in the "Certification of Adequate Legal Authority" located in Appendix XXIV (August 20, 2007 letter from Michael J. Aguirre, City Attorney, to Hon. Susan Ritschel, Chair, Regional Water Quality Control Board, San Diego Region). Enforcement, appeal, and administrative order/injunction processes are described in Section 9.0, "Illicit Discharge Detection and Elimination" and in the Stormwater Management and Discharge Control Ordinance ("Storm Water Ordinance," see Appendix II).

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# *3.0 Non-Storm Water Discharges*

Appendix II contains a copy of the San Diego Stormwater Management and Discharge Control Ordinance ("Storm Water Ordinance") §43.03 et seq., which includes listed prohibited discharges, allowable discharges, fines, storm water Best Management Practice (BMP) requirements, definitions, and other regulatory provisions.

## 3.1 Storm Water Discharge Categories

The City of San Diego has determined that none of the categories of non-storm water discharges identified in Section B-2 of the Municipal Permit (listed below) are significant sources of pollutants to waters of the U.S., and are identified as allowable non-storm water discharge categories listed in Storm Water Ordinance §43.0305 (see Appendix II).

Allowable Non-Storm Water Discharge Categories:

(1) diverted stream flows;
(2) rising ground waters;
(3) uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to the *Storm Water Conveyance System;*
(4) uncontaminated pumped ground water;
(5) foundation drains;
(6) springs;
(7) water from crawl space pumps;
(8) footing drains;
(9) air conditioning condensation, provided such discharges comply with *Best Management Practices* adopted under Section 43.0307(a);
(10) flows from riparian habitats and wetlands;
(11) water line flushing, provided that such discharges comply with *Best Management Practices* adopted under Section 43.0307(a);
(12) irrigation water, provided such discharges comply with *Best Management Practices* adopted under Section 43.0307(a);
(13) discharges from potable water sources not subject to NPDES Permit No. CAG679001, other than water main breaks;
(14) individual residential car washing, provided such discharges comply with *Best Management Practices* adopted under Section 43.0307(a);
(15) dechlorinated swimming pool discharges, provided such discharges comply with *Best Management Practices* adopted under Section 43.0307(a);
(16) emergency fire fighting flows necessary for the protection of life or property; and
(17) non-emergency fire fighting flows from controlled or practice blazes and fire suppression equipment maintenance activities, provided

such discharges are not prohibited categorically by *Best Management Practices* established by the *Enforcement Official* pursuant to Section 43.0307(a), and provided further that such discharges comply with all *Best Management Practices* established by the *Enforcement Official* under Section 43.0307(a).

## 3.2 Prohibited Non-storm Water Discharge Categories

As stated in Storm Water Ordinance §43.0304 (see Appendix I), it is unlawful for any person to discharge non–storm water to the storm drain system except as provided in §43.0305 (see list in 3.1). None of the categories identified in Section B-2 of the Municipal Permit and listed in section 3.1 above are prohibited since the City has determined these are not significant sources of pollutants.

## 3.3 Control Measures for Non-prohibited Non-storm Water Discharges

Table 6.3-2 contains required municipal activity-specific BMPs for the following allowable non-storm water discharges from Section 3.1 above:

- Air conditioning condensation;
- Water line flushing (see also Table 6.16-2 regarding water mains);
- Landscape irrigation;
- Irrigation water;
- Lawn watering

Appendices XII, “Residential Best Management Practices” and Appendix X, “Industrial/Commercial Best Management Practices” contain required minimum BMPs for:

- Landscape irrigation;
- Irrigation water;
- Lawn watering;
- Individual residential car washing;
- Dechlorinated swimming pool discharges
- Fire suppression equipment maintenance activities

Section 3.4 below, and Section Section 6.6, “Non-Emergency Fire-Rescue Activities” contain required municipal BMPs for:

- Non-emergency fire fighting

No BMPs were developed for the remaining allowable non-storm water discharges because they are not considered to be a significant source of pollution at this time.

## 3.4 Program for Non-emergency Fire Fighting Flows

For discharges from controlled or practice blazes, see Section 6.6, “Non-Emergency Fire-Rescue Activities.” For discharges from maintenance activities, the manager of the Storm Water Pollution Prevention Division may authorize the discharge, individually or as a class. Such authorization shall be based on an evaluation of the potential (or actual) pollutants in the flows and shall not be granted if the flows, individually and in the context of other discharges, have the potential to be a significant source of pollution to waters of the United States. The manager of the Storm Water Pollution Prevention Division has the authorization and duty to ensure that implementation by the discharger of appropriate BMPs is made part of the authorization, if necessary.

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# 4.0 Development Planning Component

## 4.1 Introduction

The goal of this section is to reduce the impacts of new development and redevelopment in the City of San Diego on water quality in the San Diego region. This section is primarily applicable to the City Planning and Community Investment Department (CPCI), Development Services Department, Engineering and Capital Projects Department, and the Storm Water Pollution Prevention Division.

## 4.2 Land Use Planning

### 4.2.1 Background

The goal of the Land Use Planning Section is to reduce the impacts of new development and redevelopment on storm water quality in the City by incorporating water quality and watershed protection principles into the City's land use planning policies. This Section is applicable to the CPCI.

The City's program must meet the requirements of the Municipal Storm Water Permit ("Municipal Permit", Order R9-2007-0001, see Appendix I), as described in Table 4-1.

**Table 4-1. Municipal Permit requirements – Land Use Planning.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 4.2.3 | (Pg. 16) D. 1. a. | Description of the water quality and watershed protection principles that have been or will be addressed in the Copermittee's land use planning process. |
| 4.2.4 | (Pg. 28) D.2.a | Revise General, community, and watershed plans to provide water quality and watershed protection principles. |
| 4.2.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 46) D. 5. b. (1) (d);<br>(Pg. 46) D.5.(2);<br>(Pg. 67) J. 3. (c, g, j);<br>(Pg. 51) G. 3 | Implement and designate an educational program for all City personnel. Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

### 4.2.2 Best Management Practice Requirements

1. General Plan Update

*General Plan and the City of Villages Strategy*

The City of San Diego's General Plan is its constitution for development. It is the foundation upon which all land use decisions in the City are based. It expresses community vision and values, and it embodies public policy for the distribution of future land use, both public and private.

The City's General Plan addresses State of California requirements through the following ten elements: Land Use and Community Planning; Mobility; Economic Prosperity; Public Facilities; Services and Safety; Urban Design; Recreation; Historic Preservation; Conservation; Noise; and Housing.

The City of Villages strategy is a "smart growth" sub-component and incentive program under the General Plan. The goal is to direct compact growth in limited areas that are served by transit and is, in itself, a conservation strategy. The City of Villages strategy promotes efficient use of urban land that reduces the need to develop outlying areas and creates an urban form where transit, walking, and bicycling are more viable alternatives to automobile travel. Reducing dependence on automobiles reduces vehicle miles traveled, which, in turn, lowers greenhouse gas emissions. Additionally, it improves water quality by decreasing automobile-related oil and gas leaks and atmospheric deposition of heavy metals that pollute water bodies throughout the region.

Planning Division staff, with assistance from Storm Water Pollution Prevention Division staff, has incorporated water quality and watershed protection principles into the "Urban Runoff Management" section within the Conservation Element, as well as the "Storm Water Infrastructure" within the Public Facilities element of the General Plan. The following general policy recommendations address water quality and watershed protection:

Water Quality Improvement Policies in the General Plan

- Develop and employ Master Drainage Plans for the City's watersheds to foster a comprehensive approach to storm water infrastructure improvements.
- Identify partnerships and collaborative efforts to sponsor and coordinate pollution prevention BMPs that benefit storm water infrastructure maintenance and improvements.
- Continue to develop and implement public education programs.
- Apply water quality protection measures to land development projects during project design, permitting, construction, and operations in order to minimize the

quantity of runoff generated on-site, the disruption of natural water flows, and the contamination of storm water runoff.

- Require contractors for all projects to comply with storm water pollution prevention planning practices in the City's Storm Water Standards[1] (see Appendix IX).

- Continue to participate in the development and implementation of Watershed Management Plans for water quality and habitat protection.

- Assure that City departments continue to use best management practices (BMPs) procedures so that water quality objectives are routinely implemented.

- Continue to encourage "Pollution Prevention" measures to promote the proper collection and disposal of pollutants at the source, rather than allowing them to enter the storm drain system.

- Manage floodplains to address their multi-purpose use, including natural drainage, habitat preservation, and open space and passive recreation, while also protecting public health and safety.

- Ensure that all storm drain systems, structures, and maintenance practices are consistent with federal Clean Water Act and California Regional Water Quality Control Board NPDES Permit standards.

- Install infrastructure that, where feasible, includes components to capture, minimize, and prevent pollutants in urban runoff from reaching receiving waters and potable water supplies.

- Meet, and preferably exceed, regulatory mandates to protect water quality in a cost-effective manner monitored through performance measures.

- Identify and implement BMPs for projects that repair, replace, extend or otherwise affect the storm drain system. These projects should also include design considerations for maintenance, inspection, and, as applicable, water quality monitoring.

2. Multiple Species Conservation Program

The Multiple Species Conservation Program (MSCP) is a regional effort between local jurisdictions, federal, and state agencies to develop a comprehensive habitat conservation planning program. It addresses multiple species habitat needs and the preservation of native vegetation communities in southwestern San Diego County. The

[1] See http://www.sandiego.gov/development-services/news/pdf/stormwatermanual.pdf

City of San Diego MSCP Subarea Plan has been prepared pursuant to the overall MSCP guidelines to address habitat conservation goals within the City boundaries.

The Multiple Habitat Planning Area (MHPA) identifies areas of the City's subarea within which conservation of habitat areas and linkages will occur in addition to limited development. In association with management of MHPA lands, the City MSCP Subarea Plan contains guidelines for minimizing impacts of urban development on upland and wetland ecosystems and water quality. All developments proposed adjacent to the MHPA must conform to the Land Use Adjacency Guidelines of the City MSCP Subarea Plan, which require that all new and proposed parking lots and developed areas in and adjacent to the MHPA must not drain directly into the MHPA. All developed and paved areas must protect against the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment. The MSCP recommends that potential impacts can be minimized through the use of a variety of measures including natural detention basins, grass swales or mechanical trapping devices. The MSCP also requires that these systems are maintained routinely throughout the life of a project.

The City MSCP Subarea Plan also requires that land uses, such as recreation and agriculture, that use chemicals or generate potentially toxic byproducts incorporate storm water BMPs to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Where applicable, the requirement to minimize impacts to water quality is also incorporated into leases on publicly-owned property as leases come up for renewal.

The City MSCP Subarea Plan provides specific management directives requiring that restoration of native riparian habitat take place within many of the important drainage systems and watersheds within the City. For example, the portion of the Los Peñasquitos Watershed located within the City of San Diego is addressed in the City MSCP Subarea Plan. Major drainages within the Los Peñasquitos watershed including Los Peñasquitos Canyon, Lopez Canyon, Carmel Creek, and portions of Carroll Canyon are located within the MHPA. The guidelines and Specific Management Policies of the City MSCP Subarea Plan require that enhancement of these drainages take place, where appropriate. The Subarea Plan also requires restoration and enhancement of native riparian lands within the Otay River Valley, Tijuana River Valley, and several smaller urban canyons within the central and southern portions of the City. Many of these drainages are surrounded by urban development and restoration of native riparian areas is intended to minimize impacts from urban runoff to receiving waters as well as provide habitat for animal and plant species.

### 4.2.3 Program Implementation

The implementation of the General Plan and MSCP storm water policies described in 4.2.3 is the responsibility of City staff who oversee the development project environmental review, approval, and verification processes (see Sections 4.3 and 4.4).

Updates to the General Plan and MSCP occur periodically and are the responsibility of CPCI staff, along with support and input from the Storm Water Pollution Prevention Division and participating stakeholders. Storm water public outreach and annual reporting activities performed by the CPCI staff are covered in Sections 4.5 and 4.6.

## 4.3 Environmental Review Process

This section is applicable to the Development Services Department (DSD), which is responsible for administering the environmental review process on all (public and private) development projects within the City. With the adoption of the City's Standard Urban Storm Water Mitigation Plan (SUSMP) in 2002, there are new storm water requirements to implement one or a combination of storm water BMPs including, 1) Low Impact Development BMPs, 2) source control BMPs, and 3) structural treatment BMPs. For this section, the term "development" refers to any project that requires construction permits, development permits/approvals, and subdivision approvals from the City of San Diego.

The Environmental Analysis Section (EAS) in the Development Services Department is responsible for using the California Environmental Quality Act (CEQA) Initial Study checklist and consultation with other project review staff to identify projects that may result in water quality impacts during and/or after construction. EAS reviews proposed projects subject to environmental review under CEQA, including City capital improvement projects, to independently determine where proposed projects may have potentially significant impacts on the environment. To assist in identifying appropriate measures to mitigate potentially significant storm water quality impacts to below a level of significance, EAS staff consults with DSD engineering staff to determine what storm water BMP requirements have been identified by engineering staff. DSD Engineering staff reviews and approves the storm water BMPs that are proposed by project applicants.

## 4.4 Development Project Approval and Verification Process

### 4.4.1 Background

The City of San Diego's Storm Water Standards are published in the Land Development Manual and enforceable via the San Diego Stormwater Management and Discharge Control Ordinance ("Storm Water Ordinance") Sections 43.03 and 142.02. The standards require new development and redevelopment projects to incorporate into project plans and permit conditions the necessary storm water BMPs to control storm water pollution during construction and throughout the use of a developed site prior to issuance of any applicable discretionary (development permits/approvals, subdivision approvals or policy approvals) or ministerial (construction permits and some subdivision approvals) permits. The post-construction, or "permanent" BMPs that are required are site-specific and vary based on the project's potential impact to storm water and receiving waters.

The City's program must meet the requirements of the Municipal Permit, as described in Table 4-3.

**Table 4-3. Municipal Permit Requirements – Development Project Approval and Verification Process.**

| Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 4.4.1 | (Pg. 28) D.1.h | Enforcement of development sites (ordinance basis for authority) |
| 4.4.3 | (Pg. 16) D.1c;<br>(Pg. 17) D.1.d (4-7) | Permanent BMP requirements for all sites (Priority Development Projects and Standard Projects) |
| 4.4.3.1 | (Pg. 33) D.3.a (2) (d) | Evaluate existing flood control devices to determine if retrofit will provide additional pollutant removal |
| 4.4.4.1 | (Pg. 16) D.1.c | Public project (CIP) approval process |
| 4.4.4.2 | (Pg. 16) D.1.c | Private project approval process |
| 4.4.4.3 | (Pg. 17) D.1.d | Model and local SUSMP updates |
| 4.4.4.4 | (Pg. 24) D.1.e | Treatment control BMP maintenance tracking |
| 4.4.4.5 | (Pg. 25) D.1.f | Inspection and enforcement of BMPs |
| 4.4.4.6 | (Pg. 25) D.1.g | Collaboration on developing a Hydromodification Management Plan and interim criteria. |
| 4.6 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j);<br>(Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

### 4.4.2 Source Characterization

Chapter III of the Storm Water Standards identifies the anticipated pollutant from different land use types. Furthermore, the Storm Water Standards Manual identifies categories of project types that are likely to generate significant pollutants. The definition of Priority Projects was updated in Chapter III of the Storm Water Standards to conform to the new Municipal Permit's section D.1.d(2). The Storm Water Standards requires priority projects to identify the pollutants of concern in receiving waters and requires that priority projects identify conditions of concern such as topography, site soils and vegetation conditions, percent impervious area among others.

### 4.4.3 Best Management Practices Requirements

The Storm Water BMP Performance Standards as described in Chapter III of the Storm Water Standards are applicable for all projects including standard and priority projects within the City. These performance standards have been updated to ensure compliance with the BMP implementation requirements described in Municipal Permit section D.1.d (4-7) for priority development projects. The update to BMP performance standards included updates to SUSMP requirements such as the addition of low-impact development (LID) BMPs, and updates to source control and treatment control BMPs.

Other updates included revision to the downstream erosion criteria for priority development projects to include interim hydromodification criteria, as required in Municipal Permit section D.1.g(6), and updates to infiltration and groundwater protection restrictions on the use of treatment control BMPs that are designed to primarily function as infiltration devices, to conform with new requirements in Municipal Permit section D.1.d(12).

#### 4.4.3.1 Best Management Practices for Public Flood Control Projects

The City of San Diego is performing a master planning study of the entire drainage network, which will include establishing criteria for BMP retrofits to flood control devices for the purposes of improving water quality as it relates to TMDL compliance. The Storm Water Pollution Prevention Division is facilitating the program to establish retrofit criteria. ECP will follow and apply the criteria during the planning stage of any CIP projects that propose replacement or improvements to an existing flood control device.

### 4.4.4 Program Implementation

In December 2002, the City began implementation of the Storm Water Standards for both private and public projects. To help simplify the process (and thereby improve the implementation of the requirements), all of the City's storm water-related requirements for land development projects are included in the Storm Water Standards. As an implementation manual to the City's Storm Water Ordinance, the Storm Water Standards benefits from the unique position of being fully enforceable and "updateable" as new innovations occur or state construction or permanent BMP requirements change. During the project planning and design review phase of development, the permanent and construction BMP requirements in the Storm Water Standards are applied to development projects as further described below.

#### 4.4.4.1 Public Construction Project CIP Approval Process

ECP is responsible for planning, design and construction of all capital improvement projects. All project managers of capital improvements program (CIP) projects are required to incorporate the applicable permanent BMP requirements set forth in the Storm Water Standards into the project (specifications and plans) during the design and contract award phases to ensure that storm water BMPs have been sufficiently incorporated into the project's permanent design. To assist project managers, storm water language was included in the CIP contract document (boilerplate) specifications along with standard drawing details. Drawings are routed internally (within the design sections) as part of a process termed "peer plan check" for a check on water quality design measures. Revisions are made to the design and then the project is routed to the Storm Water Division staff for a more detailed and formal review. If permanent treatment BMPs are required, the design is discussed and coordinated with the department that will be maintaining the permanent BMP facility after it is built. This phase of the project is being completed at about the 75% or 90% design levels. The drawings are simultaneously routed to the Field Engineering Division of the ECP for a

constructability review. All ensuing comments are routed back to the project managers for revision prior to City Manager (Mayor) or Council approval and the advertisement of the contract documents.

The design drawings go through City-wide plans check at multiple milestones prior to design completion. As to the storm water runoff reviews, the project managers are required to fill out the storm water requirement applicability checklist (Form DS 560) when they submit the project for environmental review at 30% design. At the 90% design level, the project managers are required to fill out a certification form for the Storm Water Pollution Prevention Program. It is required that this form be signed by a registered civil engineer.

The mandatory review by the Storm Water Division provides review of CIP projects for compliance with the City's Storm Water Standards. In addition to the plans, the Storm Water Division's engineering review staff often reviews Water Quality Technical Reports (WQTR), Storm Water Pollution Prevention Plans (SWPPP), and Water Pollution Control Plans (WPCP), and Water Quality Studies. A Water Quality Study is required for standard projects. It documents the applicant's consideration of site design and source control BMPs for a proposed project. After each review, a memo is sent to the City project manager informing him or her whether or not the project has met the requirements of the City's Storm Water Standards and, if needed, what additional documents, plan revisions, etc. are required in order for those requirements to be met.

#### 4.4.4.2 Private Development Construction Project Approval Process

Conceptual permanent BMPs are reviewed by DSD for conformance with the Storm Water Standards during discretionary review, and reviewed in greater detail during ministerial review. Conceptual BMPs accepted as part of discretionary review are enforced during ministerial review. The Storm Water Applicability Checklist is a submittal requirement for both discretionary and ministerial permit applications. A Water Quality Technical Report is required for all Priority Development Projects.

#### 4.4.4.3 Model and Local SUSMP updates

The regional Model SUSMP identifies specific post-construction site design, source control and treatment control storm water BMPs that must be implemented on land development projects that meet the criteria for definition of a priority development project. These SUSMP requirements are adopted locally through updates to the Storm Water Standards.

The City of San Diego has cooperated with the other Copermittees to update the regional Model SUSMP, as required by Municipal Permit section D.1.d(8)(a). The updated Model SUSMP will be submitted to the San Diego Regional Water Control Board (Regional Board) by June 2008, as required in Municipal Permit section D.1.d(8)(b). Within 365 days of the Regional Board acceptance of the updated Model

SUSMP, the updated requirements will be adopted locally via revisions to the Storm Water Standards.

#### 4.4.4.4 Treatment Control BMP Maintenance Tracking

A watershed-based database has been implemented to track and inventory treatment control BMPs and maintenance within the jurisdiction. DSD and ECP annually provide an updated inventory of approved treatment control BMPs. The database will be used to verify that treatment control BMPs are regularly maintained by the parties responsible. The Storm Water Pollution Prevention Division runs and maintains the inspection program. All treatment control BMPs will be prioritized based on its treatment efficiency; the BMP priority will determine the inspection frequency. All drainage insert treatment control BMPs have a medium prioritization at a minimum. All of the treatment control BMPs that have a high priority ranking are inspected on an annual basis. At least 50% of projects with drainage insert treatment control BMPs are inspected annually. At a minimum, 20% of all approved treatment control BMPs are inspected annually and a maximum of 200% of the average number of projects with treatment control BMPs approved per year are inspected annually. Non-complaint sites will be reinspected or elevated to enforcement action. The City of San Diego's Code Compliance Officers have authority to issue citations and civil penalties to entities that are not effectively managing storm water pollutants (see Component 9, "Illicit Discharge Detection and Elimination." Table 4-4 summarizes the inspection frequencies.

**Table 4-4. Treatment Control BMP Inspection Frequency.**

| BMP Prioritization | Inspection Frequency | Percentage of BMPs Inspected |
|---|---|---|
| Approved Treatment Control BMPs | Annually | Minimum 20% |
| High | Annually | 100% |
| Medium-drainage inserts | Annually | 50% of drainage inserts |
| Medium | As needed | NA |
| Low | As needed | NA |

#### 4.4.4.5 Inspection and Enforcement of BMPs

Resident Engineers in the Field Engineering Division inspect the construction and installation of BMPs that are associated with engineering permits (grading permits and public improvement permits) and CIP projects. The Resident Engineers ensure that the project is in compliance with the discharge permit and the storm water ordinances. Inspections are also conducted by private Construction Management firms hired by the City to supplement staff. For CIPs that are priority development projects, enforcement will be withholding operational acceptance or notification of completion until it is verified that post-construction BMPs are installed.

Building Inspectors in DSD inspect the construction and installation of construction and permanent BMPs that are associated with private development that requires a demolition or building permit. For priority development projects that are private

developments, the Certificate of Occupancy will not be issued unless the BMPs have been inspected and signed off. Table 4-5 summarizes the departments responsibilities regarding BMPs and discharge enforcement at construction sites.

**Table 4-5. BMPs and Discharge Enforcement at Construction Sites.**

| | Development Services Department (DSD) - Building Inspection | Engineering and Capital Projects - Field Engineering | General Services - Storm Water Pollution Prevention Division (SWPP) | DSD/Neighborhood Code Compliance Department (NCCD) |
|---|---|---|---|---|
| **Demolition Permit Issued** | While demolition is active. After demolition ends, site is inactive. | None | None | None |
| **Public Improvements (PI)/Grading Permit (PI/G) Issued** | After PIs are "accepted," substantially complete, any portion of the site is active due to issuance of the Building permit and building construction is underway. | While any portion of the construction project is active under PI/G permit. Before Public Improvements "accepted" substantially complete, site active or inactive. | After PIs are "accepted," substantially complete, any portion of the site is inactive due to the Engineering permit being signed-off with NO Building permit issued. | None |
| **Building Permits Issued: No Public Improvement No Grading Permits** | After construction begins and until "Certificate of Occupancy" issued. | None | When construction ends and certificate of occupancy is issued. | None |
| **Public Improvement/ Grading or Building Permits Expired** | If work is occurring in violation of building codes. | If work is occurring in violation of public improvement/grading code(s). | If NO work is occurring in violation of Public Improvement/Grading or building code(s). | None |
| **Other** | None | None | Construction does not require Building or Public Improvement/Grading permits. Certificate or occupancy issued. All bonds released, site work complete. | No active permit to apply - illegal grading. |
| **Discharge to City Owned and Non-City Owned Conveyance Systems** | Capture photo documentation, and other key information. Call SWPPD-Codes. Identify yourself as City Staff with an active discharge to report. | Capture photo documentation, and other key information. Call SWPPD-Codes. Identify yourself as City Staff with an active discharge to report. | **All calls to (619) 235-1000, Think Blue Hotline.** | None |

### 4.4.4.6 Hydromodification

The City participated in the Copermittee Workgroup responsible for establishing interim Hydromodification Management Plan (HMP) criteria to be implemented in March 24, 2008, and a HMP that will be submitted to the Regional Water Quality Control Board for review in January 2009. After the Regional Board approves the HMP, the City will have 180 days to incorporate the requirements into the Storm Water Standards.

### 4.4.4.7 Flood Control Devices

The Storm Water Pollution Prevention Division conducted evaluations of existing flood control devices to determine if retrofitting these devices will reduce pollutants in the storm drain system. Performance criteria were developed to apply to existing and proposed flood control devices. Those existing flood control devices which meet the criteria will be proposed for retrofit. ECP will follow and apply the performance criteria during the planning stage of a project to incorporate permanent pollution removal measures into proposed flood control devices to the maximum extent practicable.

## 4.5 Education and Training

This sub-section is applicable to CPCI, DSD, and ECP.

The Municipal Permit identifies five target communities to receive education using all media as appropriate.

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, “Education.”

### 4.5.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

### 4.5.2 Activity-Specific Training

#### Municipal Departments

This section describes activity-specific trainings provided by DSD and ECP. These departments will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 4-6. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 4-6. Activity-specific BMP Training(s) Provided by DSD and ECP.**

| Training Module/Item | Staff Level | Available |
|---|---|---|
| **DSD** | | |
| 1. staff meetings to discuss storm water requirements such as Federal, state and local water quality laws; connection between land use decisions and water quality; LID BMP requirements; and methods to minimize impacts to receiving waters from development | All | ongoing |
| 2. educate staff and ensure that the in-house standards for the review of WQTRs are followed | All | ongoing |
| **Field Engineering Division** | | |
| 3. Storm water activity-specific training before the start of the wet weather seasons | Resident Engineers | As needed |
| 4. Storm water topics are discussed at the monthly meeting of resident engineers | Resident Engineers | As needed |

Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.

### 4.5.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by CPCI, DSD, and ECP in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 4-7 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 4-7. Department External Outreach Activities by Target Audience.**

| Dept/Division<br>Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Available |
|---|---|---|
| **City Planning and Community Development** | | |
| Storm Water related information on Department Web site | 1,4 | ongoing |
| Storm Water Pollution Prevention Division materials in business licenses and renewals. | 2,3 | ongoing |
| **DSD** | | |
| Distribute *Standard Urban Storm Water Mitigation Plan* Fact Sheet | 1 | ongoing |
| Distribute *Grading: Doing It Right* brochures and video which provides information about proper storm water pollution prevention practices. These resources were provided to the public and aired regularly on City TV 24. | 1-5 | ongoing |
| Construction poster and brochure promoting proper storm water pollution prevention practices at construction sites. | 1 | ongoing |
| "Development Process: Step-by-Step" web site, which references both the *Storm Water Applicability Checklist* as well as the *Storm Water Standards*. | 1 | ongoing |
| New section of the DSD web site focusing on grading which includes visual examples and a "Frequently Asked Questions" page. | 1 | ongoing |
| Holds quarterly coordination meetings with the construction industry with water quality as a standing topic. | 1 | ongoing |
| **DSD (Building Inspection)** | | |
| Provides individualized training to construction industry members on proper storm water pollution prevention and BMP techniques. | 2 | ongoing |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

## 4.6 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by CPCI, DSD, and ECP to track expenditures for designing, developing, and implementing BMPs and educational activities. The departments' annual report information will be submitted in one report to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

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# 5.0 Construction Section

## 5.1 Introduction

The goal of this section is to reduce or eliminate pollutants from entering into the City's storm drain system or receiving waters due to construction activities. Storm water requirements are contained in the San Diego Municipal Code (clerkdoc.sannet.gov/Website/mc/mc.html) as follows:

Chapter 4 Article 3 Division 3 – Storm Water Management and Discharge Control
Chapter 14 Article 2 Division 1 – Grading Regulations
Chapter 14 Article 2 Division 2 – Drainage Regulations

Referenced in the Municipal Code is the Land Development Manual which includes the Storm Water Standards ( http://www.sandiego.gov/development-services/news/pdf/stormwatermanual.pdf). The Storm Water Standards Manual contains the City's construction BMP requirements.

All City departments responsible for inspecting construction projects are responsible for ensuring that adequate storm water BMPs are installed and maintained by the owner or contractor. The Field Engineering Division in the Engineering and Capital Projects Department is the primary department responsible for inspecting grading permits, and the Inspection Services Division in the Development Services Department is primarily responsible for inspecting building permits. The Storm Water Pollution Prevention Division assists these departments in implementing the storm water requirements contained in section D.2 of the Municipal Storm Water Permit (Order No.R9-2007-0001, "Municipal Permit", see Appendix I), as described in Table 5-1.

**Table 5-1. Municipal Permit Requirements – Construction.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 5.2.1 | (Pg. 29) D. 2. b | Maintain, and update monthly, an inventory of construction sites. |
| 5.3 | (Pg. 28) D. 2. a | Update ordinances |
| 5.4 | (Pg. 29) D. 2. c | BMP Requirements |
| 5.5.1 | (Pg 29) D. 2. a | Ensuring construction requirements through the project authorization or approval process |
| 5.5.2 | (Pg. 30) D. 2. d | Site inspection process and frequency of inspections. |
| 5.5.3 | (Pg. 32) D. 2. e | Enforcement of construction sites |
| 5.5.4 | (Pg. 32) D. 2. f (1)(b,d) | When San Diego Regional Water Quality Control Board ("Regional Board") notification is required |
| 5.5.5 | (Pg. 45) D. 5. (b, d);<br>(Pg. 61) J.1.a. (1) (i) | Implement and designate an educational program for all City personnel. |

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 5.5.6 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 5.2 Source Characterization

Construction sites include any site where an activity such as grading, excavation, clearing, structure and road construction, or demolition results in a disturbance of soil. Sources identified by the City of San Diego include: City-issued Construction Permits, and Capital Improvement Program (CIP) projects.

### 5.2.1 Site Inventory

A watershed-based inventory of construction sites is updated monthly as required by Municipal Permit Section D.2.b. The Engineering and Capital Projects Department (ECP) Field Engineering Division and the Development Services Department (DSD) individually maintain the inventory of construction sites that are under their inspection domain. The current inventory is provided as Appendix VI, "Construction Project Inventory."

### 5.2.2 Inventory Updates

Updates to the construction site inventory are managed by the DSD and the ECP Field Engineering Division as described below.

#### 5.2.2.1 Development Services Department Process for Inventory Updates

DSD maintains an inventory of construction permits in the Project Tracking System (PTS). This is updated as new permits are issued and when permits are closed out. The building inspectors also provide updates to this inventory based on inspection of sites. The two departments provide Storm Water Pollution Prevention Division verification of updates inventory on a monthly basis.

#### 5.2.2.2 Field Engineering Process for Inventory Updates

The project managers in the ECP maintain an inventory of CIP projects that are in construction using the "CityWorks" program. The supervisors at the Field Engineering Division maintain a paper inventory that contains the most current information on when a site was last inspected and the current construction status including priority

adjustments. This paper record is updated through weekly reports from the Resident Engineers and the information is routinely transferred into a reporting spreadsheet.

## 5.3 Ordinance Updates

Construction sites are required by the Storm Water Ordinance to conform to the Construction Storm Water best management practices (BMP) Performance Standards described in Chapter IV of the Storm Water Standards. These standards are updated when needed to ensure effectiveness and compliance with current Regional Board requirements. Updates to these standards are described in the following section.

## 5.4 Best Management Practices Requirements

The Construction Storm Water BMP Performance Standards described in Chapter IV of the Storm Water Standards are applicable to all construction sites within the jurisdiction. These performance standards have been updated to ensure compliance with the BMP implementation requirements described in Municipal Permit section D.2.c, and include requirements specific to the wet and dry season, and protective measures for rain events that occur in the dry season.

### 5.4.1 Updated BMP Requirements

Chapter IV of the Storm Water Standards provides a listing of the minimum BMPs for both general site management, erosion, and sediment controls, as required in Municipal Permit section D.2.a(2).

### 5.4.2 Additional Controls for Construction Sites

To ensure compliance with Municipal Permit section D.2.c(4), Chapter IV of the Storm Water Standards has been updated to include additional controls for construction sites that are located such that they could result in a discharge of sediment directly to 303(d) listed water bodies impaired for sediment, coastal lagoons, and water bodies on environmentally sensitive lands.

### 5.4.3 Maximum Disturbed Area for Erosion Controls

To ensure compliance with Municipal Permit section D.2.c(1)(a)vi, Chapter IV of the Storm Water Standards has been updated to specify the maximum size of disturbed area that can be created at a grading site prior to implementation of erosion controls. The updated standards also outline conditions in which an increase to the maximum disturbed area may be allowed.

### 5.4.4 Advanced Treatment Methods

To ensure compliance with Municipal Permit section D.2.c(2), Chapter IV of the Storm Water Standards has been updated to specify what conditions will trigger a requirement to implement advanced treatment for sediment using factors described in the Municipal Permit.

## 5.5 Program Implementation

### 5.5.1 Authorization Prior to Construction of Capital Improvement Program Projects

ECP is responsible for planning, design and construction of all of the City's CIP projects. All project managers of CIP projects are required to incorporate the construction requirements set forth in the Storm Water Standards Manual. These requirements must be incorporated into the project specifications and plans prior to approval in order to fund the construction of the project. To assist project managers in assuring consistency, storm water language is included in the boilerplate CIP Standard Specifications. Standard drawings are used in conjunction with project specific drawings where appropriate. Drawings are routed internally (within the design sections) as a "peer plan check" to ensure adequate inclusion of construction BMP measures. Additional details on the City's process of conditioning CIP projects prior to approval of construction funds is provided in Chapter 4.

### 5.5.2 Construction and Grading Approval Process for Private Projects

DSD is responsible for reviewing construction and development projects for private development in the City of San Diego. Projects are reviewed by DSD staff to ensure conformance to Chapter IV of the Storm Water Standards prior to issuance of any construction permits. All projects are required to incorporate construction BMPs on the plans and in the appropriate construction storm water plan (Water Pollution Control Plans for projects that are not subject to the State Construction National Pollutant Discharge Elimination System (NPDES) Permit, and Storm Water Pollution Prevention Plans for projects that are subject to the State Construction NPDES permit). The review staff also verifies enrollment under the statewide General NPDES permit for Construction.

### 5.5.2 Site Inspection Process and Frequency

Inspections performed by the City (by City staff or Construction Management (CM) firms managed by the City) provide verification that each site is in conformance to Chapter IV of the Storm Water Standards. The inspections are tracked to ensure that inspections meet the minimum inspection frequencies provided in the table below. Definitions for site priority are found in the Storm Water Standards.

**Table 5-2. Inspection Frequencies.**

| Site Priority | Wet Season | Dry Season |
|---|---|---|
| High Priority - Active | Bi-weekly | As-Needed |
| High Priority - Inactive | Bi-weekly | As-Needed |
| Medium Priority | Monthly | As-Needed |
| Low Priority | As-Needed | As-Needed |

As required by Municipal Permit section D.2.d(6), all inspections at a minimum include:

a. A check for coverage under the General Construction Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.) during initial inspections;
b. Assessment of compliance with the Construction Storm Water BMP Performance Standards located in Chapter IV of the City of San Diego Storm Water Standards (and enforceable by San Diego Stormwater Management and Discharge Control Ordinance ("Storm Water Ordinance") Section 43.04, et seq.);
c. Assessment of BMP effectiveness;
d. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff;
e. Education and outreach on storm water pollution prevention, as needed, and
f. Creation of a written inspection report.

To ensure compliance with Municipal Permit section D.2.d (7), the inspection supervisors oversee the tracking of storm water inspections to ensure that the minimum frequencies are met. The inspection supervisors also maintain records necessary to ensure compliance with all of the reporting requirements located in Municipal Permit section J.3.a(3)(b). Table 5-3 summarizes the departments' responsibilities regarding BMPs and discharge enforcement at construction sites.

**Table 5-3. BMPs and Discharge Enforcement at Construction Sites.**

| | Development Services Department (DSD) - Building Inspection | Engineering and Capital Projects - Field Engineering | General Services - Storm Water Pollution Prevention Division (SWPP) | DSD/Neighborhood Code Compliance Department (NCCD) |
|---|---|---|---|---|
| **Demolition Permit Issued** | While demolition is active.<br>After demolition ends, site is inactive. | None | None | None |
| **Public Improvements (PI)/Grading Permit (PI/G) Issued** | After PIs are "accepted," substantially complete, any portion of the site is active due to issuance of the Building permit and building construction is underway. | While any portion of the construction project is active under PI/G permit.<br>Before Public Improvements "accepted" substantially complete, site active or inactive. | After PIs are "accepted," substantially complete, any portion of the site is inactive due to the Engineering permit being signed-off with **NO** Building permit issued. | None |
| **Building Permits Issued: No Public Improvement No Grading Permits** | After construction begins and until "Certificate of Occupancy" issued. | None | When construction ends and certificate of occupancy is issued. | None |
| **Public Improvement/ Grading or Building Permits Expired** | If work is occurring in violation of building codes. | If work is occurring in violation of public improvement/grading code(s). | If **NO** work is occurring in violation of Public Improvement/Grading or building code(s). | None |
| **Other** | None | None | Construction does not require Building or Public Improvement/Grading permits.<br>Certificate or occupancy issued.<br>All bonds released, site work complete. | No active permit to apply - illegal grading. |
| **Discharge to City Owned and Non-City Owned Conveyance Systems** | Capture photo documentation, and other key information. Call SWPPD-Codes. Identify yourself as City Staff with an active discharge to report. | Capture photo documentation, and other key information. Call SWPPD-Codes. Identify yourself as City Staff with an active discharge to report. | **All calls to (619) 235-1000, Think Blue Hotline.** | None |

#### 5.5.2.1 Field Engineering Division's Process for Construction Site Inspections

Resident Engineers in the Field Engineering Division inspect BMPs associated with engineering permits and CIP projects. Inspections of BMPs are also performed by CM firms when hired to supplement staffing needs. Field Engineering staff manage all of the City's contracts with CM firms.

#### 5.5.2.2 Development Services Department's Process for Construction Site Inspections

DSD inspects building sites routinely for compliance with storm water requirements. Inspectors are assigned to a district and are responsible for monitoring projects in that area. Each inspector routinely monitors his/her district on a daily basis. Sites are also inspected at the request of another department or in response to complaints. A special correction notice pertaining to storm water pollution prevention measures is used by inspectors to provide immediate written notice to contractors requiring immediate correction of BMPs.

### 5.5.3 Enforcement of Construction Sites

All construction sites found to be not in compliance with the Construction Storm Water BMP Performance Standards are issued a notice and stronger measures as deemed necessary. The enforcement procedures followed by Field Engineering Division and the Development Services Department are outlined below.

#### 5.5.3.1 Field Engineering Division's Enforcement Process

As the single point of contact with the contractor, the Resident Engineer is responsible for identifying any storm water issues or potential violations. If issues are not resolved through storm water notices, and violations still occur, then stop work orders are generally issued and all work is halted except those activities necessary to bring the site into compliance with storm water regulations. Stop work orders are issued based on documentation, consultation with a supervisor, and the Deputy Director's approval. A re-inspection is required to be conducted by Field Engineering Division personnel prior to lifting a stop work order.

For sites that have no activity occurring and the issuance of a stop work order would not provide sufficient influence to the contractor to remedy deficiencies, the site is referred to the Storm Water Pollution Prevention Division for enforcement during rain events or discharges.

The Field Engineering Division also coordinates with the inspectors from DSD. For example, a site that may have a grading permit for which the grading has been

completed but the contractor continues to work under a building permit. Any storm water violations can be referred to DSD for further enforcement action.

#### 5.5.3.2 Development Services Department's Enforcement Process

For egregious or repeat issues, inspectors have been trained to issue re-inspection notices, which effectively stops work on the site until the corrections are made and the site is re-inspected.

For sites that have no activity occurring and the issuance of a re-inspection notice would not provide sufficient influence to the contractor to remedy deficiencies, the site is referred to the Storm Water Pollution Prevention Division for enforcement during rain events or discharges.

The inspectors from DSD also coordinate with the inspectors from the Field Engineering Division when the currently active permit is within the Field Engineering Division's inspection domain.

### 5.5.4 Pollutant Discharge Notification

As required by 40 CFR Section 122.41(1)(6), when a construction manager or inspector, employed by the City or hired to represent the City, determines that a discharge poses a significant threat to water quality or human health, they will notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City's Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the construction manager or inspector to the Regional Board within five working days of the day the event was identified. The construction manager or inspector will also notify other regulatory agencies as required on Form 304.

In addition, the Regional Board will also be notified at any time that a stop work order or other high level enforcement action is taken to address a storm water violation.

### 5.5.5 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0 “Education.”

#### 5.5.5.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

#### 5.5.5.2 Activity-Specific Training

**Municipal Departments**

This section describes activity-specific trainings provided by DSD and ECP Field Engineering Division. DSD and ECP Field Engineering Division will create, execute, and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 5-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 5-4. Activity-specific BMP Training(s) Provided by the DSD and ECP.**

| Dept Division<br>Activity | Staff Level | Schedule |
|---|---|---|
| **DSD** | | |
| 1. Staff meetings to discuss storm water requirements such as Federal, state and local water quality laws; connection between construction activities and water quality; construction BMP requirements; and methods to minimize impacts to receiving waters from construction sites | All | ongoing |
| 2. Educate staff and ensure that the in-house standards for the review of WQTRs are followed | All | ongoing |
| **Field Engineering Division** | | |
| 3. Storm water activity-specific annual training before the start of the wet weather season | Resident Engineers | As needed |
| 4. Storm water topics are discussed at the monthly meeting of resident engineers | Resident Engineers | As needed |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 5.5.5.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by the DSD and ECP Field Engineering Division in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 5-5 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 5-5. Department External Outreach Activities by Target Audience.**

| Dept Division<br>Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Available |
|---|---|---|
| **DSD** | | |
| Distribute *Standard Urban Storm Water Mitigation Plan* Fact Sheet | 1 | ongoing |
| Distribute *Grading: Doing It Right* brochures and video which provides information about proper storm water pollution prevention practices. These resources were provided to the public and aired regularly on City TV 24. | 1-5 | ongoing |

| Dept Division<br>Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Available |
|---|---|---|
| | | |
| Construction poster and brochure promoting proper storm water pollution prevention practices at construction sites. | 1 | ongoing |
| "Development Process: Step-by-Step" web site, which references both the *Storm Water Applicability Checklist* as well as the *Storm Water Standards Manual*. | 1 | ongoing |
| New section of the DSD web site focusing on grading which includes visual examples and a "Frequently Asked Questions" page. | 1 | ongoing |
| Quarterly coordination meetings with the construction industry with water quality as a standing topic. | 1 | ongoing |
| **DSD (Building Inspection)** | | |
| Individualized training to construction industry members on proper storm water pollution prevention and BMP techniques. | 2 | ongoing |

### 5.5.6 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by DSD and the ECP Field Engineering Division to track expenditures for designing, developing, and implementing BMPs and educational activities. The departments' annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

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# 6.0 Municipal Section

## 6.1 Introduction

The City of San Diego employs over 11,000 persons and contracts many more. Due to the City's organizational size and complexity, this chapter is organized into logical sub-sections according to City functions and services to help City departments easily understand their requirements and effectively implement the Best Management Practices (BMPs). Each section addresses a City responsibility, which can be shared by multiple departments, or just one. To help the departments track which sections apply to them, an index is provided (see Table 2-1 in Section 2.0, "Administrative and Legal Procedures"). Because of BPR reorganization of the City, some responsibilities may change in the upcoming fiscal years. The Storm Water Pollution Prevention Division will inform the San Diego Regional Water Quality Control Board (Regional Board) of these changes as they occur through the annual reporting process.

This Jurisdictional Urban Runoff Management Plan (URMP) will begin implementation on March 24, 2008. Updates to the Plan will be included in the URMP annual reports which City departments are due to submit to the Storm Water Pollution Prevention Division by July 21 of each year. It is the responsibility of each department to secure the budget for all aspects of program implementation, including: planning, implementation, construction of BMPs, maintenance of BMPs, education and training, and reporting for the URMP, as applicable.

The following are recommended steps to implement the elements of the program that apply to each department:

1) Assign Storm Water Representative(s) (Ongoing)

Each department must assign a representative within the department who will be responsible for overseeing implementation of the department's requirements, ensuring data is tracked and reported to the Storm Water Pollution Prevention Division each year, represents the department during storm water audits by the federal Environmental Protection Agency (EPA) and other agencies, and responds to storm water-related issues, such as notices of violation, that occur within the department. In addition, the Storm Water Pollution Prevention Division will be meeting with department representatives periodically throughout the fiscal year.

2) Adopt (September 2007)

The first step toward implementation is to adopt the URMP. A department head or appointing authority must accept and certify that the department will formally establish policies and procedures to implement the URMP.

3) Distribute (March 2008)

After City Council approval of the URMP on January 22, 2008, the next step is to distribute the RMP to the affected divisions within the department with the appropriate transmittal requiring them to begin implementation. The department will make copies of the Plan (or Plan applicable sections) and distribute these to the appropriate personnel.

4) Train/ Develop Awareness (Ongoing)

The department must schedule and ensure both the general storm water training for all personnel, and "Activity Specific" training for those personnel engaged in activities covered by the Plan. The department must maintain records of the personnel trained so that the status of the training can be reported to the Regional Board.

5) Practice/ Implement (March 24, 2008 – March 24, 2013)

The next step is to apply the practices, policies, and procedures to daily activities within the department. Personnel should be informed that they must apply the practices that are appropriate for their activities.

6) Assessment/ Review (Ongoing, annually through reporting process)

Periodically, the department, along with the Storm Water Pollution Prevention Division, will assess and review the practices that the department has applied to its daily activities. They will record any practice that needs modification or any new practices, policies or procedures that should be adopted.

7) Update (Ongoing)

If needed, and after an assessment and review of the department's activities, the practices and guidelines may be updated by the Storm Water Pollution Prevention Division, including the minimum BMPs, and any changes will be submitted to the department for review and co-approval. Once approved, the new guidelines must be incorporated into the department's URMP Section and policies and procedures and the appropriate employee awareness and training must be provided. Such changes will be reported by the Storm Water Pollution Prevention Division to the Regional Board through the annual reporting process.

8) Report (Ongoing)

The department will need to maintain records and provide reports to the Storm Water Pollution Prevention Division. The reporting format and requirements are detailed in the applicable sections of the URMP. Departments must maintain such records as are necessary to provide the information that will be required by the Regional Board. Additionally, records of any required training should be maintained. For example, as part of the annual report, the Storm Water Pollution Prevention Division will ask for the number of employees trained for each element, among other items. The Storm Water Pollution Prevention Division will compile the reports for all City departments and

prepare the annual report to the Regional Board. Departmental information for the annual report is due to the Storm Water Pollution Prevention Division by July 21st of each year. Departments are responsible for collecting information in anticipation of an July 21st reporting deadline. The Storm Water Pollution Prevention Division will provide early notification to departments of specific reporting dates each year.

9) Inspection (Twice annually)

Two department self- inspections of municipal facilities and activities are required each year, and are important to the success of this Program. The inspections will check what practices and policies have been adopted and implemented so that the general effectiveness of the Program in instilling practices to reduce pollutants in urban runoff can be assessed. If deficiencies or ineffective procedures are identified during an inspection, departments must identify and implement corrective actions to resolve the issue. If the department determines that corrective actions cannot be implemented immediately (such as construction of a structural control), departments must identify a schedule for when the corrective actions will be implemented. Storm Water Pollution Prevention staff will be available to assist in addressing issues.

Additional voluntary self-inspections, performed by department staff, should be held as frequently as deemed necessary to assess program effectiveness and ensure proper implementation of BMPs. Occasional spot inspections by Storm Water Pollution Prevention Division staff may be made to assess each facility's compliance with Municipal Permit requirements. In addition, departments and facilities are subject to periodic inspection and/or audits by Regional Board and federal EPA staff.

The Storm Water Pollution Prevention Division will coordinate with the departments to verify the implementation of designated BMPs, and the completion of two annual inspections. The "Inspection Forms" found in Appendix XIV detail the steps used in the inspections. Enforcement of the City's Storm Water Management and Discharge Control Ordinance (Appendix II) is the responsibility of the Storm Water Pollution Prevention Division Enforcement Program.

10) Certify (Annually)

Each department will sign and return a statement of compliance along with the department's required reporting data to the Storm Water Pollution Prevention Division by July 21 of each year as part of the proof that the City is doing its part to reduce pollutants in storm water and urban runoff.

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# 6.2 Airports

## 6.2.1 Background

This section is applicable to the Real Estate Assets Department, Airports Division that operates Brown Field, Montgomery Field and leased non-aviation properties. These airports serve to provide support for general aviation activities, parking, hangars and maintenance services for a variety of fixed and rotary wing aircraft. These activities inherently involve petroleum products (e.g., fuel and lubricants), products of wear (e.g., carbon, metal, rubber, etc.), and cleaning agents (e.g., solvents, soap, etc.), which could pollute storm water runoff. Fertilizers and herbicides used in the ground maintenance of the airports also may pose a hazard if not monitored properly. The Airports Division's goal is to reduce the impact on receiving waters by aircraft and ground maintenance activities. Best management practices (BMPs) have been implemented into the airport activities through inventory, inspection, education, and annual reporting requirements applicable the airport and non-aviation activities.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No.R9-2007-0001 "Municipal Permit", Appendix I), as described in Table 6.2-1.

**Table 6.2-1. Municipal Permit Requirements – Airports Division.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.2.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.2.3 | (Pg. 32-34) D. 3. a. (2,3,4,5) | Implement and maintain BMPs. |
| 6.2.4.1 | (Pg. 35) D. 3. a. (7) | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.2.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.2.4.3 | (Pg. 45) D. 5. (b, d) | Implement and designate an educational program for all City personnel, contractors and community groups. |
| 6.2.4.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.2.2 Source Characterization

The Airports Division's inventory includes the two municipal airports (see Appendix III, "Municipal Inventory"). The Division's activities, their associated potential pollutants, and designated BMPs are listed in Table 6.2-2. The Airports Division will update any

changes to its facilities inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.2.4.4, “Annual Report Forms.”

## 6.2.3 Best Management Practices Requirements

### 6.2.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.2.3.1 to 6.2.3.2 below are the Airports Division’s BMPs for activities not already covered by the General Permit for the California Storm Water Monitoring Group for Airports with Industrial Activities.

If the Airports Division determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the San Diego Stormwater Management and Discharge Control Ordinance (Stormwater Ordinance), the Airports Division will modify its activities to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, the Airports Division will provide updates to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.2.4). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in “Illicit Discharge Detection and Elimination.”

Additionally, the leased properties operating at the airport fields, which includes small restaurants and other businesses, are classified as Commercial/Industrial as part of the Jurisdictional Urban Runoff Management Plan (URMP). These leased properties, therefore, are subject to the Commercial/Industrial minimum BMP requirements identified in Appendix X, “Annual Report Form Questions.” Airports Division’s storm water oversight responsibilities for these leased properties are detailed in Section 6.4.3.1 and 6.4.3.2, “City Owned Leased Properties.”

#### 6.2.3.1.1 Minimum BMPs

The Airports Division will ensure that all City staff implements the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.2-2.
2. Only clean rainwater can be discharged to the storm drain system. See Stormwater Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by Stormwater Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.

4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the "Storm Drain Inspection/Cleaning Schedule" in Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.
5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately the Airports Division's responsibility to prevent pollutant discharges to the storm drain system. Therefore, the Airports Division will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

The Airports Division will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

#### 6.2.3.1.2 Activity-specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.2-2 will be implemented during the Airports Division's operations and maintenance activities by City employees.

**Table 6.2-2. BMPs Designated for Areas and Activities at the Airports.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Public Parking Areas (Parking lot and Curb Side Parking) | trash and debris, oil and grease | • Sweep parking lot and street curbs quarterly by a contracted street sweeping service.<br>• Clean/empty parking lot and trash cans daily (except weekends and holidays). |
| Landscaping | sediments, pesticides, nutrients | • Clean trimmings or cuttings daily.<br>• Sweep up seasonal shedding of leaves as necessary. |
| Landscape Irrigation | pesticides, nutrients, sediments | • Orient sprinkler heads towards vegetated areas.<br>• Monitor sprinkler system watering and do not irrigate for long periods of time or during windy conditions.<br>• Maintain sprinkler valves and manifolds to prevent leaking.<br>• Repair broken sprinkler heads as necessary. |
| Refuse Dumpster | sediments, metals, organic, compounds trash and debris, oxygen-demanding substances, oil and grease, bacteria and viruses | • Keep lids closed on dumpsters to contain trash materials and protect from rainwater.<br>• Replace dumpsters if they leak.<br>• Clean trash and debris from around the dumpsters on a regular basis. |
| Fertilizer and Herbicide Application | organic compounds | • Do not apply fertilizers and herbicides if there is a 40% or greater chance of rain.<br>• Only use fertilizers and herbicides s directed and apply directly to the source of intended use.<br>• Apply herbicides based on the recommendations of a licensed Pest Control Advisor.<br>• Conduct annual reviews of the pest control applications and conform to the current San Diego County Department of Agriculture regulations.<br>• Perform herbicide applications by contracted services as much as possible to minimize the need to manage stored products. |
| Pesticide Application | pesticides | • Perform pesticide applications only by contracted licensed pesticide handlers.<br>• Apply pesticide applications in such a manner so as to not enter into the storm drain system. |
| Materials Handling, Storage, and Disposal | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Material Loading and Unloading | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Vehicle Equipment Maintenance | | • See this activity's BMPs in Table 6.15-2 Section 6.3, "Vehicle Maintenance/Operations Yards" |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Vehicle and Equipment Fuel Dispensing Areas | | • See this activity's BMPs in Table 6.15-2, Section 6.3, "Vehicle Maintenance/Operations Yards" |
| Storm Drain System Inspection and Cleaning | | • See this activity's BMPs in table 6.3-2, Section 6.3, "Buildings/Parking Facilities/Landscaping" |

### 6.2.3.2 Additional Controls for Municipal Areas and Activities

The Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, the Airports Division will conduct a second facility inspection as described in detail in Section 6.2.4.1 "Facilities Inspections and Improvements."

## 6.2.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

### 6.2.4.1 Facility Inspections and Improvements

The Municipal Permit requires that the City inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges Note: see Section 6.2.4.2 "Pollutant Discharge Notification" below for reporting requirements.

Also, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, the Airports Division will conduct a second facility inspection. As shown in Table 6.2-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to the end of April).

**Table 6.2-3. Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection the Airports Division determines that improvements to its BMPs are required, the Airports Division will perform the action (e.g., repair a structural BMP), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved. Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second inspection. If the Airports Division determines that the modifications require additional time or funds to implement, the Airports Division will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Facility Inspection Forms are attached as Appendix XIV, "Inspection Forms" and are also located on the City's website.[2]

### 6.2.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis by Airports Division and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Stormwater Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

[2] http://www.sandiego.gov/thinkblue/resources/index.shtml

When Airports Division determines that a discharge poses a significant threat to water quality or human health, Airports Division must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City's Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the Airports Division to the Regional Board within five working days of the day the event was identified.

Airports Division will also notify other regulatory agencies as required on Form 304.

#### 6.2.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, "Education."

##### 6.2.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a "Storm Water and You" training module presented at the "New Employee Orientation" workshop. Staff that do not take the "New Employee Orientation"

workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive "refresher" training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via "e-tests" for randomly selected City employees with regular computer access will occur periodically between the mandated "refresher" courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

### 6.2.4.3.2 Activity-specific Training

**Municipal Departments**

This section describes activity-specific trainings provided by the Airports Division. The Airports Division will create, execute, and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.2-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.2-4. Activity-specific BMP Training(s) Provided by the Airports Division.**

| Training Module/Item | Staff Level | Schedule |
|---|---|---|
| Public Parking Areas | Airport Operations Staff | ongoing |
| Landscaping | Airport Operations Staff | ongoing |
| Refuse Dumpsters | Airport Operations Staff | ongoing |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 6.2.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by the Airports Division in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.2-5 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.2-5. Department External Outreach Activities by Target Audience.**

| Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Schedule |
|---|---|---|
| 1. Ensure Commercial Operating Permits (COPs) contain language to inform permittees of the regulations from the City Airports and other controlling agencies concerning acceptable activities and their associated BMPs. Permittees will be notified of any potential fines for failing to comply with the regulations. | 3 | Current COPs are issued with BMPs regarding their activity on the airport. |
| 2. Send informational material to tenants and lessees of the Airport policies regarding the Storm Water Pollution Prevention Plan (SWPPP) and the City's regulatory compliance expectations. | 3 | Currently in effect with SWPPP Industrial Permit. |
| 3. Inform all new development they must conform with industry standards for SWPPPs and measures to comply with State and local requirements. | 3 | Currently in effect with SWPPP Industrial Permit. |

### 6.2.4.4 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by Airports Division to track expenditures for designing, developing, and implementing BMPs and educational activities. The Airports Division's annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

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# 6.3 Buildings/Parking/Landscaping

## 6.3.1 Background

This section is primarily applicable to the General Services Department's Facilities Maintenance Division, Purchasing and Contracting Department, Library Department, Office of the City Treasurers, Homeless Services Division of the City Planning and Community Investment Department, and the Customer Services Department. This section is secondarily applicable to all City departments that operate and maintain City buildings, parking lots, and/or landscaping (except Park and Recreation Department which is addressed in Section 6.10, "Recreational Lands and Facilities"). The goal of this section is to reduce the impact of department or division operations and maintenance activities on storm water quality and provide guidance for the protection of water quality and receiving waters. This section contains storm water best management practices (BMPs) the departments or divisions will implement for operations and maintenance activities, in addition to inventory, inspection, pollutant discharge reporting, education and annual reporting requirements applicable to operations.

The City of San Diego currently owns over fourteen hundred buildings, parking lots, parking structures, and landscaped areas that are located in areas potentially exposed to storm water.

The City's programs must meet the requirements of the Municipal Storm Water Permit (Order No.R9-2007-0001 "Municipal Permit", see Appendix I), as described in Table 6.3-1.

**Table 6.3-1. Permit requirements – Operations and Maintenance of Buildings, Parking Areas, and Landscaped Areas**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.3.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.3.3 | (Pg. 32-34) D. 3. a. (2,3,4,5) | Implement and maintain BMPs. |
| 6.3.4.1 | (Pg. 35) D. 3. a. (7) | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.3.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.3.4.3 | (Pg. 45) D. 5. (b, d); | Implement and designate an educational program for all City personnel and contractors. |
| 6.3.4.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j);<br>(Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

### 6.3.2 Source Characterization

Each City department's facilities inventories are included in Appendix III, "Municipal Inventory." Department or division activities, their associated potential pollutants, and designated BMPs are listed in Table 6.3-2. The departments or divisions will update any changes to the inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.3.4.4, "Annual Report Forms."

### 6.3.3 Best Management Practice Requirements

#### 6.3.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.3.3.1.1 to 6.3.3.1.2 below are the departments or divisions BMPs for operations and maintenance of buildings, parking areas, and landscaped areas.

If the department or division determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the San Diego Stormwater Management and Discharge Control Ordinance (Storm Water Ordinance), the department or division will modify its activities to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, the departments or divisions will provide updates to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.3.4.4). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in "Illicit Discharge Detection and Elimination."

#### 6.3.3.1.1 Minimum BMPs

Departments or divisions will ensure that all City staff will implement the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.3-2.
2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by Storm Water Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.

4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the "Storm Drain Inspection/Cleaning Schedule" in Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.
5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately the department or divisions' responsibility to prevent pollutant discharges to the storm drain system. Therefore, the departments or divisions will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

The departments or divisions will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

Purchasing and Contracting Department Responsibilities

The Purchasing and Contracting Department will ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current municipal minimum BMP requirements are written into

the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008). The Purchasing and Contracting Department will ensure that any updated minimum BMPs are sent to Storm Water Pollution Prevention Division before including these changes in the contracts and renewals.

#### 6.3.3.1.2 Activity-Specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.3-2 will be implemented by departments or divisions that operate and maintain buildings, parking areas, and landscaped areas.

**Table 6.3-2. BMPs Designated for Areas and Activities Associated with the Operation and Maintenance of Buildings, Parking, and Landscaped Areas.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Boiler Maintenance | sediments, metals, organic compounds, trash and debris, oil and grease | • Discharge all treated boiler to the sanitary sewer with MWWD permission or recycled/reused in an approved closed loop system.<br>• Dispose of discharges containing chemical additives properly, and never into the storm drain system.[4] |
| Concrete and Asphalt Work | sediments, organic compounds | • Schedule concrete removal activities for dry weather.<br>• Take measures to protect any nearby storm drain system and adjacent watercourses prior to breaking up asphalt or concrete.<br>• After breaking up old concrete, sweep up and dispose of materials. Recycle if feasible.<br>• Do not allow any water to enter storm drain during saw-cutting and grinding operations. Use as little water as possible. Block or place berms to contain saw-cutting water, and wet- vac liquids or dry out work area and sweep. Or direct to landscape/dirt area to infiltrate.<br>• If slurry enters storm drain system, remove material immediately, and dispose of properly.[2]<br>• Remove saw-cut slurry as soon as possible (e.g., with a vacuum).<br>• Avoid mixing excess amounts of fresh concrete or cement mortar onsite.<br>• Store dry and wet materials under cover, protected from rain, wind, and runoff.<br>• Designate concrete wash out areas for transit mixers and tools that will not discharge to the storm drain system or receiving waters.<br>• Dispose of leftover material in the solid waste receptacle. Recycle if feasible. |

[2] Contact ESD-HMMP for disposal options.

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Cooling Tower Maintenance | sediments, metals, organic compounds, trash and debris, oil and grease | • Direct to the sanitary sewer all cooling tower discharges. |
| Dry Wall and Stucco Work | sediments, organic compounds | • Avoid mixing excess amounts of drywall mud or plaster.<br>• Store dry and wet materials under cover, protected from rain, wind, and runoff.<br>• Designate drywall or plaster wash out areas that will not discharge to the storm drain system.<br>• Dispose of leftover material in a trash can or dumpster. |
| Exterior Building and Roof Cleaning | metals, sediments | • Do not allow any wash water to enter storm drain. Either:<br>o Berm work area and wet-vac wash water or let work area dry and sweep up; or<br>o Direct wash water to landscaping to infiltrate. |
| Fire Sprinkler Flushing | sediments, metals | • Do not discharge fire sprinkler system water into the storm drain system.<br>• See Appendix IX, "Maintenance and Operations Contract Language." |
| HVAC, Chillers and Refrigerators Maintenance | sediments, metals, organic compounds, trash and debris, oil and grease | • Determine whether air conditioning units (generally found on roof) and chillers have a condensate line which is plumbed to a roof storm drain.<br>o For existing buildings, non-contaminated discharge can go to the storm drain system.<br>o For new development or building remodels, the discharge should go to the sanitary sewer.<br>• Determine whether air conditioning and chiller units are treated with descaling or anti-algal agent. Properly dispose of all flushing agent residues and by-pass condensate line while flushing unit.[3]<br>• When HVAC condenser tubes are flushed capture and dispose of properly. If chemicals are used contact ESD-HMMP for disposal options.<br>• If defrost water or condensate is discharged, ensure defrost water does not come into contact with any pollutants. |
| Installation and Removal of Parking Meters | sediments, organic compounds | • Prior to starting activities, locate storm drain system and prevent pollutants from entering.<br>• If parking meter is located over a storm drain, drill out four holes for changing the parking meter. Do not saw cut over the storm drain.<br>• If parking meter is away from storm drain, use a jet hammer (no water will be used, dry method) to remove a square area around the meter pole.<br>• Use a vacuum to remove debris (e.g., dust and particles).<br>• Mix concrete in a tub, apply it to the square area, and allow it to dry.<br>• Dry excess concrete in the tub and dispose of it to the landfill.<br>• Vacuum area again to remove any remaining debris. |

[3] Contact ESD-HMMP for disposal options.

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Irrigation Repair | pesticides, nutrients, sediments | • Inspect and repair irrigation systems regularly for broken water lines, sprinkler heads, and valves.<br>• Eliminate runoff by careful manual control of water volume and spray or adjusting automatic controls to minimize excess water runoff.<br>• Prevent eroded soil resulting from a line break from entering the storm drain system. After digging out a line, return all soil to the hole and compact properly. Sweep area.<br>• When bailing out muddy water, do not pour it into the storm drain system or curb. Pour it onto a landscaped area. |
| Landscaping | pesticides, nutrients, sediments | • Schedule chemical application at times when rain is not predicted and irrigation is not scheduled.<br>• Apply and handle pesticides and keep detailed records in accordance with existing state regulations (California Title 3, Division 6, Pesticides and Pest Control Operations).<br>• Collect and dispose of unused chemicals as a regulated waste.[4]<br>• Use native plants when possible.<br>• Keep removed vegetation, including clippings, chips, loose soils, and pruning debris away from the storm drain system and watercourses.<br>• Consider applying compost instead of chemical fertilizers.<br>• Rely on integrated pest management methods, including:<br>o No controls<br>o Physical/mechanical controls<br>o Environmental controls (mulching, pest-resistant vegetation, prescribed burns)<br>o Biological controls (predators, parasites, etc.)<br>o Less toxic chemical controls (e.g., soaps and oils) and/or hot water<br>• If absolutely necessary, use the least toxic chemicals that will do the job (e.g., biodegradable products). Avoid use of copper-based pesticides. |
| Material Loading and Unloading | nutrients, trash, oil and grease, pesticides, oxygen demanding compounds, metals | • Prior to starting activities, locate storm drain system and prevent pollutants from entering (e.g., with silt fences, gravel bags, filter fabric, etc.).<br>• Sweep up municipal areas after activities and/or spills. Hosing down pollutants to the storm drain is prohibited by the Storm Water Ordinance Section 43.03. Use a broom or shovel or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law.[4]<br>• Keep materials and waste piles covered and off the ground. Materials and waste stockpiles will be protected to prevent contact with rainfall and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition. |

[4] Contact ESD-HMMP for disposal options.

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Materials Handling, Storage, and Disposal | nutrients, trash, oil and grease, pesticides, oxygen demanding compounds, metals | • Sweep up municipal areas after activities and/or spills. Hosing down pollutants to the storm drain is prohibited by Storm Water Ordinance Section 43.03. Use a broom or shovel or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact Environmental Services, Hazardous Materials Management Program (HMMP) for assistance.<br>• Keep materials and waste piles covered and off the ground. Materials and waste stockpiles will be protected to prevent contact with rainfall and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.<br>• Use secondary containment for hazardous materials. If rain water is captured in secondary containment and dispose of properly.<br>• Never dispose of any materials down the storm drain system. |
| Painting (Oil or Water Based) | metals, organic compounds | • Store oil-base paint in a flammable storage cabinet.<br>• Capture and properly dispose all oil-base paint.<br>• Clean all oil-based brushes with paint thinner, and dispose properly into a hazardous waste 55-gallon drum.<br>• Seal and properly place all latex paint into a closed confined space at the paint shop.<br>• Wash and clean all latex water-based paint materials in a deep sink in the paint shop away from all storm water drains. |
| Parking Lot/Structure Maintenance | sediments, trash and debris, oil and grease, metals | • Sweep parking lot according to a schedule, which is determined by your department or division[5]:<br>o Lots generating high volumes of solid waste 2 x month<br>o Lots generating medium volumes of solid waste 1 x month<br>o Lots generating low volumes of solid waste 1 x year<br>• Use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste.[4]<br>• Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas. |
| Parking Structure Sump Pump Maintenance | sediments, organic compounds, oil and grease | • Remove any debris surrounding or inside the sump routinely.<br>• Install a screen mesh or filter fabric on the sump grate to assist in protecting sumps from particulate debris and ensure it will not cause a flooding hazard. |
| Ponds and Fountains Maintenance | nutrients, metals, sediments, organic compounds | • Discharge to the sanitary sewer or to landscaping any overflow drainage from ponds and decorative fountains.[6]<br>• Ensure pond or fountain filters are not back flushed into a street or storm drain system. |

[5] As of the writing of the URMP all municipal parking lots are classified as low volume with the exception of operation yards classified as medium volume.
[6] The facility should consult with MWWD if the ponds or fountains are treated with copper-based algaecides (shock), growth inhibitors or other agents.

<table>
<tr><th>Activity</th><th>Potential Pollutants</th><th>Best Management Practices</th></tr>
<tr><td>Refuse Dumpsters</td><td>sediments, metals, organic, compounds trash and debris, oxygen-demanding substances, oil and grease, bacteria and viruses</td><td>• Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.<br>• Relocate dumpsters and bins away from storm drains systems.<br>• Discharge to the sanitary sewer (with MWWD permission) or infiltrate onto landscaping any contaminated rain water that has accumulated from an open container.<br>• Ensure dumpsters are not leaking. If so, repair, cover, and/or exchange dumpsters.</td></tr>
<tr><td>Roof Vents and Equipment Maintenance</td><td>oil and grease, sediments, metals, organic compounds, trash and debris</td><td>• Clean excessively greasy roof vents on a regular basis, especially during the wet season.<br>• Install catchment pans or trays at the base of the vents, if feasible.<br>• Properly seal and maintain duct work.<br>• Install protective devices around storm drain inlets, if feasible.<br>• Inspect roofs for residual machinery process residues (e.g., paper dust, saw dust, steam condensate, paint, etc.).</td></tr>
<tr><td>Storm Drain System Inspection and Cleaning</td><td>sediments, nutrients, trash and debris</td><td>• Inspect and clean all storm drain facilities (catch basins, storm drain inlets, open channels, etc.) of debris or other foreign material according to the schedule below. When practical, work is to be done when conditions are dry. Dispose of materials properly.<br><br>Storm Drain Inspection/Cleaning Schedule
<table>
<tr><th>Debris Volume</th><th>Frequency*</th></tr>
<tr><td>1. High (e.g., tends to clog during rains)</td><td>Annually, between May 1 and September 30.**</td></tr>
<tr><td>2. Medium (e.g., tends to collect measurable debris without clogging)</td><td>Annually at any time during the year.**</td></tr>
<tr><td>3. Low (e.g., generally free of debris)</td><td>Annually at any time during the year for Fiscal Year 2008 and 2009. Every other year thereafter.</td></tr>
<tr><td colspan="2">* Any storm drain facility that is designed to be self-cleaning must be cleaned of any accumulated debris observed during an inspection immediately. Anthropogenic litter observed in open channels must be cleaned in a timely manner after obtaining all appropriate environmental clearances.<br><br>** Following two fiscal years of inspections, any storm drain facility that does not contain debris may be re-classified as a “Low” priority facility and may be inspected as needed, but not less than every other year.</td></tr>
</table></td></tr>
</table>

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Vehicle and Equipment Washing | | • See this activity's BMPs in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yards." |
| Vehicle and Equipment Maintenance | | • See this activity's BMPs in Table 6.15-2 Section 6.15, "Vehicle Maintenance/Operations Yards." |
| Vehicle and Equipment Fuel Dispensing Areas | | • See this activity's BMPs in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yards." |

### 6.3.3.2 Additional Controls for Municipal Areas and Activities

The Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303d listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection as described in detail in section 6.3.4.1 "Facilities Inspections and Improvements."

### 6.9.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

### 6.3.4.1 Facility Inspections and Improvements

This section applies to Facilities and Maintenance Division or other departments that maintain its own buildings and grounds. The Municipal Permit requires that the City inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges. Note: see Section 6.3.4.2, "Pollutant Discharge Notification" below for reporting requirements.

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303d listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will

conduct a second facility inspection. As shown in Table 6.3-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to the end of April).

**Table 6.3-3. Municipal Facility Inspection Requirements**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection the department or division determines that improvements to its BMPs are required, the department or division will perform the action (e.g., repair a structural BMP), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved (Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second bi-inspection). If the department or division determines that the modifications require additional time or funds to implement, the department or division will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Facility Inspection Forms are attached as Appendix XIV, "Inspection Forms" and are also located on the City's website.[7]

### 6.3.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis by Departments and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that

[7] http://www.sandiego.gov/thinkblue/resources/index.shtml

would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When Departments determines that a discharge poses a significant threat to water quality or human health, Departments must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City's Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the Departments to the Regional Board within five working days of the day the event was identified.

Departments will also notify other regulatory agencies as required on Form 304.

#### 6.3.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, "Education."

##### 6.3.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

### New Employees

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a "Storm Water and You" training module presented at the "New Employee Orientation" workshop. Staff that do not take the "New Employee Orientation" workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

### Existing Employees

Existing employees with regular access to a computer will be mandated to receive "refresher" training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via "e-tests" for randomly selected City employees with regular computer access will occur periodically between the mandated "refresher" courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

## 6.3.4.3.2 Activity-Specific Training

### Municipal Departments

This section describes activity-specific trainings provided by the individual departments or divisions. The departments or divisions will create, execute, and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.2-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.3-4. Activity Specific BMP Training(s) Provided by the Departments/Divisions as Applicable.**

| Training Module/Item (as applicable) | Staff Level (i.e., Supervisor, Crew, etc.) | Available |
|---|---|---|
| Painting (Oil or Water Based) | Supervisor, Crew | ongoing |
| Dry Wall and Stucco Work | Supervisor, Crew | Summer 2009 |
| Concrete and Asphalt Work | Supervisor, Crew | Summer 2009 |
| Storm Drain System Inspection and Cleaning | Supervisor, Crew | ongoing |
| Refuse Dumpsters | Supervisor, Crew | Summer 2009 |
| Material Loading and Unloading | Supervisor, Crew | Summer 2009 |
| Materials Handling, Storage, and Disposal | Supervisor, Crew | Summer 2009 |
| Ponds and Fountains Maintenance | Supervisor, Crew | Summer 2009 |

| Training Module/Item (as applicable) | Staff Level (i.e., Supervisor, Crew, etc.) | Available |
|---|---|---|
| | | |
| Roof Vents and Equipment Maintenance | Supervisor, Crew | Summer 2009 |
| HVAC, Chillers and Refrigerators Maintenance | Supervisor, Crew | Summer 2009 |
| Boiler Maintenance | Supervisor, Crew | Summer 2009 |
| Cooling Tower Maintenance | Supervisor, Crew | Summer 2009 |
| Fire Sprinkler Flushing | Engineer (Project Officer) | Summer 2009 |
| Installation and Removal of Parking Meters | Supervisor, Crew | Ongoing |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 6.3.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by the Library Department, Office of the City Treasurer, and Customer Service Department's Community Service Centers in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.3-6 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.3-6. Library Department, Office of the City Treasurer, and Customer Service Department's Community Service Centers External Outreach Activities by Target Audience.**

| Dept/Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Schedule |
|---|---|---|
| **Library Department/Office of City Treasurer/Customer Service Department** | | |
| Think Blue Brochure available in lobby information rack | 1-5 | Ongoing |
| Think Blue "3 C's" handout available in lobby information rack | 1-5 | Ongoing |
| Think Blue Flyer insert in Business Tax Renewal mailing | 3 | Ongoing |

* Note the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.

### 6.3.4.4 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by departments or divisions to track expenditures for designing, developing, and implementing BMPs and educational activities. The departments' or divisions' annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

# 6.4 *City-Owned Leased Properties*

## 6.4.1 Background

This section is applicable to the Real Estate Assets Department (READ), which is responsible for leasing and/or managing more than 550 City-owned properties. The goal of this component is to reduce pollutants in runoff from City-owned managed or leased properties and minimize the impact of tenant or lessee activities on storm water quality to the maximum extent practicable. This section contains storm water best management practices (BMPs) READ and its lessees will implement in addition to inventory, inspection, pollutant discharge reporting, education, and reporting requirements.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No.R9-2007-001 "Municipal Permit" see Appendix I), as described in Table 6.4-1.

**Table 6.4-1. Municipal Permit Requirements – City-owned leased properties.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.4.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.4.3 | (Pg. 32-34) D. 3. a. (2,3,4,5) | Implement and maintain BMPs. |
| 6.4.4 | (Pg. 45) D. 5. (b, d); | Implement and designate an educational program for all City personnel. |
| 6.4.5 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.4.2 Source Characterization

READ manages an array of City-owned leased properties with commercial, industrial or residential uses operating on-site. Although READ manages these commercial, industrial and residential leases, these are classified as commercial/ industrial or residential land uses in the "Industrial/Commercial Inventory" (Appendix V) or "High Priority Residential Areas" (Appendix VII) inventory, and are treated as such by the City. Each year, READ will provide an updated list of these facilities to the Storm Water Pollution Prevention Division by July 15.

### 6.4.3 Best Management Practice Requirements

#### 6.4.3.1 Updated BMP Requirements

As discussed in Section 6.4.2 above, READ's leased properties, including those leased to City Departments such as Homeless Services, are classified as Commercial/Industrial or Residential under the URMP because of the nature of their activities. These leased properties, therefore, are subject to the Commercial/Industrial or Residential BMP requirements identified in the "Commercial/Industrial" or "Residential" sections of this URMP (see Appendices V and VI).

It is ultimately the responsibility of READ staff to ensure the storm water requirements language is included in lease language as they are established or renewed, as identified in Sections 6.4.3.1.1 and 6.4.3.1.2, below. Collectively, these policies and procedures implemented during lease renewals represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any policies or procedures are eliminated or modified, the replacement set of policies or procedures must collectively provide equal or greater storm water quality protection. In addition, if it is determined that a READ policy or procedure does not sufficiently protect water quality, READ will modify its storm water policies, procedures and/or lease language, as necessary and provide the updated information to the Storm Water Pollution Prevention Division. For information on enforcement see Section 9.5 in "Illicit Discharge Detection and Elimination." In addition to enforcement consequences, storm water violations may be considered a default on the lease by READ.

##### 6.4.3.1.1 BMPs for Residential Leases

During residential lease establishment, renewal, or amendment, READ staff will ensure that the following storm water requirements are included in the lease contract or provided as an exhibit:

"Water Quality – Best Management Practices

The CITY and LESSEE are committed to the implementation of controls (best management practices, or BMPs) to manage activities on the premises in a manner which aids in the protection of the City of San Diego's precious water resources. It is the LESSEE's responsibility to identify and implement an effective combination of BMPs so as not to cause pollutant discharges to the storm drain system in violation of Section 43.03, San Diego Stormwater Management and Discharge Control Ordinance (Stormwater Ordinance).

Therefore, LESSEE shall, at a minimum, implement and comply, as applicable, with the BMPs for residential areas and activities adopted under the San Diego Municipal Code Section 43.0307(a).

It is ultimately the LESSEE's responsibility to prevent pollutant discharges to the storm drain system. Therefore, the LESSEE will identify and implement any additional BMPs that may be required to avoid the discharge of pollutants to the storm drain system."

#### 6.4.3.1.2 BMPs for Industrial/Commercial Leases

During industrial or commercial lease establishment or renewal, READ staff will ensure that the following storm water requirements are included in the lease contract or provided as an exhibit:

"Water Quality – Best Management Practices

The CITY and LESSEE are committed to the implementation of controls (best management practices, or BMPs) to manage activities on the premises in a manner which aids in the protection of the City of San Diego's precious water resources. It is the LESSEE's responsibility to identify and implement an effective combination of BMPs so as not to cause pollutant discharges to the storm drain system in violation of Section 43.03, Stormwater Ordinance.

Therefore, LESSEE shall, at a minimum, implement and comply, as applicable, with the BMPs for industrial and commercial facilities adopted under the San Diego Municipal Code Section 43.0307(a).

It is ultimately the LESSEE's responsibility to prevent pollutant discharges to the storm drain system. Therefore, the LESSEE will identify and implement any additional BMPs that may be required to avoid the discharge of pollutants to the storm drain system."

### 6.4.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation education and training and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

#### 6.4.4.1 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate.

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators

- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, “Education.”

#### 6.4.4.2 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

#### 6.4.4.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by READ in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.4-2 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.4-2. Department External Outreach Activities by Target Audience.**

| Dept Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Schedule |
|---|---|---|
| 1. Include Storm Water BMP language in all lease and permit agreements | 1-4 depending on lessee/permittee and activity | ongoing |
| 2. Provide access to the City's Storm Water Video | 1-4 | ongoing |
| 3.Distribute Storm Water Pollution Prevention brochures to lessees, permittees, and any interested parties | 1-4, depending on lessee/permittee and activity | ongoing |

### 6.4.5 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by READ to track expenditures for designing, developing, and implementing BMPs and educational activities. READ will provide an updated list of all leaseholds each year to the Storm Water Pollution Prevention Division by July 15 each year. In addition, READ's annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

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# 6.5 Household Hazardous Waste

## 6.5.1 Background

This section is applicable to the Environmental Services Department (ESD). ESD oversees and runs the Household Hazardous Waste (HHW) Program. The HHW Program description contains the measures taken to actively eliminate illicit discharges associated with the improper use and disposal of household hazardous materials. These include products used in the routine maintenance of a resident's home, yard, and/or vehicle. The HHW Program has been in operation since 1985 and has provided opportunities for the safe disposal of HHW through one-day collection events, a permanent facility, educational programs, and public/private partnership collection activities. The HHW Program serves to divert HHW from the City's municipal solid waste landfill, the sewer system, and the ground and storm drain system, since inappropriate disposal may adversely affect the quality of our receiving waters and ground water supplies. Thus, the program itself is a best management practice (BMP) and this environmental message is included in outreach materials when appropriate.

Beginning in fiscal year 2007, the fiscal responsibility for the diversion of HHW is equally shared by the Environmental Services Department (for diversion from the landfill), General Services Storm Water Pollution Prevention Division (for diversion from the ground and storm water), and Metropolitan Wastewater Department Environmental Monitoring and Technical Services (for diversion from the sewer system). A Service Level Agreement (SLA) was established, and it identified ESD as the service provider and defined the scope of work, responsibilities, and billing process.

Both the City and the private sector provide collection services for HHW. In 1999, a permanent household hazardous waste transfer facility (HHW transfer facility) was opened at the Miramar Landfill and now serves residents with weekly HHW disposal services. Additionally, to target "do-it-yourself mechanics", the City operates one-day collection events throughout the City that accept used motor oil, contaminated motor oil, oil filters, antifreeze, and vehicle batteries. These events are promoted as auto product recycling events. Also, the private sector voluntarily collects recyclable auto products from the public.

Recent legislation, SB20/SB50, established a payment system to support the collection and recycling of cathode ray tubes (CRTs) including computer monitors, television, and DVD players. Many private retailers provide collection of these items and other electronic devices. AB 2901, California's Cell Phone Recycling Act of 2004, AB 1125, the Rechargeable Battery Recycling Act, require retailers to offer no charge cell phone and rechargeable battery recycling options.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-001, "Municipal Permit," see Appendix I), as described in Table 6.5-1.

**Table 6.5-1. Municipal Permit Requirements for Household Hazardous Waste.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.5.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.5.3 | (Pg. 32-34) D. 3. a. (2,3,4,5); (Pg. 41) D.3.c.(2) (c) | Implement and maintain BMPs. |
| 6.5.4 | (Pg. 35) D. 3. a. (7) | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.5.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.5.4.3 | (Pg. 45) D. 5.b.(1)(d) | Implement and designate an educational program for all City personnel, and public . |
| 6.5.4.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.5.2 Source Characterization

The City of San Diego operates one HHW facility located at 5161 Convoy Street, San Diego. HHW activities, their associated potential pollutants, and designated BMPs are listed in Table 6.5-2. This facility is included in the Municipal Facilities inventory in Appendix III. ESD will update any changes to the inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.5.4.4, "Annual Report Forms."

## 6.5.3 Best Management Practice Requirements

### 6.5.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.5.3.1 to 6.5.3.2 below are the BMPs required for the HHW Transfer Facility and one-day collection events. The minimum and activity-specific BMPs identified in this section are documented and implemented by ESD policy or procedural manuals.

As the BMPs are improved or revised, ESD will provide updated documentation to the Storm Water Pollution Prevention Division with their annual report form. Updates will also be provided if it is determined that a municipal activity results in a discharge in violation of Section 43.03 of the Stormwater Management and Discharge Control Ordinance ("Stormwater Ordinance"). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement

set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in "Illicit Discharge Detection and Elimination."

#### 6.5.3.1.1 Minimum BMPs

ESD will ensure that all City staff implement the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.5-2.
2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain system is prohibited by Storm Water Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.
4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the "Storm Drain Inspection/Cleaning Schedule" in Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.
5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.

10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately the ESD's responsibility to prevent pollutant discharges to the storm drain system. Therefore, ESD will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

ESD will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

### 6.5.3.1.2 Activity-Specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.5-2 shall be implemented at the HHW facility.

**Table 6.5-2. BMPs Designated for Areas and Activities at Household Hazardous Waste Facilities.**

<table>
<tr><th>Activity</th><th>Potential Pollutants</th><th>Best Management Practices</th></tr>
<tr><td>Storm Drain System Inspection and Cleaning</td><td>sediment, metals, organic compounds, oil and grease, pesticides</td><td>
• Close storm drain valve in collection area during hours of operations.<br>
• Inspect and clean all storm drain facilities (catch basins, storm drain inlets, open channels, etc.) of debris or other foreign material according to the schedule below. When practical, work is to be done when conditions are dry. Dispose of materials properly.<br><br>
Storm Drain Inspection/Cleaning Schedule
<table>
<tr><th>Debris Volume</th><th>Frequency*</th></tr>
<tr><td>1. High (e.g., tends to clog during rains)</td><td>Annually, between May 1 and September 30.**</td></tr>
<tr><td>2. Medium (e.g., tends to collect measurable debris without clogging)</td><td>Annually at any time during the year.**</td></tr>
<tr><td>3. Low (e.g., generally free of debris)</td><td>Annually at any time during the year for Fiscal Year 2008 and 2009. Every other year thereafter.</td></tr>
</table>
</td></tr>
</table>

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| | | ***** Any storm drain facility that is designed to be self-cleaning must be cleaned of any accumulated debris observed during an inspection immediately. Anthropogenic litter observed in open channels must be cleaned in a timely manner after obtaining all appropriate environmental clearances.<br>****** Following two fiscal years of inspections, any storm drain facility that does not contain debris may be re-classified as a "Low" priority facility and may be inspected as needed, but not less than every other year. |
| Unloading, Packaging and Sorting Areas | metals, organic compounds, oil and grease, pesticides | • Cover areas with a permanent canopy. |
| Hazardous Waste Unloading from Vehicle | metals, organic compounds, oil and grease, pesticides | • Place wastes on a cart and wheel to sorting area.<br>• Line sorting area with visqueen.<br>• Package wastes in sorting area. |
| Hazardous Waste Storage Area | metals, organic compounds, oil and grease, pesticides | • Store all wastes inside chemical storage lockers equipped with fire suppression systems and secondary containment.<br>• Store all wastes outside in secondary containment, on pallets and covered. |
| Hazardous Materials Storage Area | metals, organic compounds, oil and grease, pesticides | • Store materials in a Connex box or cover. |
| One-day Collection Events | metals, organic compounds, oil and grease, pesticides | • Locate storm drains and cover with visqueen to prevent pollutants from entering.<br>• Stage absorbent materials near storm drain if needed to address spills.<br>• Cover packaging and sorting area with tent/canopy during inclement weather.<br>• Line sorting area with visqueen.<br>• Package wastes in sorting area.<br>• Store hazardous waste in containers on a wood pallet until loaded on truck for shipment.<br>• Inspect parking lot at end of event and remove visqueen from storm drains and pick-up any litter. |
| Refuse Dumpsters | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Landscaping | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |

### 6.5.3.2 Additional Controls for Municipal Areas and Activates

The Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection as described in detail in Section 6.5.4.1 “Facilities Inspections and Improvements.”

## 6.5.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

### 6.5.4.1 Facility Inspections and Improvements

This section applies to ESD which maintains the household hazardous waste transfer facility. The Municipal Permit requires that the City inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges (Note: see Section 6.5.4.2, “Pollutant Discharge Notification” below for reporting requirements).

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection. As shown in Table 6.5-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to April).

**Table 6.5-3 Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January – April |

If as a result of the inspection ESD determines that improvements to their BMPs are required, ESD will perform the action (e.g., repair a structural BMP), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved. Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second annual inspection. If ESD determines that the modifications require additional time or funds to implement, ESD will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Facility Inspection Forms are attached as Appendix XIV, "Inspection Forms" and are also located on the City's website.[2]

### 6.5.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis by ESD and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When ESD determines that a discharge poses a significant threat to water quality or human health, ESD must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City's Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions

[2] http://www.sandiego.gov/thinkblue/resources/index.shtml

must be sent by the ESD to the Regional Board within five working days of the day the event was identified.

ESD will also notify other regulatory agencies as required on Form 304.

### 6.5.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, “Education.”

#### 6.5.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division.

Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

#### 6.5.4.3.2 Activity-Specific Training

### Municipal Departments

This section describes activity-specific trainings provided by ESD. ESD will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.5-3. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.5-3. Activity-specific BMP Training(s) Provided by HHW Program.**

| Training Module/Item | Staff Level (i.e., Supervisor, Crew, etc.) | Schedule |
|---|---|---|
| Proper BMPs for Collecting, Packaging, and Storing HHW | Contractor Staff<br>City Field Crew Employees if applicable | Ongoing<br>Tailgate safety briefing conducted before operations at HHW transfer facility and one-day events. |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

#### 6.5.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by ESD in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.5-5 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.5-5. Department External Outreach Activities by Target Audience.**

| Dept Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | |
|---|---|---|
| 1. HHW Transfer Facility Brochure | 4 | Ongoing |
| 2. Auto Product Recycling Event Flyer | 4 | Ongoing |
| 3. Auto Product Recycling Event Water Bill Insert | 4 - 5 - Other – City Water Bill Customer List | 1 – 2 times annually |
| 4. Auto Product Recycling Event *Pennysaver* Inserts | 4 - 5 – Other – Selected zip codes all mailing addresses in zip code | Each Event (7-8 per year) |
| 5. Auto Product Recycling Event San Diego *Union-Tribune* Inserts | 4 - 5 – Other – Selected zip codes - all subscribers in zip code | Each Event (7-8 per year) |
| 6. Auto Product Recycling Event Ads | 4 – 5 | 1-5 ads per |

| Dept Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | |
|---|---|---|
| | | each event |
| 7. Direct Mail of HHW transfer facility brochure and Auto Product Recycling Event schedule. | 4 – ESD mailing list for selected City residential trash customers. | Based on funding and need. |
| 8. Customer Service Hotline | 1-4 | Ongoing |
| 9. Certified Oil Collection Center Inspections | 3 | Annually |
| 10. ESD web page | 1-4 | Update as needed |

### 6.5.4.4 Annual Report Forms

The Municipal Permit requires the City to report on their storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by Environmental Services Department to track expenditures for designing, developing, and implementing BMPs and educational activities. The Environmental Services Department annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, “Annual Report Form Questions” for department-specific reporting requirements.

# 6.6 Non-Emergency Fire-Rescue Activities

## 6.6.1 Background

This section is applicable to the Fire-Rescue Department's non-emergency fire-rescue activities. The goal of this Section is to reduce the impact of non-emergency activities on storm water quality. This section contains storm water best management practices (BMPs) the Fire-Rescue Department non-emergency fire-rescue activities, in addition to inventory, inspection, pollutant discharge reporting, education, and annual reporting requirements.

The Fire-Rescue Department's activities must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit," see Appendix I), as described in Table 6.6-1.

**Table 6.6-1. Municipal Permit Requirements – Non-Emergency Fire-Rescue Activities.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.6.2 | (Pg. 32) D. 3. a. (1); | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.6.3 | (Pg. 32-34) D. 3. a. (2,3,4,5) | Implement and maintain BMPs. |
| 6.6.4.1 | (Pg. 35) D. 3. a. (7); (Pg. 13) B.3. | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.6.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.6.4.3 | (Pg. 45) D. 5. b (1) (d) | Implement and designate an educational program for all City personnel and contractors. |
| 6.6.4.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.6.2 Source Characterization

The Fire-Rescue Department's inventory includes the 46 fire stations, fire communications, fire training facility, fire logistics facility, air operations base, 10 permanent lifeguards stations and 47 seasonal lifeguard towers (see Appendix III. "Municipal Inventory"). Department activities, their associated potential pollutants, and designated BMPs are listed in Table 6.6-2. The Fire-Rescue Department will update any changes to the inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.6.4.4 "Annual Report Forms."

## 6.6.3 Best Management Practice Requirements

### 6.6.3.1 Updated BMP Requirement

The BMPs identified in Sections 6.6.3.1.1 to 6.6.3.1.2 below are the Fire-Rescue Department's BMPs for non-emergency fire-rescue activities.

If the Fire-Rescue Department determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the San Diego Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance"), the Fire-Rescue Department will modify its activities to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, the Fire-Rescue Department will provide updates to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.6.4.4). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in "Illicit Discharge Detection and Elimination."

#### 6.6.3.1.1 Minimum BMPs

The Fire-Rescue Department will ensure that all City staff implement the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.6-2.
2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by Storm Water Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.
4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the "Storm Drain Inspection/Cleaning Schedule" in Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately the Fire-Rescue Department's responsibility to prevent pollutant discharges to the storm drain system. Therefore, the Fire-Rescue Department and/or contractors will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

The Fire-Rescue Department will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

#### 6.6.3.1.2 Activity-specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.6-2 will be implemented by Fire-Rescue Department's staff.

**Table 6.6-2. BMPs Designated for Areas and Activities at with Non-Emergency Fire Department Activities.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Hazardous Materials Spills (public and private) | hazardous materials | • Abate and mitigate all hazardous material spills (see Table 9-2 in "Illicit Discharge Detection and Elimination"). |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Hazardous Materials Storage Area | oil and grease, pesticides, nutrients, metals, organic compounds oxygen-demanding substances. | • Store materials in a Connex box, cover, or keep in secondary containment. |
| Hazardous Waste Storage Area | all | • Store all inside wastes in chemical storage and/or secondary containment.<br>• Store all outside wastes in secondary containment and cover. |
| Painting Activities | metals | • Do not perform paint preparation and equipment cleaning near storm drain system.<br>• Monitor weather and wind direction to ensure that paint does not enter storm drain system or receiving waters.<br>• Place canvas or plastic tarps under work to capture excess paint chips.<br>• Dispose of paint leftovers according to the hazmat requirements. |
| Refuse Dumpsters | sediments, metals, organic, compounds trash and debris, oxygen-demanding substances, oil and grease, bacteria and viruses. | • Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.<br>• Relocate dumpsters and bins away from storm drains.<br>• Discharge contaminated rain water that has accumulated from an open container to the sanitary sewer with MWWD permission or infiltrated onto landscaping.<br>• Ensure dumpsters are not leaking. If so, repair, cover, and/or exchange dumpsters.<br>• Place absorbent socks around bottom of scrap metal roll-off bins to capture runoff. |
| Training Activities | all | • Protect storm drains with filter fabric and gravel bags prior to the start of the activities.<br>• Direct water flows to the landscaped areas, whenever possible.<br>• When flows cannot be directed to a landscaped area, the officer in charge will ensure that debris is swept prior to starting the training activity and that the debris does not enter the storm drain system.<br>• Pre-plan live fire training activities to allow the integration of storm drain system protection.<br>• If an outside agency is using the facility, they will sign an agreement adhering to BMPs.<br>• Sweep up and dispose of properly any debris generated by a training activity. |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Vehicle and Equipment Fuel Dispensing Areas | oil and grease | • Prior to starting activities, locate storm drain system and prevent pollutants from entering.<br>• Use spill kits (dry clean up methods) for any spills. |
| Vehicle Maintenance (Small Equipment, Lifeguard, ATV, Personal Water Craft, Vessel, and Trailer) | sediments, metals, organic, compounds trash and debris, oil and grease. | • Prior to starting activities, locate storm drain system and prevent pollutants from entering.<br>• Use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste.Repair vehicle as soon as possible[2]<br>• If applicable, inspect outdoor drains and suspicious indoor drains in vehicle maintenance areas.<br>• Ensure wash water for specialized equipment and bleed line releases from air compressor units are disposed of properly.[3]<br>• Use spill kits (dry clean up methods) for any spills. |
| Vehicle Washing (Small Equipment, Lifeguard, ATV, Personal Water Craft, Vessel, and Trailer) | sediments, metals, organic, compounds oil and grease. | • Clean Fire-Rescue's light vehicles at Police Department substation automatic car washes or a commercial car wash.<br>• If vehicles are unable to be cleaned at the above sites, prior to starting activities, locate storm drain system and prevent pollutants from entering.<br>• Clean vehicles where runoff is directed to sanitary sewer system or to a drain with an oil/water separator.<br>• If washing in an area where wash water cannot be directed to the sanitary sewer, wet/dry vacuum wash water or let it evaporate, then sweep up area when dry. Dispose of to sanitary sewer system.<br>• Minimize use of detergents.<br>• Dispose of solutions sanitary sewer system.<br>• Dispose of cleaning solutions used on response equipment in a utility sink. |
| Washing of Vessels (moored or docked) | sediments, metals, organic, compounds oil and grease. | • Keep all bilges clean of oil and other contaminants using spill containers, and vacuum containers.<br>• When vessels are washed, use a minimum amount of biodegradable soap and discharge water into bay using bilge pumps.<br>• Whenever feasible all captured waste water will be emptied into sewer system. |
| Refuse Dumpsters | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Vehicle and Equipment Fuel Dispensing Areas | | • See this activity's BMP in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yard" |
| Material Handling/Storage and Disposal | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |

[2] Contact ESD-Hazardous Materials Management Program for assistance.
[3] See MWWD or ESD-HMMP for disposal options.

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Material Loading/Unloading | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Storm Drain System Inspection and Cleaning | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Parking Lot/Structure Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Landscaping | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |

### 6.6.3.2 Additional Controls for Municipal Areas and Activities

The Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection as described in detail in Section 6.6.4.1 "Facilities Inspections and Improvements."

## 6.6.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

### 6.6.4.1 Facility Inspections and Improvements

This section applies to the Fire-Rescue Department which maintains its own fire stations, training facility, air operations facility, life-guard stations, and repair facilities. The Municipal Permit requires that the Fire-rescue Department inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges. Note: see Section 6.6.4.2, "Pollutant Discharge Notification" below for reporting requirements.

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will

conduct a second facility inspection. As shown in Table 6.6-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to the end of April).

**Table 6.6-3. Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection the Fire-Rescue Department determines that improvements to its BMPs are required, the Fire-Rescue Department will perform the action (e.g., repair a structural BMP), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved. Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second inspection. If the Fire-Rescue Department determines that the modifications require additional time or funds to implement, the Fire-Rescue Department will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Facility Inspection Forms are attached as Appendix XIV, “Inspection Forms” and are also located on the City’s website.[4]

### 6.4.3 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis by the Fire-Rescue Department and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage would generally not be considered a significant event that would

[4] http://www.sandiego.gov/thinkblue/resources/index.shtml

require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When the Fire-rescue Department determines that a discharge poses a significant threat to water quality or human health, the Fire-Rescue Department must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City's Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the Fire-Rescue Department will to the Regional Board within five working days of the day the event was identified.

The Fire-Rescue Department will also notify other regulatory agencies as required on Form 304.

### 6.6.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
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- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, "Education."

#### 6.6.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

### New Employees

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

### Existing Employees

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

## 6.6.4.3.2 Activity-specific Training

### Municipal Departments

This section describes activity-specific trainings provided by the Fire-Rescue Department. The Fire-Rescue Department will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.6-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.6-4. Activity-specific Training.**

| Training Module/Item | Staff Level (i.e., Supervisor, Crew, etc.) | Available |
|---|---|---|
| Vehicle washing | All | Spring 2009 |
| Training Activities | All | Summer 2009 |
| Hazardous Waste Storage Area | All | Summer 2009 |
| Hazardous Materials Storage Area | All | Summer 2009 |
| Storm Drain System Inspection and Cleaning | All | Summer 2009 |
| Refuse Dumpsters | All | Summer 2009 |
| Landscaping | All | Summer 2009 |
| Parking Lot/Structure Maintenance | All | Summer 2009 |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 6.6.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by the Fire-Rescue Department in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.2-5 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.6-6. Department External Outreach Activities by Target Audience.**

| Dept Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Available |
|---|---|---|
| **Lifeguards** | | |
| 1. Boaters- Sewage/Bilge BMPs | 4 | July 2007 |
| 2. Recreation Vehicle- Sewage BMPs | 4 | July 2007 |
| 3. Beach Day Users- BMPs | 4 | August 2007 |
| 4. Mission Bay Boater's Guide/Map | 4 | Existing |

### 6.6.4.4 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by the Fire-Rescue Department to track expenditures for designing, developing, and implementing BMPs and educational activities. The department's annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirement.

# 6.7 Non-Emergency Police Activities

## 6.7.1 Background

This program section is applicable to the Police Department's non-emergency activities. The goal of this section is to reduce the impact of non-emergency police activities on storm water quality. This section contains storm water best management practices (BMPs) the Police Department will implement non-emergency activities in addition to inventory, inspection, pollutant discharge reporting, education, and annual reporting requirements.

The Police Department's activities must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-001, "Municipal Permit," see Appendix I), as described in Table 6.7-1.

**Table 6.7-1. Municipal Permit requirements – Non-Emergency Police Activities.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.7.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.7.3 | (Pg. 32-34) D. 3. a. (2,3,4,5) | Implement and maintain BMPs. |
| 6.7.4.1 | (Pg. 35) D. 3. a. (7) | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.7.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.7.4.3 | (Pg. 45) D. 5. (b, d); | Implement and designate an educational program for all City personnel. |
| 6.7.4.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.7.2 Source Characterization

The Police Department's facilities inventory includes nine area command stations, headquarters, and the traffic division, air patrol, canine patrol, and mounted patrol facilities (see Appendix III, "Municipal Inventory"). Department activities, their associated potential pollutants, and designated BMPs are listed in Table 6.7-2. The Police Department will update any changes to the inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.7.4.4, "Annual Report Forms."

## 6.7.3 Best Management Practice Requirements

### 6.7.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.7.3.1.1 to 6.7.3.1.2 below are the Police Department's BMPs for non-emergency activities.

If the Police Department determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the San Diego Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance"), the Police Department will modify its activities to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, the Police Department will provide updates to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.7.4.4). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in "Illicit Discharge Detection and Elimination."

#### 6.7.3.1.1 Minimum BMPs

The Police Department will ensure that all City staff implement the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.7-2.
2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by Storm Water Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.
4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the "Storm Drain Inspection/Cleaning Schedule" in Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately the Police Department's responsibility to prevent pollutant discharges to the storm drain system. Therefore, the Police Department will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

The Police Department will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

### 6.7.3.2 Activity Specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.7-2 will be implemented by Police Department's staff.

**Table 6.7-2. BMPs Designated for Areas and Activities Associated with Non-emergency Police Activities.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Vehicle Washing | sediments, metals, organic compounds, trash and debris, oil and grease | • Wash all police vehicles inside the automatic car wash.<br>• Wash Meter-Reader Vehicles inside of the automatic carwash with a hose. |
| Canine Unit | bacteria | • Officers from all jurisdictions pick up dog waste daily with bags and dispose of in trash cans.<br>• While on patrol, waste will be picked up and disposed of in trash cans immediately. |
| Pistol Range | sediments, metals | • Drains divert rain water from contacting the soils around the backdrop. |
| Mounted Unit | nutrients, sediments, organic compounds, trash and debris | • Wash horse trailers and rinse at Central Operations Yard in the wash rack.<br>• If horse manure is deposited while on patrol, the officer will phone the stables for another officer to come in a vehicle and pick up the manure. If no one is available, the officer will return in a vehicle after patrol and clean up the manure. The manure is placed in a garbage bag and disposed of in the trash.<br>• Collect horse manure in the turnouts and stalls daily and disposed of in a covered dumpster.<br>• Protect storm drains in the turnout area with sandbags to prevent sediment from entering.<br>• Conduct horse washing in the designated horse washing area that drains to the sanitary sewer. |
| Helicopter maintenance | sediments, metals, organic compounds, trash and debris, oil and grease | • Perform all repairs in the hangar. |
| Vehicle and Equipment Fuel Dispensing Areas | sediments, metals, organic compounds, trash and debris, oil and grease | • Prior to starting activities, locate storm drain system and prevent pollutants from entering.<br>• Use spill kits (dry clean up methods) for any spills. |
| Hazardous Waste Storage Area | nutrients, trash, oil and grease, pesticides, oxygen demanding compounds, metals | • Store all inside wastes are stored in chemical storage lockers and/or secondary containment.<br>• Store all outside wastes in secondary containment and cover. |
| Storm Drain System Inspection and Cleaning | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Refuse Dumpsters | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Landscaping | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Parking Lot/Structure Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Material Loading/Unloading | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Material Handling/Storage and Disposal | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Ponds and Fountain Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Roof Vents and Equipment Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| HVAC, Chillers and Refrigerators Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Cooling Tower Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Parking Structure Sump Pump Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |

### 6.7.3.2 Additional Controls for Municipal Areas and Activities

The Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, the Police Department will conduct a second facility inspection as described in detail in Section 6.2.4.1 "Facilities Inspections and Improvements."

## 6.7.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

### 6.7.4.1 Facility Inspections and Improvements

This section applies to the Police Department's facilities (see Appendix III, "Municipal Inventory"). The Municipal Permit requires that the City inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges (Note: see Section 6.7.4.2, "Pollutant Discharge Notification" below for reporting requirements).

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection. As shown in Table 6.7-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to the end of April).

**Table 6.7-3. Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection the Police Department determines that improvements to their BMPs are required, the Police Department will perform the action (e.g., repair a structural BMP), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved (Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second inspection). If the Police Department determines that the modifications require additional time or funds to implement, the Police Department will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Facility Inspection Forms are attached as Appendix XIV, "Inspection Forms" and are also located on the City's website.[2]

### 6.7.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional

[2] http://www.sandiego.gov/thinkblue/resources/index.shtml

Board). A significant threat to water quality or human health is determined on a case-by-case basis by The Police Department and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When The Police Department determines that a discharge poses a significant threat to water quality or human health, The Police Department must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City's Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the Police Department to the Regional Board within five working days of the day the event was identified.

The Police Department will also notify other regulatory agencies as required on Form 304.

### 6.7.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, “Education.”

#### 6.7.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

#### 6.7.4.3.2 Activity-specific Training

**Municipal Departments**

This section describes activity-specific trainings provided by the Police Department. The Police Department will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.7-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.7-4. Activity Specific BMP Training(s) Provided by the Police Department.**

| Training Module/Item | Staff Level (i.e., Supervisor, Crew, etc.) | Schedule |
|---|---|---|
| Storm Water BMPs for Air Support | Supervisor, Crew | Ongoing |
| Storm Water BMPS for Canine Patrol Units- educating officers from all jurisdictions pick up dog waste daily with bags and dispose of in trash cans. | Supervisor, Crew | Ongoing |
| Storm Water BMPs for Mounted Police | Supervisor, Crew | Ongoing |
| Parking Structure Sump Pump Maintenance | Supervisor, Crew | Ongoing |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 6.7.4.4 Annual Report Forms

The Municipal Permit requires the City to report on their storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by the Police Department to track expenditures for designing, developing, and implementing BMPs and educational activities. The Police Department's annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

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# *6.8 Metropolitan Wastewater Collection*

## 6.8.1 Background

The Metropolitan Wastewater Department (MWWD) Collection Division operates the facilities covered under this section. Among other tasks, the Collection Division provides ongoing preventive cleaning, maintenance, and repair of the Municipal Sewage Collection System, including emergency removal of sewer line stoppages, equipment overhaul and repair, on-site facility inspections, and maintenance of the structural integrity of sewer mains and manholes in the collection system. Although sewage systems themselves are not a regular source of storm water pollution, raw sewage contains pollutants that can pose a serious threat to both human health and the quality of receiving waters if they enter the storm drain system through incidents such as spills, leaks, or overflows. The goal of this program is to reduce the impact of wastewater collection activities on storm water quality in the San Diego region. This section contains storm water best management practices (BMPs) that MMWD will implement for wastewater collection activities, in addition to inventory, inspection, pollutant discharge reporting, education, and annual reporting requirements.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit," see Appendix I), as described in Table 6.8-1.

**Table 6.8-1. Municipal Permit requirements – Metropolitan Wastewater Collection**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.8.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities, and potential sources of pollutants. |
| 6.8.3 | (Pg. 32-34) D. 3. a. (2,3,4,5,6) | Implement and maintain BMPs. |
| 6.8.4.1 | (Pg. 35) D. 3. a. (7);<br>(Pg. 43) D.4.g | Inspect municipal areas, activities and implement any necessary follow up actions. Implement sanitary sewer and storm drain system surveys and preventive maintenance. Prevent, respond to, contain and clean up sewage spills. |
| 6.8.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.8.4.3 | (Pg. 45) D. 5. b. (1) (d) | Implement and designate an educational program for all City personnel and contractors. |
| 6.8.4.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j);<br>(Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.8.2 Source Characterization

MWWD Facilities that are covered under this program component include office buildings, sanitary sewer pipes, and approximately 90 small pump stations. The complete inventory of MWWD assets are included in Appendix III, ”Municipal Inventory.” MWWD’s activities, their associated potential pollutants, and designated BMPs are listed in Table 6.8-2. MWWD will update any changes to the inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.8.4.4, “Annual Report Forms.”

## 6.8.3 Best Management Practice Requirements

### 6.8.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.8.3.1.1 to 6.8.3.1.2 below are the BMPs required of MMWD. The minimum and activity-specific BMPs identified in this section are documented and implemented via the City’s, Sewer Overflow Response and Tracking Plan (SORTP).

If MWWD determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the City’s Storm Water Management and Discharge Control Ordinance (“Storm Water Ordinance”), MWWD will modify its activities to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, MWWD will provide an updated SORTP or other internal Division policy or procedural manuals to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.8.4.4). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in “Illicit Discharge Detection and Elimination.”

#### 6.8.3.1.1 Minimum BMPs

MWWD will ensure that all City staff implement the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.8-2.
2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by Storm Water Ordinance Section 43.03. Use a broom,

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.

4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the "Storm Drain Inspection/Cleaning Schedule" in Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.
5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately MWWD's responsibility to prevent pollutant discharges to the storm drain system. Therefore, MWWD will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

MWWD will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of January 25, 2008).

### 6.8.3.1.2 Activity-Specific BMPs

In addition to the minimum BMPs listed above, the following activity-specific BMPs listed in Table 6.8-2 will be implemented by MMWD.

**Table 6.8-2. BMPs Designated for Areas and Activities at MWWD Collection Facilities.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Clean Up and Mitigation Activities after a Sewer Spill (public and private) | nutrients, metals, oxygen-demanding substances, bacteria and viruses | • Operate a sewer spill reporting hotline.<br>• When potential sewer spills are identified through the sewer spill hotline, Storm Water Pollution Prevention Division hotline, visual observations or other means, MWWD will respond to each case<br>• If it is a public spill, implement measures to identify the source, abate it, contain, and clean up the spill from the surface and storm drain system (see Appendix XVII).<br>• If it is a private spill, the responsible party will repair the problem, clean up the spill from the surface and storm drain system, and prevent future discharges (see Table 9-2 in "Illicit Discharge Detection and Elimination").<br>• If the private spill does not have a responsible party, MWWD will identify the source, abate it, contain, and clean up the spill from the surface and storm drain system. |
| Erosion Control at Work Sites | sediments, trash and debris, nutrients | • Disturb as little vegetation on site as possible.<br>• Minimize soil exposure time.<br>• Stabilize exposed soils.<br>• Clean up with a minimum amount of water keeping debris from entering the storm drain system. |
| Structural Controls Maintenance | organic compounds, trash and debris, bacteria and viruses | • Inspect and remove the wastes that may have accumulated, and properly dispose of all wastes.<br>• Eliminate and/or clean up discharges to the storm drain system during maintenance and cleaning operations. |
| Prevent Sewage Spills | nutrients, metals, oxygen-demanding substances, bacteria and viruses | • Implement a system wide cleaning plan where every pipe is cleaned on at least a 5 year frequency. If a problem is noted, adjust the cleaning frequency and repair or replace the pipe. |
| Prevent Infiltration from Sanitary Sewer to Storm Drain System | nutrients, metals, oxygen-demanding substances, bacteria and viruses | • During routine maintenance and inspection, note the condition of sanitary sewer structures and identify areas that are in need of repair or maintenance to prevent seepage from the sewer system to the storm drain system.<br>• Educate field staff to recognize suspected seepage from the municipal sewer to the storm drain system.<br>• Televise sewer mains to determine the structural integrity and condition of pipes.<br>• Comply with the County Health Department's minimum requirement for the acceptable separation between the newly installed sewer pipelines and the storm drain system.<br>• Eliminate any known illicit connection between the sewer system and the storm drain system as described above. |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Stock Piles Associated with Emergency Repairs | sediments, nutrients | • Identify inlet catch basins and protect with sand bags.<br>• Surround spoil piles left on street and surround with sand bags.<br>• Sweep up and bag debris. Don't sweep it into the trench.<br>• Capture wash water and dispose of properly.<br>• Dispose of sewage contaminated soils at the sanitary landfill immediately. |
| Elimination of Illicit Discharges and Connections | nutrients, metals, oxygen-demanding substances, bacteria and viruses | • See Appendix XVII, SORTP, Section 7.0 Overflow Response, Containment, Correction and Clean-Up) |
| Concrete and Asphalt Work | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Materials Handling, Storage, and Disposal | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Material Loading and Unloading | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Parking Lot/Structure Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Landscaping | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Storm Drain System Inspection and Cleaning | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Vehicle and Equipment Washing | | • See this activity's BMP in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yards" |
| Vehicle Equipment Maintenance | | • See this activity's BMP in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yards" |
| Vehicle and Equipment Fuel Dispensing Areas | | See this activity's BMP in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yards" |

### 6.8.3.2 Additional Controls for Municipal Areas and Activities

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to

this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection as described in detail in Section 6.8.4.1 “Facilities Inspections and Improvements.”

### 6.8.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

#### 6.8.4.1 Facility Inspections and Improvements

The Municipal Permit requires that MWWD inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges Note: see Section 6.8.4.2, “Pollutant Discharge Notification” below for reporting requirements.

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection. As shown in Table 6.8-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to the end of April).

**Table 6.8-3. Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection MWWD determines that improvements to its BMPs are required, MWWD will perform the action (e.g., repair a structural BMP), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved. Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second inspection. If the Division determines that the modifications require additional time or funds to implement, the Division will develop an anticipated schedule for when the

modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Facility Inspection Forms are attached as Appendix XIV, "Inspection Forms" and are also located on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml.

### 6.8.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis by MWWD and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When MWWD determines that a discharge poses a significant threat to water quality or human health, MWWD must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City's Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by MWWD to the Regional Board within five working days of the day the event was identified. MWWD will also notify other regulatory agencies as required on Form 304.

### 6.8.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate.

- Municipal Departments and Personnel

- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, “Education.”

#### 6.8.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

### 6.8.4.3.2 Activity-specific Training

## Municipal Departments

This section describes activity-specific trainings provided by MWWD. MWWD will create, execute, and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.8-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.8-4. Activity-Specific BMP Training(s) provided by MMWD.**

| Training Module/Item [ | Staff Level (i.e., Supervisor, Crew, etc.) | Schedule |
|---|---|---|
| Hazardous Waste Operations & Emergency Response | Supervisor, Crew | Ongoing |
| International Organization for Standardization (ISO) Awareness Training 07 | Supervisor, Crew | Ongoing |
| ISO 14001 Safety Tailgate | Supervisor, Crew | Ongoing |
| ISO 14001 (Awareness) | Supervisor, Crew | Ongoing |
| ISO 14001 (BMP Training/Collection Division | Supervisor, Crew | Ongoing |
| ISO 14001 (Environmental Coordinator) | Supervisor, Crew | Ongoing |
| ISO 14001 (Internal Auditor) | Supervisor, Crew | Ongoing |
| ISO 14001 (Intro Overview) | Supervisor, Crew | Ongoing |
| Storm Water - BMPS - WWCD | Supervisor, Crew | Ongoing |
| Storm Water Pollution Prevention – General | Supervisor, Crew | Ongoing |
| Tailgate (Hazardous Material Control Program) | Supervisor, Crew | Ongoing |
| Tailgate (Hazardous Plants) | Supervisor, Crew | Ongoing |
| Tailgate (Hazardous Waste – Antifreeze Coolant) | Supervisor, Crew | Ongoing |
| Tailgate (Hazardous Waste Handling and Storage) | Supervisor, Crew | Ongoing |
| Tailgate (Hazardous Waste Minimization) | Supervisor. Crew | Ongoing |
| Tailgate (ISO 14001 – Objective/Targets 2005) | Supervisor. Crew | Ongoing |
| Tailgate (ISO 14001 - Recycling) | Supervisor, Crew | Ongoing |
| Tailgate (ISO 14001 Safety) | Supervisor, Crew | Ongoing |
| Tailgate (ISO 14401 - Audit) | Supervisor, Crew | Ongoing |
| Tailgate (Storm Water and You) | Supervisor, Crew | Ongoing |
| Tailgate (Storm Water Pollution Prev. Program) | Supervisor, Crew | Ongoing |
| Hazardous Waste Operations and Emergency Response | Supervisor, Crew | Ongoing |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 6.8.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by MWWD in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials).

**Table 6.8-5. MWWD External Outreach Activities by Target Audience.**

| Department Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Schedule |
|---|---|---|
| **Metropolitan Wastewater Collection Division:** | | |
| Canyon Watch Program | 3,4 | Ongoing |
| Food Establishment Wastewater Discharge Program (FEWD) | 3 | |
| Sewer Spill Hotline | 1,2,3,4,5 | Ongoing |
| The FOG Program (Fats, Oils and Grease) Brochures, magnets, grease scrapers, pencils, etc.) | 3,4,5 | Ongoing |
| **Treatment and Disposal Division** | | |
| School Education Tours of Treatment Plants | 4 | Ongoing |
| Pt. Loma Wastewater Treatment Plant Brochure | 2,3,4 | Ongoing |
| South Bay Water Reclamation Plant Brochure | 2,3,4 | Ongoing |
| North City Water Reclamation Plant Brochure | 2,3,4 | Ongoing |
| Metro Biosolids Center Brochure | 1,2,3,4,5 | Ongoing |
| North City Water Reclamation Plant Brochure | 1,2,3,4,5 | Ongoing |
| **Environmental Monitoring and Technical Services Division** | | |
| Industrial Wastewater Control Program (IWCP) Brochure | 1,2,3,4,5 | Ongoing |
| Ocean Monitoring Brochure | 4,5 | Ongoing |
| **Department-wide** | | |
| MWWD website | 1,2,3,4,5 | Ongoing |
| Informational Videos on MWWD website (17) | 1,2,3,4,5 | Ongoing |
| Water/Sewer bill inserts | 2,3,4,5 | |
| Metropolitan Wastewater Department Brochure | 2,3,4,5 | Ongoing |
| MWWD Energy Fact Sheet | 2,3,4,5 | Ongoing |
| MWWD Information Line | 1,2,3,4,5 | Ongoing |
| City Hall elevator posters | 3,4 | Ongoing |

### 6.8.4.4 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by MMWD to track expenditures for designing, developing, and implementing BMPs and educational activities. The Division's annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

# 6.9 Metropolitan Wastewater Treatment and Maintenance

## 6.9.1 Background

The Metropolitan Wastewater Department (MWWD) is responsible for the conveyance, treatment and disposal of wastewater and its by-products. This section is relevant to Treatment and Disposal, Environmental Monitoring Technical Services, and Engineering and Program Management Divisions, and also to Central Support staff who oversee department-wide facilities maintenance. In addition to operating plants and pump stations, MWWD is responsible for regulatory compliance, design, construction, and upgrades to facilities, among other tasks.

Although sewage systems themselves should not be a regular source of storm water pollution, raw sewage contains pollutants that can pose a serious threat to both human health and the quality of receiving waters if it enters the storm drain system through incidents such as spills, leaks, or overflows. The goal of this program is to reduce the impact of City-owned wastewater facilities, support facilities, and associated construction activities on storm water quality in the San Diego region. This section contains storm water best management practices (BMPs) that MWWD staff and its contractors will implement for treatment and maintenance activities, in addition to inventory, inspection, pollutant discharge reporting, education, and annual reporting requirements.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit," see Appendix I), as described in Table 6.9-1.

**Table 6.9-1. Municipal Permit Requirements – Metropolitan Wastewater Treatment and Maintenance.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.9.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities, and potential sources of pollutants. |
| 6.9.3 | (Pg. 32-34) D. 3. a. (2,3,4,5,6) | Implement and maintain BMPs. |
| 6.9.4.1 | (Pg. 35) D. 3. a. (7);<br>(Pg. 43) D.4.g | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.9.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.9.4.3 | (Pg. 45) D. 5. b. (1) (d) | Implement and designate an educational program for all MWWD personnel and contractors. |
| 6.9.4.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j);<br>(Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

### 6.9.2 Source Characterization

MWWD's Treatment and Disposal facilities can be divided into two categories. The first category, hereafter referred to as "plants", includes the Point Loma Wastewater Treatment Plant, the North City Water Reclamation Plant, the South Bay Water Reclamation Plant, and the Metropolitan Biosolids Center. The second category contains the pump stations. The aforementioned facilities are subject to the California General Industrial Activities Storm Water National Pollutant Discharge Elimination System (NPDES) Permit. As such, these facilities have Storm Water Pollution Prevention Plans (SWPPPs) in place. In addition to the plants and pump stations, MWWD staff oversees the facility management of the Metropolitan Operations Complex (MOC) and the Environmental Monitoring and Technical Services Laboratory. The complete inventory of MWWD's facilities is included in Appendix III, "Municipal Inventory." MWWD activities, their associated potential pollutants, and designated BMPs are listed in Table 6.9-2. MWWD will update any changes to the inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.9.4.4, "Annual Report Forms."

### 6.9.3 Best Management Practice Requirements

#### 6.9.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.9.3.1 to 6.9.3.2 are the BMPs required for MWWD treatment and maintenance activities.

If MWWD determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the San Diego Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance"), MWWD will modify its activities to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, MWWD will provide updates to SWPPPs in addition to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.9.4.4). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in "Illicit Discharge Detection and Elimination."

##### 6.9.3.1.1 Minimum BMPs

MWWD will ensure that all City staff implements the following minimum BMPs, as applicable.

1. Prior to starting activities, <u>locate storm drain system and prevent pollutants from entering.</u> Activity-specific BMPs are listed in Table 6.9-2.

2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by Storm Water Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.
4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the “Storm Drain Inspection/Cleaning Schedule” in Table 6.3-2, “Buildings/Parking/Landscaping.” Annually inspect and clear open channels in a timely manner.
5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance..
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division’s municipal inventory (Appendix III) with “No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue”, as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately MWWD’s responsibility to prevent pollutant discharges to the storm drain system. Therefore, MWWD will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

MWWD will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

#### 6.9.3.1.2 Activity-Specific BMPs

In addition to the minimum BMPs listed above, the following activity-specific BMPs listed in Table 6.9-2 will be implemented by MWWD.

**Table 6.9-2. BMPs Designated for Areas and Activities Relating to MWWD Treatment and Maintenance.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Clean Up and Mitigation Activities after Public Sewer Spill | nutrients, metals, oxygen-demanding substances, bacteria and viruses | • When potential sewer spills are identified at or near MWWD facilities, MWWD will investigate each case and where spills are identified, implement measures to abate the spill and prevent and/or remove sewage from the storm drain system (see Table 9-2 in "Illicit Discharge Detection and Elimination"). |
| Erosion Control in Work Sites | sediments, trash and debris, nutrients | • Leave as much vegetation on site as possible, minimize soil exposure time, stabilize exposed soils<br>• Clean up with a minimum amount of water keeping debris from entering the storm drain system. |
| Spill/Leak/Overflow Response and Containment at Pump Stations | nutrients, metals, oxygen-demanding substances, bacteria and viruses | • Perform scheduled maintenance to maximize the reliability and life expectancy of all equipment.<br>• Prioritize repairs based on the nature and severity of the problem.<br>• Administer a corrective work order system to address problems with equipment identified by operations and maintenance staff.<br>• Maintain a spare parts inventory to reduce equipment repair time<br>• Track and schedule routine maintenance using the Computerized Preventative Maintenance Program. |
| Reuse or Disposal of Sewage Sludge | nutrients, metals, oxygen-demanding substances, bacteria and viruses | • Sludge is pumped to the MWWD Biosolids Center, dewatered, and trucked for off site disposal. |
| Reverse Osmosis and Deionization Units Maintenance | oxygen-demanding substances, organic compounds | • Ensure reject water from reverse osmosis (R.O.) units, in no way impacts the storm drain system. Divert reject water from R.O. units to the sanitary sewer.<br>• Discharge back flush water from deionization units into the sanitary sewer. |
| Boat maintenance | sediments, metals, organic, compounds | • Prior to starting activities, locate storm drain system and prevent pollutants from entering.<br>• Use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Repair vehicle |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| | trash and debris, oil and grease | as soon as possible. Contact ESD-HMMP for assistance.<br>• Use spill kits (dry clean up methods) for any spills. |
| Concrete and Asphalt Work | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping |
| Materials Handling, Storage, and Disposal | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Material Loading and Unloading | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Parking Lot/Structure Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Landscaping | | • See this activity's BMPs in Table 6.3-2, Section 6.3, "Buildings/Parking Facilities/Landscaping" |
| Storm Drain System Inspection and Cleaning | | • See this activity's BMPs in table 6.3-2, Section 6.3, "Buildings/Parking Facilities/Landscaping" |
| Refuse Dumpsters | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| HVAC, Chillers and Refrigerators Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Boiler Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Painting (Oil or Water Based) | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Dry Wall and Stucco Work | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Roof Vents and Equipment Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Cooling Tower Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Vehicle and Equipment Washing | | • See this activity's BMPs in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yards" |
| Vehicle Equipment Maintenance | | • See this activity's BMPs in Table 6.15-2 Section 6.15, "Vehicle Maintenance/Operations Yards" |
| Vehicle and Equipment Fuel Dispensing Areas | | • See this activity's BMPs in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yards" |
| Wastewater Facilities Design Upgrades | | • See this activity's BMPs in Table 4-2, Section 4.0, "Development Planning" |
| Wastewater Facilities Construction | | • See this activity's BMPs in Table 5-2, Section 5.0, "Construction" |

### 6.9.3.2 Additional Controls for Municipal Areas and Activities

The Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection as described in detail in section 6.9.4.1 “Facilities Inspections and Improvements.”

## 6.9.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

### 6.9.4.1 Facility Inspections and Improvements

The Municipal Permit requires that the City inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges (Note: see Section 6.9.4.2, “Pollutant Discharge Notification” below for reporting requirements).

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection. As shown in Table 6.9-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to the end of April).

**Table 6.9-3. Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection MWWD determines that improvements to its BMPs are required, MWWD will perform the action (e.g., repair a structural BMP and/or update the

SWPPPs), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved (Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second inspection). If MWWD determines that the modifications require additional time or funds to implement, MWWD will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

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This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

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### 6.9.4.3.2 Activity-Specific Training

### Municipal Departments

This section describes activity-specific trainings provided by the MWWD. The MWWD will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs instable 6.9-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.9-4. Activity-specific BMP Training(s) Provided by MWWD.**

| Training Module/Item | Staff Level (i.e., Supervisor, Crew, etc.) | Schedule |
|---|---|---|
| Hazardous Waste Operations and Emergency Response | Supervisor, Crew | Ongoing |
| International Organization for Standardization (ISO) Awareness Training 07 | Supervisor, Crew | Ongoing |
| ISO 14001 Safety Tailgate | Supervisor, Crew | Ongoing |
| ISO 14001 (Awareness) | Supervisor, Crew | Ongoing |
| ISO 14001 (BMP Training/Collection Division | Supervisor, Crew | Ongoing |
| ISO 14001 (Environmental Coordinator) | Supervisor, Crew | Ongoing |
| ISO 14001 (Internal Auditor) | Supervisor, Crew | Ongoing |
| ISO 14001 (Intro Overview) | Supervisor, Crew | Ongoing |
| Storm Water - BMPS - WWCD | Supervisor, Crew | Ongoing |
| Storm Water Pollution Prevention – General | Supervisor, Crew | Ongoing |
| Tailgate (Hazardous Material Control Program) | Supervisor, Crew | Ongoing |
| Tailgate (Hazardous Plants) | Supervisor, Crew | Ongoing |
| Tailgate (Hazardous Waste - Antifreeze Coolant) | Supervisor, Crew | Ongoing |
| Tailgate (Hazardous Waste Handling and Storage) | Supervisor, Crew | Ongoing |
| Tailgate (Hazardous Waste Minimization) | Supervisor. Crew | Ongoing |
| Tailgate (IOS 14001 - Objective/Targets 2005) | Supervisor. Crew | Ongoing |
| Tailgate (ISO 14001 - Recycling) | Supervisor, Crew | Ongoing |
| Tailgate (ISO 14001 Safety) | Supervisor, Crew | Ongoing |
| Tailgate (ISO 14401 - Audit) | Supervisor, Crew | Ongoing |
| Tailgate (Storm Water and You) | Supervisor, Crew | Ongoing |
| Tailgate (Storm Water Pollution Prev. Program) | Supervisor, Crew | Ongoing |
| Hazardous Waste Operations and Emergency Response | Supervisor, Crew | Ongoing |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 6.9.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by MWWD in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.9-5 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.9-5. MWWD External Outreach Activities by Target Audience.**

| Department Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Schedule |
|---|---|---|
| **Metropolitan Wastewater Collection Division:** | | |
| Canyon Watch Program | 3,4 | Ongoing |
| Food Establishment Wastewater Discharge Program (FEWD) | 3 | |
| Sewer Spill Hotline | 1,2,3,4,5 | Ongoing |
| The FOG Program (Fats, Oils and Grease) Brochures, magnets, grease scrapers, pencils, etc.) | 3,4,5 | Ongoing |
| **Treatment and Disposal Division** | | |
| School Education Tours of Treatment Plants | 4 | Ongoing |
| Pt. Loma Wastewater Treatment Plant Brochure | 2,3,4 | Ongoing |
| South Bay Water Reclamation Plant Brochure | 2,3,4 | Ongoing |
| North City Water Reclamation Plant Brochure | 2,3,4 | Ongoing |
| Metro Biosolids Center Brochure | 1,2,3,4,5 | Ongoing |
| North City Water Reclamation Plant Brochure | 1,2,3,4,5 | Ongoing |
| **Environmental Monitoring and Technical Services Division** | | |
| Industrial Wastewater Control Program (IWCP) Brochure | 1,2,3,4,5 | Ongoing |
| Ocean Monitoring Brochure | 4,5 | Ongoing |
| **Department-wide** | | |
| MWWD website | 1,2,3,4,5 | Ongoing |
| Informational Videos on MWWD website (17) | 1,2,3,4,5 | Ongoing |
| Water/Sewer bill inserts | 2,3,4,5 | |
| Metropolitan Wastewater Department Brochure | 2,3,4,5 | Ongoing |
| MWWD Energy Fact Sheet | 2,3,4,5 | Ongoing |
| MWWD Information Line | 1,2,3,4,5 | Ongoing |
| City Hall elevator posters | 3,4 | Ongoing |

### 6.9.4.4 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by MWWD to track expenditures for designing, developing, and implementing BMPs and educational activities. The MWWD annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, “Annual Report Form Questions” for department-specific reporting requirements.

# 6.10 Recreational Lands and Facilities

## 6.10.1 Background

This section is applicable to the City's Park and Recreation Department management and employees. The goal of this section is to ensure storm water pollution prevention practices are considered when conducting operation and maintenance activities while enriching lives through quality parks and programs. This section contains storm water best management practices (BMPs) that the Park and Recreation Department will implement for operations and maintenance activities, in addition to inventory, inspection, pollutant discharge reporting, education, and annual reporting requirements.

Maintenance practices at parks, open spaces, and recreation facilities vary and can include fertilizer and pesticide applications, vegetation maintenance and disposal, swimming pool maintenance and draining, trash and debris management, and landscaping. All of these maintenance practices have the potential to contribute pollutants to the storm drain system and receiving waters.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit," see Appendix I), as described in Table 6.10-1.

**Table 6.10-1. Municipal Permit Requirements – Recreational Lands and Facilities.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.10.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.10.3 | (Pg. 32-34) D. 3. a. (2,3,4,5) | Implement and maintain BMPs. |
| 6.10.4.1 | (Pg. 35) D. 3. a. (7) | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.10.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.10.4.3 | (Pg. 45) D. 5. (b, d); | Implement and designate an educational program for all City personnel and community groups |
| 6.10.4.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.10.2 Source Characterization

The Park and Recreation Department's facilities inventory includes park facilities and buildings, recreation areas, open spaces, pools, golf courses and a cemetery (see Appendix III, "Municipal Inventory"). Park and Recreation Department activities, their associated potential pollutants, and designated BMPs are listed in Table 6.10-2. The

Park and Recreation Department will update any changes to the facilities inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.10.4.4 “Annual Report Forms.”

## 6.10.3 Best Management Practice Requirements

### 6.10.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.10.3.1.1 to 6.10.3.1.2 below are the Park and Recreation Department BMPs for operations and maintenance activities. The minimum and activity-specific BMPs identified in this section are documented and implemented via the Park and Recreation Department’s Best Management Practices Manual.

If the Park and Recreation Department determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the San Diego Storm Water Management and Discharge Control Ordinance (“Storm Water Ordinance”), the Park and Recreation Department will modify its activities to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, the Park and Recreation Department will provide an updated manual to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.10.4.4). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in “Illicit Discharge Detection and Elimination.”

#### 6.10.3.1.1 Minimum BMPs

The Park and Recreation Department will ensure that all City staff implement the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.10-2.
2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by Storm Water Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the "Storm Drain Inspection/Cleaning Schedule" in Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.
5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately the Park and Recreation Department's responsibility to prevent pollutant discharges to the storm drain system. Therefore, the Park and Recreation Department will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

The Park and Recreation Department will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

#### 6.10.3.1.2 Activity-Specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.10-2 will be implemented during the Park and Recreations Department's operations and maintenance activities by City employees.

**Table 6.10-2. BMPs Designated for Areas and Activities at the Park and Recreation Department.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| All activities | all | • See Appendix XVIII, "Park and Recreation Department BMPs Manual" |
| Parking Lot/Structure Maintenance | sediments, trash and debris, oil and grease, metals | • See this activity's BMPs in Table 6.3-2, Section 6.3, and "Buildings/Parking/Landscaping." |
| Storm Drain System Inspection and Cleaning | sediments, nutrients, trash and debris | • See this activity's BMPs in Table 6.3-2, Section 6.3, and "Buildings/Parking/Landscaping." |

### 6.10.3.2 Additional Controls for Municipal Areas and Activities

The Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection as described in detail in Section 6.10.4.1 "Facilities Inspections and Improvements."

## 6.10.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

### 6.10.4.1 Facility Inspections and Improvements

The Municipal Permit requires that the City inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges. Note: see Section 6.10.4.2, "Pollutant Discharge Notification" below for reporting requirements.

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection. As shown in Table 6.10-3, the first inspection will

occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to April).

**Table 6.10-3. Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection the Park and Recreation Department determines that improvements to its BMPs are required, the Park and Recreation Department will perform the action (e.g., repair a structural BMP and/or update the manual), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved (Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second inspection). If the Park and Recreation Department determines that the modifications require additional time or funds to implement, the Park and Recreation Department will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Permit also requires inspections of special events. Special events are defined by the Municipal Code as having 75 or more persons. The City typically considers special events with 75 or more people as having the potential to generate significant amounts of trash and litter. Park and Recreation Dept. will conduct periodic inspections (no less than once annually) of each category, or type, of special event, to ensure that the Special Event Permit Requirements identified in Appendix VXIII, “Park and Recreation BMP Manual,” above are effectively being implemented. Park and Recreation staff will note any deficiencies during the inspection and coordinate with the Event Hosts/Organizers to resolve the issue. If potential discharges to the storm drain system are identified during the inspection, Park and Recreation staff will report the potential discharge to the City’s Storm Water Hotline at (619) 235-1000. These inspections will be included in the annual reporting information provided to the Storm Water Pollution Prevention Division each year (see Section 6.10.4.4, below).

The Municipal Facility and Special Event Inspection Forms are attached as Appendix XIV, “Inspection Forms” and are also located on the City’s website.[2]

[2] http://www.sandiego.gov/thinkblue/resources/index.shtml

### 6.10.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis by Park and Recreation Dept. and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When Park and Recreation Dept. determines that a discharge poses a significant threat to water quality or human health, Park and Recreation Dept. must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City’s website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City’s Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the Park and Recreation Dept. to the Regional Board within five working days of the day the event was identified.

Park and Recreation Dept. will also notify other regulatory agencies as required on Form 304.

### 6.10.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, “Education.”

### 6.10.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

#### New Employees

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

#### Existing Employees

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

### 6.10.4.3.2 Activity-Specific Training

#### Municipal Departments

This section describes activity-specific trainings provided by the Park and Recreation Dept. The Park and Recreation Dept. will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.10-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.10-4. Activity-specific BMP Training(s) provided by the Park and Recreation Department.**

| Training Module/Item | Staff Level (i.e., Supervisor, Crew, etc.) | Schedule |
|---|---|---|
| Storm Water BMPs as covered in Park and Recreation BMP Handbook (See Appendix X) | All Park and Rec Field Supervisors and Employees | Ongoing |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 6.10.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by the Park and Recreation Dept. in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.10-5 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.10-5. Department External Outreach Activities by Target Audience.**

| Department/Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Schedule |
|---|---|---|
| Issuing park permits | Residents who request to reserve parks for their activities | Ongoing |
| Issuing GDP's (indicating all storm drains) along with the permits if the activity could potentially impact a storm drain | Residents who request to reserve parks for their activities | Ongoing |
| Issuing department BMPs to the permittee for potential pollutants resulting from the activity | Residents who request to reserve parks for their activities | Ongoing |
| Issuing GDP's (indicating all storm drains) to consultants/contactors/vendors if the activity they are performing could potentially impact a storm drain | Consultants/contactors/vendors | Ongoing |
| Issuing department BMPs to consultants/contractors/vendors if the activity they are performing could potentially impact the storm drain | Consultants/contactors/vendors | Ongoing |
| Distributing outreach materials developed by the Storm Water Program to our recreation centers and permit centers for their counters, bulletin boards, and/or literature racks containing materials available to the general public who enter the facility | General public who enter the recreation facilities or who apply for permits | Ongoing |

### 6.10.4.4 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by Park and Recreation Department to track expenditures for designing, developing, and implementing BMPs and educational activities. The Park and Recreation Department's annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

# 6.11 Solid Waste Management

## 6.11.1 Background

This section is applicable to the Environmental Services Department (ESD) which operates and manages the collection, reduction, and disposal of solid waste within the City of San Diego. Services provided by ESD include the collection of refuse and recyclable wastes, solid waste and hazardous waste code enforcement activities, and educating the public and businesses on recycling options. Additionally, ESD is responsible for operating and maintaining the Miramar Landfill and seven inactive landfills. The goal of this section is to reduce the impact of the ESD's operations and maintenance activities on storm water quality and provide guidance for the protection of water quality and receiving waters. This section contains the storm water best management practices (BMPs) the ESD will implement during department operations and maintenance activities, in addition to inventory, inspection, pollutant discharge reporting, education, and annual reporting requirements.

ESD's facilities operation and maintenance programs must meet the requirements of the Municipal Storm Water Permit (Order R9-2007-0001, "Municipal Permit," see Appendix I), as described in Table 6.11-1.

**Table 6.11-1. Municipal Permit requirements – Solid Waste Management.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.11.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.11.3 | (Pg. 32-34) D. 3. a. (2,3,4,5) | Implement and maintain BMPs. |
| 6.11.4.1 | (Pg. 35) D. 3. a. (7) | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.11.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.11.4.3 | (Pg. 45) D. 5. (b, d); | Implement and designate an educational program for all City personnel. |
| 6.11.4.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.11.2 Source Characterization

The Environmental Services facilities inventory includes the "Green" Ridgehaven building, inactive and active landfills, and Miramar Place (see Appendix III, "Municipal Inventory"). ESD activities, their associated potential pollutants, and designated BMPs are listed in Table 6.11.2. ESD will update any changes to the inventory, activities,

and/or BMPs on an annual basis as part of the reporting process described in Section 6.11.4.4, “Annual Report Forms.”

## 6.11.3 Best Management Practice Requirements

### 6.11.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.11.3.1.1 to 6.11.3.1.2 below are the ESD’s BMPs for operations and maintenance for solid waste activities. The minimum and activity-specific BMPs identified in this section are documented and implemented via ESD’s standard operating procedures (SOPs).

If ESD determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the San Diego Storm Water Management and Discharge Control Ordinance (“Storm Water Ordinance”),, ESD will modify its activities or enhance BMPs to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, ESD will provide updates to its SOPs to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.11.4.4). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in “Illicit Discharge Detection and Elimination.”

#### 6.11.3.1.1 Minimum BMPs

ESD will ensure that all City staff implements the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.11-2.
2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by Storm Water Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.
4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

(see Appendix III) according the "Storm Drain Inspection/Cleaning Schedule" in Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.

5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately ESD's responsibility to prevent pollutant discharges to the storm drain system. Therefore, ESD will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

ESD will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

#### 6.11.3.1.2 Activity-Specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.11-2 will be implemented by ESD in its operations and maintenance of solid waste management activities.

**Table 6.11-2. BMPs designated for areas and activities associated with Solid Waste Management.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Community Cleanup Events | trash and debris, oxygen demanding substances, oil and grease, pesticides | • Curb Style Events – Code Enforcement and supervisory staff will carry spill kits on their vehicles.<br>• Bin Style Events – move material private vehicle to bin or packer. Return site to original condition when finished.<br>• Survey area after the event and dispose of any trash or debris to the landfill. |
| Christmas Tree Recycling | trash and debris, oxygen demanding substances | • Use bags and straw wattles protect storm drains inlets.<br>• When servicing sites, maintain and return to original condition. |
| Hazardous Waste Storage Area | nutrients, trash, oil and grease, pesticides, metals | • Store wastes are stored inside a designated chemical storage area, if inside.<br>• Store wastes in secondary containment, designated storage area, or on pallets and covered as necessary if outside during the rainy season. |
| Hazardous Materials Storage Area | nutrients, trash, oil and grease, pesticides, oxygen demanding compounds, metals | • Store materials in a Connex box or covered. |

<table>
<tr><th>Activity</th><th>Potential Pollutants</th><th>Best Management Practices</th></tr>
<tr><td>Storm Drain System Inspection and Cleaning</td><td>trash and debris</td><td>
<ul>
<li>Remove trash and debris from open channels and inlets and properly dispose of these materials.</li>
<li>Conduct annual visual inspections during the dry season especially if there are problem storm drain inlets where sediment/trash or other pollutants accumulate.</li>
<li>Conduct field investigations to detect and eliminate improper disposal of pollutants into the storm drain system (e.g., identify problem areas where discharges or illegal connections may occur and follow up stream to determine the source(s)).</li>
<li>Inspect and clear drainage facilities as needed during wet weather.</li>
<li>At a minimum, inspect and clean all storm drain facilities (catch basins, storm drain inlets, open channels, etc.) of debris or other foreign material according to the schedule below. When practical, work is to be done when conditions are dry. Dispose of materials properly.</li>
</ul>
Storm Drain Inspection/Cleaning Schedule
<table>
<tr><th>Debris Volume</th><th>Frequency*</th></tr>
<tr><td>1. High (e.g., tends to clog during rains)</td><td>Annually, between May 1 and September 30.**</td></tr>
<tr><td>2. Medium (e.g., tends to collect measurable debris without clogging)</td><td>Annually at any time during the year.**</td></tr>
<tr><td>3. Low (e.g., generally free of debris)</td><td>Annually at any time during the year for Fiscal Year 2008 and 2009. Every other year thereafter.</td></tr>
<tr><td colspan="2">* Any storm drain facility that is designed to be self-cleaning must be cleaned of any accumulated debris observed during an inspection immediately. Anthropogenic litter observed in open channels must be cleaned in a timely manner after obtaining all appropriate environmental clearances.<br><br>** Following two fiscal years of inspections, any storm drain facility that does not contain debris may be re-classified as a “Low” priority facility and may be inspected as needed, but not less than every other year.</td></tr>
</table>
</td></tr>
<tr><td>Refuse Dumpsters</td><td>trash and debris</td><td>
<ul>
<li>See this activity’s BMP in Table 6.3-2, Section 6.3, “Buildings/Parking/Landscaping”.</li>
</ul>
</td></tr>
</table>

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| | | |
| Landscaping | pesticides, nutrients, sediments | • Schedule chemical application at times when rain is not predicted and irrigation is not scheduled.<br>• Apply and handle pesticides and keep detailed records in accordance with existing state regulations (California Title 3, Division 6, "Pesticides and Pest Control Operations").<br>• Collect and dispose of unused chemicals as a regulated waste.[2]<br>• Use native plants when possible.<br>• Keep removed vegetation, including clippings, chips, loose soils, and pruning debris away from storm drain inlets and watercourses.<br>• Consider applying compost instead of chemical fertilizers.<br>• Rely on integrated pest management methods, including:<br>o No controls<br>o Physical/mechanical controls<br>o Environmental controls (mulching, pest-resistant vegetation, prescribed burns)<br>o Biological controls (predators, parasites, etc.)<br>o Less toxic chemical controls (e.g., soaps and oils) and/or hot water<br>• If absolutely necessary, use the least toxic chemicals that will do the job (e.g., biodegradable products). Avoid use of copper-based pesticides. |
| Parking Lot/Structure Maintenance | trash and debris, oil and grease | • Sweep and/or vacuum parking lot 1 x month<br>• Use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste.[3]<br>• Keep lids closed on solid waste cans and dumpsters at all times. Provide enough solid waste cans/dumpsters in all appropriate areas.<br>• Use plastic liners in trash and recycling receptacles in front of building. |
| Last Chance Recycling | trash and debris, metals, oxygen demanding substances | • Protect storm drain inlets with straw wattles.<br>• Use all weather treatment for tipping deck and vehicular ingress/egress surfaces. |
| Fire Sprinkler Flushing | sediments, nutrients | • Collect water in 5 gallon buckets and dispose of in sewer system. |
| Heavy Equipment at Landfill | oil and grease | • See Landfill Equipment Fluid Releases; Fueling Nozzle Leaks; and Hazardous Materials Spill Response and Reporting SOPs in Appendix XIX.<br>• Use drip pans and absorbent pads.<br>• Maintenance contractor maintains regulatory compliance and practices good housekeeping techniques. |

[2] Contact ESD HMMP for instructions.
[3] Contact ESD-HMMP for disposal options.

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Landfill Operations | sediments, nutrients, trash and debris and oil and grease, bacteria and viruses | • Compact all solid waste cover daily. No water is allowed to stand on any landfill cover.<br>• Apply mulch onto slope, intermediate cover areas, and stockpiles.<br>• Revegetate when operationally feasible.<br>• Pump down sedimentation basin between storm events.<br>• Apply tackifier to exposed cut/fill areas.<br>• See "Inclement Weather; General Site Maintenance; Litter Control; and Leachate Disposal SOPs" in Appendix XIX. |
| Greenery Operations | sediments, nutrients, trash and debris and oil and grease, bacteria and viruses | • Divert run-on around the site.<br>• Cover bare areas with mulch/compost.<br>• Haul trash contaminated or unsuitable materials to the landfill.<br>• Maintain adequate windrow temperatures and moisture content.<br>• Finished product is stored upgradient of raw product.<br>• Ensure equipment that is used to handle finished product is free of any residue of raw product.<br>• See "Inclement Weather; General Site Maintenance; Litter Control; Windrow Building Operations; and Fecal Contamination Prevention SOPs" in Appendix XIX. |
| Landfill Gas Collection | sediment, metals, organic compounds | • Systems maintained to collect and properly dispose of landfill gas condensate.<br>• Materials for maintenance are stored in Connex box or covered. |
| Inactive landfills | sediments, nutrients, trash and debris | • Cover bare spots with mulch/compost.<br>• Install silt fences, wattles, geotextiles, rock rip rap, energy dissipaters or other BMPs as applicable.<br>• Revegetate as necessary.<br>• Maintain deck and slope surfaces for proper drainage.<br>• See "Minor and Major Grading and NPDES – Drainage Improvements SOPs" in Appendix XIX. |
| Native Plant Nursery | sediments, nutrients, pesticides | • Utilize computerized watering system, and closely monitor hand watering to avoid water run off. |
| Material Loading/Unloading | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Material Handling/Storage and Disposal | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Irrigation Repair | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Vehicle and Equipment Fuel Dispensing Areas | | • See this activity's BMPs in Table 6.15-2 Section 6.15, "Vehicle Maintenance/Operations Yards." |

### 6.11.3.2 Additional Controls fro Municipal Area and Activities

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will

conduct a second facility inspection as described in detail in Section 6.11.4.1 “Facilities Inspections and Improvements.”

### 6.11.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

#### 6.11.4.1 Facility Inspections and Improvements

This section applies to ESD which maintains its own buildings, grounds and the active and inactive landfills. The Municipal Permit requires that the City inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges (Note: see Section 6.11.4.2, “Pollutant Discharge Notification” below for reporting requirements).

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection. As shown in Table 6.11-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to the end of April).

**Table 6.11-3. Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection ESD determines that improvements to its BMPs are required, ESD will perform the action (e.g., repair a structural BMP and/or update the SOPs), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved (Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second inspection). If ESD determines that the modifications require additional time or funds to implement, ESD will develop an anticipated schedule for when the

modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Facility Inspection Forms are attached as Appendix XIV, “Inspection Forms” and are also located on the City’s website at http://www.sandiego.gov/thinkblue/resources/index.shtml.

### 6.11.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis by ESD and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When ESD determines that a discharge poses a significant threat to water quality or human health, ESD must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City’s website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City’s Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the ESD to the Regional Board within five working days of the day the event was identified.

ESD will also notify other regulatory agencies as required on Form 304.

### 6.11.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, “Education.”

#### 6.11.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

### 6.11.4.3.2 Activity-Specific Training

### Municipal Departments

This section describes activity-specific trainings provided by ESD. ESD will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.11-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.11-4. Activity-Specific BMP Training(s) Provided by ESD.**

| Training Module/Item | Staff Level (i.e., Supervisor, Crew, etc.) | Schedule |
|---|---|---|
| **Support Services** | | |
| Hazardous Material Handling | Supervisor, Crew | Annual |
| CRT Management and Handling | Supervisor, Crew | Ongoing |
| Handling and Management of Universal Waste | Supervisor, Crew | Ongoing |
| Managing Materials Associated with Community Cleanups | Supervisor, Crew | Ongoing |
| Management of Vehicle Batteries (illegal dump and community cleanups) | Supervisor, Crew | Ongoing |
| **HSET** | | |
| Review BMPs for hazardous waste storage area | Supervisor, Crew | 6/13/07 |
| **Facility Maintenance Staff And Vendors** | | |
| Storm Drain Maintenance (internal staff and vendor) | Supervisor, Crew | Spring 2008 |
| Parking Lot Maintenance (internal staff and vendor) | Supervisor, Crew | Spring 2008 |
| Litter and Recycling Container Storage Area Maintenance (internal staff) | Supervisor, Crew | Spring 2008 |
| Proper Fire Sprinkler Flushing Disposal (vendor) | Supervisor, Crew | Spring 2008 |
| Landscape and Irrigation Maintenance (vendor) | Supervisor, Crew | Spring 2008 |
| Fountain Maintenance (internal staff) | Supervisor, Crew | Spring 2008 |
| **Disposal Staff** | | |
| Standard Operating Procedures (SOPs) | Supervisor, EMS manager | Ongoing |
| BMP installation | Supervisor | Ongoing |
| Nursery operations | Supervisor | Ongoing |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 6.11.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by ESD in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.11-5 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.11-5. Department External Outreach Activities by Target Audience.**

| Department/Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Available |
|---|---|---|
| Think Blue informational materials on display in Environmental Services Foyer information rack | 1,2,3,4,5 | Summer 2008 |
| Storm Water related article placement in *Curbsider Newsletter* | 1,2,3,4,5 | Winter 2008 |

### 6.11.4.4 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by Environmental Services Department to track expenditures for designing, developing, and implementing BMPs and educational activities. ESD's annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

# 6.12 *Special Events*

## 6.12.1 Background

This section is applicable to the Office of Special Events, Community which issues permits for special events as defined by the San Diego Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance") §22.4. The goal of this section is to reduce the impact of special events on storm water quality. It contains storm water best management practices (BMPs) the Office of Special Events will implement, in addition to source identification, inspection, pollutant discharge reporting, education and annual reporting requirements.

The Office of Special Events provides a number of event-related services. The primary function is to provide permits for events that occur on public property. Typical events for which the Office of Special Events provide permitting services include runs, walks, triathlons, festivals, and parades. In addition, the Park and Recreation Department, Water Department, and Qualcomm Stadium staff issue special event permits for activities taking place on land managed by these departments and are addressed in other Jurisdictional Urban Runoff Management Plan (URMP) sections. In general, any organized activity involving the use of, or having impact upon, public property, public facilities, parks, beaches, sidewalks, street areas, or the temporary use of private property in a manner that varies from its current land use, requires a special event permit.

The City's programs must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit," see Appendix I), as described in Table 6.12-1.

**Table 6.12-1. Municipal Permit Requirements – Special Events.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.12.3 | (Pg. 33) D. 3. a. (2)(f) | Require implementation of BMPs at special events. |
| 6.12.4 | (Pg. 35) D. 3. a. (7) | Inspect special event venues following the events and implement any necessary follow-up actions. |
| 6.12.4.2 | (Pg B-6) Attachment B.5.(e) | Report pollutant discharges to the storm drain system or receiving waters to the Storm Water Division and San Diego Regional Water Control Board (Regional Board). |
| 6.12.4.3 | (Pg. 44) D.5.a.(1);<br>(Pg. 45) D.5.b. (1) (d) | Implement an educational program for City personnel and appropriate audiences at special events. |
| 6.12.4.4.and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J.3.a.(c,g,j);<br>(Pg. 51) G.3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

### 6.12.2 Source Characterization

Although special events permitted by the City occur on City property, the special event itself is not considered a “municipal facility” or “municipal area” in the municipal inventory under the Municipal Permit.

### 6.12.3 Best Management Practice Requirements

#### 6.12.3.1 Updated BMP Requirements

BMPs identified in Section 6.12.3.2 below are the BMPs that the Office of Special Events will ensure are included in the special event permit application language.

It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. Departments may improve or modify these BMPs at any time if they determine it will improve their operations. Whenever the BMPs are improved or revised, the Office of Special Events will provide updates to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.12.4.4).

#### 6.12.3.2 BMPs in Special Event Permits

**Table 6.12-2. BMPs Designated for the Office of Special Events.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Special Event Permitting | Any | • Report discharges to the storm drain system at special events to the City’s Storm Water Hotline, (619) 235-1000.<br>• Follow the 24-Hour Significant Discharge Reporting procedures outlined in Section 6.12.4.2, below.<br>• Review special event permits and when applicable, require the appropriate conditions listed in the “Special Event Permit Application Language” below in special event permit applications.<br><br>**<u>Special Event Permit Application Requirements:</u>**<br>All City-wide Special Event Permit Applicants will be required to:<br><br>1. Identify Storm Drains Impacted by Event<br>Identify the location of all the storm drains inside, or adjacent to the perimeter of the proposed event venue. Clearly mark the location of each storm drain on your Site Plan or Route Map. Applicants are encouraged to use the symbol provided by the Office of Special Events.<br><br>Large-scale events with the potential to generate pollutants outside of the proposed event venue perimeter may be required to identify additional storms drains that could be impacted by event-related activities.<br><br>2. Accept Terms of General Compliance Statement: |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| | | In submitting this City-wide Special Event Permit Application, the event Host and/or Organizer agrees to comply with all storm water discharge regulations as governed by the City of San Diego Storm Water Ordinance §43.03, "*Stormwater Management and Discharge Contro*l." Under the Storm Water Management and Discharge Control Ordinance, it is illegal to discharge pollutants into the City's storm drain system. Failure to prevent illegal discharges can result in fines up to $10,000 per day, per violation. The Host and/or Organizer shall implement the BMPs identified in this permit application and shall notify Office of Special Events staff in the event of a pollutant discharge to the storm drain system. However, please note that it is ultimately the Host and/or Organizer's responsibility to prevent pollutant discharges to the storm drain system. Therefore, the Host and/or Organizer shall be responsible for identifying and implementing any additional BMPs that may be necessary to avoid discharging pollutants into the storm drain system.<br><br>3. Identify/Describe Storm Water Best Management Practices (BMPs) to be used at the event. Suggested BMP options include, but are not limited to the following. Please note that if the suggested BMPs are not selected, the Event Host and/or Organizer must propose equivalent BMPs, satisfactory to the Office of Special Events.<br><br>A. Outreach<br><br>Event Hosts/Organizers are encouraged to train event staff, vendors, attendees, and other participants in storm water pollution prevention activities at the event venue and to notify all vendors of their storm water pollution prevention responsibilities.<br><br>B. Storm Drain Protection<br><br>Event Hosts/Organizers are encouraged to develop appropriate strategies to protect all storm drains identified on their site plans including all storm drains inside, or adjacent to the perimeter of the proposed event venue.<br><br>Pollution Prevention Strategies may include, but are not limited to:<br><br>I. Provision of signage in visible areas throughout the event venue stating:<br><br>"Do not pour liquids or place trash into the storm drain. Violators will be subject to fines/ No tire líquidos ni basura en los desagües. Violadores serán multados"<br><br>II. Placement of food, craft, portable restrooms and other activities that may generate pollutants in areas significantly distanced from storm drains. Provide secondary containment underneath all portable restrooms (ADA accessible restrooms excluded).<br><br>III. Provision of spill kits comprised of paper towels, cloth towels, kitty litter and/or sand in all areas where food, beverages, craft/creative areas as well as where chemical or liquid activities or products such as portable restrooms |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| | | may be placed within or adjacent to the event venue.<br><br>All spill materials must be picked up out of the public right of way once the spilled material is absorbed off the ground. Spills leaving the event venue area into the surrounding streets must be captured and prevented from entering the surrounding non-event area(s) and storm drains.<br><br>IV. Placement of plastic sheeting (e.g. visqueen) or other material over storm drain openings to preclude the discharge of pollutant/liquids into the storm drain. Any materials used to block a storm drain must be removed from the venue site upon conclusion of the event dismantle process. THIS STRATEGY TO BE USED ONLY IF THERE IS NO RAIN PROJECTED DURING THE EVENT TIME FRAME.<br><br>DO NOT block a storm drain or use other BMPs that may create a potential for flooding if there is a chance of rain forecasted during the event time frame (including set-up and dismantle).<br><br>V. Venue Housekeeping<br><br>a. Provision of adequate personnel assigned to the collection of loose trash and debris throughout the event time frame including set-up and dismantle.<br><br>b. Sweeping of all venue and related areas such as parking and production sites. Use wet mops to remove any temporary public art (chalk, paint, charcoal, clay, etc.) at the conclusion of the event.<br><br>c. Ensure that any water used during the event (e.g., cooler water, mop water, food prep water, etc.) is either poured down a sink or released over a landscaped area with adequate capacity to contain the liquids and pollutants off the sidewalks, curbs, gutters, streets, and drains.<br><br>d. DO NOT power wash or rinse event residue within your event venue unless all wash water is captured and disposed of in a sanitary sewer or released over a landscaped area with adequate capacity to contain the liquid and pollutants.<br><br>VI. Other<br><br>Many special events have unique event components and operational circumstances. Please describe any additional or alternative storm drain protection strategies that you plan to use. |

### 6.12.3.2 Additional Controls for Municipal Areas and Activities

The Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or

water body on environmentally sensitive lands (all City facilities are subject to this requirement). The additional BMPs that fulfill this requirement have been incorporated in Table 6.12-2.

### 6.12.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

#### 6.12.4.1 Inspections

As required by the Municipal Permit, the Office of Special Events will conduct periodic inspections (no less than once annually) of each category, or type, of special event, to ensure that the Special Event Permit Requirements identified in Section 6.12.3.2, above are effectively being implemented. Office of Special Events staff will note any deficiencies during the inspection and coordinate with the Event Hosts/Organizers to resolve the issue. If potential discharges to the storm drain system are identified during the inspection, Office of Special Events staff will report the potential discharge to the City's Storm Water Hotline, (619) 235-1000. These inspections will be included in the annual reporting information provided to the Storm Water Pollution Prevention Division each year (See Section 6.12.4.4, below).

#### 6.12.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the Regional Water Board. A significant threat to water quality or human health is determined on a case-by-case basis by Office of Special Events and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and

removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When Office of Special Events determines that a discharge poses a significant threat to water quality or human health, Office of Special Events must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City's Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the Office of Special Events to the Regional Board within five working days of the day the event was identified.

Departments must also notify other regulatory agencies as required on Form 304.

### 6.12.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, "Education."

#### 6.12.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to

storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

### 6.12.4.3.2 Activity-Specific Training

**Municipal Departments**

This section describes activity-specific trainings provided by the Office of Special Events. The Office of Special Events will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.12-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.12-4. Activity Specific BMP Training(s) Provided by the Special Events.**

| Training Module/Item | Staff Level (i.e., Supervisor, Crew, etc.) | Available ] |
|---|---|---|
| Training Video | City wide Special Events Management team | July 2008 |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 6.12.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by the Office of Special Events in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.12-5 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.12-5. Department External Outreach Activities by Target Audience.**

| Dept Division<br>Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Schedule |
|---|---|---|
| **All Special Event Sections and Groups** | | |
| 1. Customer Video – "Storm Water Protection at Special Events.<br>Delivered to customer by:<br>o Website<br>o On line application<br>o Applicant workshop(s) | 3,4,5 | ongoing |

### 6.12.4.4 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by departments to track expenditures for designing, developing, and implementing BMPs and educational activities. The Office of Special Events' annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 of each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

# 6.13 Stadium

## 6.13.1 Background

This section is applicable to the City's Qualcomm Stadium ("the Stadium") management and employees, and any lessees or vendors who operate at Jack Murphy Field (Qualcomm Stadium and Jack Murphy Field are hereinafter referred to as "the Stadium).The goal of this section is to reduce the impacts of the Stadium events and operations on water quality in the San Diego River watershed. This section contains storm water best management practices (BMPs) the Stadium will implement for operations and maintenance activities, in addition to inventory, inspection, pollutant discharge reporting, education and annual reporting requirements.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No.R9-2007-0001 "Municipal Permit," see Appendix I), as described in Table 6.13-1.

**Table 6.13-1. Municipal Permit Requirements – Stadium.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.13.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.13.3 | (Pg. 32-34) D. 3. a. (2,3,4,5) | Implement and maintain BMPs. |
| 6.13.4.1 | (Pg. 35) D. 3. a. (7) | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.13.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.13.4.3 | (Pg. 45) D. 5. (b, d); | Implement and designate an educational program for all City personnel and contractors. |
| 6.13.4.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.13.2 Source Characterization

The Stadium is a municipal facility located at 9449 Friars Road, San Diego. This facility is included in the municipal inventory (see Appendix III "Municipal Inventory"). The Stadium's activities, its associated potential pollutants, and designated BMPs are listed in Table 6.13-2. The Stadium will update any changes to its activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.13.4.4, "Annual Report Form Questions."

## 6.13.3 Best Management Practices Requirements

### 6.13.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.13.3.1.1 to 6.13.3.1.2 below are the Stadium's minimum and activity specific BMPs for operations and maintenance activities.

If the Stadium determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the San Diego Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance"), the Stadium will modify its activities to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, the Stadium will provide updates to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.13.4.4). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in "Illicit Discharge Detection and Elimination".

#### 6.13.3.1.1 Minimum BMPs

The Stadium will ensure that all City staff implement the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.13-2.
2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by Storm Water Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.
4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the "Storm Drain Inspection/Cleaning Schedule" in Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.
5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately the Stadium's responsibility to prevent pollutant discharges to the storm drain system. Therefore, the Stadium's will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

The Stadium will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

#### 6.13.3.1.2 Activity-Specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.13-2 will be implemented by City staff during the Stadium's operations and maintenance activities.

**Table 6.13-2. BMPs Designated for Areas and Activities at the Stadium.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Refuse Dumpsters | Sediments, Trash and debris | • For large events with crowds that exceed 25,000, three yard and five yard front loaded dumpsters will be placed throughout the parking lot and will be emptied beginning three hours after the event.<br>• For events with crowds less than 25,000, three yard and five yard dumpsters will be emptied within 24 hours after the event ends. |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Vehicle Washing | Sediment, oil and grease, metals | • City staff will wash the city vehicles at the car washes located in the operations yards.<br>• All Parking Lot Event permits contain language prohibiting vehicle washing as per Storm Water Ordinance 43.0301. |
| Soil Stockpile Maintenance | sediments | • Tackify soil once a year<br>• Place sandbags around perimeter of stockpile. |
| Stadium Wash-down Cleaning | Sediments, metals, trash and debris, | • Use street sweeper in conjunction with wash- down to capture all water. |
| Field Painting | Sediments, nutrients, metals, organic compounds, pesticides | • Mix paints in the east tunnel.<br>• Secure all lids tightly during transport and storage.<br>• Clean all equipment in the east tunnel |
| Special Event Permitting | Any | <u>General Compliance Statement:</u><br>Contracts shall agree to the following statement: In submitting this Event Permit, the event Host and/or Organizer agree to comply with all storm water discharge regulations as governed by Storm Water Ordinance §43.03. Identify the location of all the storm drains inside the event area. Clearly mark the storm drain on your venue Site Plan submitted with the Permit application.<br><br><u>Standard BMPs:</u><br><br>Event Organizers are encouraged to train event staff in storm water pollution prevention activities at the event venue and to notify all vendors of their storm water pollution prevention responsibilities.<br><br>Required Storm Water Best Management Practices (BMPs):<br>1. *Food and beverage, and all chemical and liquid activities or products*: Event Hosts/Organizers and vendors must have spill kits in or adjacent to their work area. Spill kits include: paper towels, cloth towels, kitty litter and/or sand. All spill materials must be picked up out of the public right of way once the spilled material is absorbed off the ground. Spills leaving the event venue area into the surrounding property must be captured and prevented from entering the surrounding non-event area(s) and storm drains.<br>2. *Storm Drain Protection:* Event Hosts/Organizers must protect all storm drains identified on their site plans.<br>A) Dry: if no rain is projected, place fabric filters over the drain opening and hold them in place with duct tape or gravel bags protecting the perimeter of the drain. The gravel must be clean and free of sediment.<br>B) Rain: If a 40 percent chance or greater of rain is forecasted, gravel bags protecting the storm drain perimeter is sufficient. Do not use fabric filters in the event of rain. |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| | | 3. *Post Event markings Removal:* All event areas where temporary chalk, paint or other marking materials are used to identify spaces, locations, travel pathways, etc. must have spill kits on hand (see No 1 above).<br><br>Post event clean-up of these areas includes removal of temporary markings (chalk, paint, charcoal, clay, etc). Event/vendor staff must use wet-mops. Any water in a bucket must be either poured into the sanitary sewer via for example a sink, or released over a landscaped area that has adequate capacity to contain the liquids and the pollutant without allowing discharge onto any water impervious area, sidewalks, curbs, gutters streets and drains.<br><br>4. *Trash and Debris:*<br><br>A) Adequate trash containers must be provided throughout the event venue, including at the exit and entry points. Regular collection of renegade trash and debris is required.<br><br>B) If a trash and or recycling collection area is established, spill kits and wet mop(s) and brooms must be available and staff trained in spill clean-up methods.<br><br>5. Portable Restrooms<br><br>Placement of food, craft, portable restrooms and other activities that may generate pollutants in areas significantly distanced from storm drains. Provide secondary containment underneath all portable restrooms (ADA accessible restrooms excluded).<br><br>Post event sweeping of the venue and related staging areas. |
| Building Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Parking lots/structures maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Landscaping | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Materials Handling, Storage, and Disposal | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Material Loading and Unloading | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Storm drain system inspection and cleaning | | • See this activity's BMP in Table 6.3-2, Section 6.3 "Buildings/Parking/Landscaping" |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Vehicle Equipment Maintenance | | • See this activity's BMPs in Table 6.15-2 Section 6.15, "Vehicle Maintenance/Operations Yards" |
| Vehicle and Equipment Fuel Dispensing Areas | | • See this activity's BMPs in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yards" |

### 6.13.3.2 Additional Controls for Municipal Area and Activities

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection as described in detail in Section 6.13.4.1 "Facilities Inspections and Improvements".

## 6.13.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

### 6.13.4.1 Facility Inspections and Improvements

The Municipal Permit requires that the City inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges. Note: see Section 6.13.4.4, "Pollutant Discharge Notification" below for reporting requirements.

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection. As shown in Table 6.13-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to the end of April).

**Table 6.13-3. Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection the Stadium determines that improvements to its BMPs are required, the Stadium will perform the action (e.g., repair a structural BMP), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved (Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second inspection). If the Stadium determines that the modifications require additional time or funds to implement, the Stadium will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Permit also requires inspections of special events. The Stadium will conduct periodic inspections (no less than once annually) of each category, or type, of special event, to ensure that the Special Event Permit Requirements identified in Table 6.13.2, above are effectively being implemented. Stadium staff will note any deficiencies during the inspection and coordinate with the Event Hosts/Organizers to resolve the issue. If potential discharges to the storm drain system are identified during the inspection, Stadium staff will report the potential discharge to the City's Storm Water Hotline, (619) 235-1000. These inspections will be included in the annual reporting information provided to the Storm Water Pollution Prevention Division each year (see Section 6.13.4.4, below).

The Municipal Facility Inspection Forms and Special Event Inspection Forms are attached as Appendix XIV "Inspection Forms" and are also located on the City's website at http://www.sandiego.gov/thinkblue/resources/index/shtml

### 6.13.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis by The Stadium and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting

process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When The Stadium determines that a discharge poses a significant threat to water quality or human health, The Stadium must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City's Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the Stadium to the Regional Board within five working days of the day the event was identified.

The Stadium will also notify other regulatory agencies as required on Form 304.

### 6.13.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, "Education."

### 6.13.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a "Storm Water and You" training module presented at the "New Employee Orientation" workshop. Staff that do not take the "New Employee Orientation" workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive "refresher" training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via "e-tests" for randomly selected City employees with regular computer access will occur periodically between the mandated "refresher" courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

### 6.13.4.3.2 Activity-Specific Training

**Municipal Departments**

This section describes activity-specific trainings provided by the Stadium. the Stadium will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.13-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.13-4. Activity Specific BMP Training(s) Provided by the Stadium.**

| Training Module/Item | Staff Level (i.e., Supervisor, Crew, etc.) | Available |
|---|---|---|
| How to train Employees regarding BMPs for Stadium seat cleaning | Supervisor, Crew | Spring 2008 |
| Parking lot cleanup BMPs | Supervisor, Crew | Summer 2009 |
| Equipment cleaning BMPs | Crew | Summer 2009 |
| Pesticide/Chemical application BMPs for Stadium fields and landscaping | Supervisor, Crew | Summer 2009 |
| Soil Storage and Stabilization | Supervisors | Spring 2008 |
| Vendor Disposal BMPs | Contractors and Vendors | Summer 2008 |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 6.13.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by the Stadium in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.13-5 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.13-5. Department External Outreach Activities by Target Audience.**

| Department / Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>Under-represented audiences in 1-4 | Available |
|---|---|---|
| 1. Visitor information provided and posted in various locations on proper disposal of trash | 4 | Ongoing |
| 2. BMPs for stadium vendors | 3 | Summer 2008 |
| 3.Think Blue message on Friars Rd. Marquis | 1-5 | Summer 2008 |
| 4. Provide vendors and contractors access to Stadium activity specific BMPs | 1,3,4 | Ongoing |

### 6.13.4.4 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by the Stadium to track expenditures for designing, developing, and implementing BMPs and educational activities. The Stadium annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, “Annual Report Form Questions” for department-specific reporting requirements.

# 6.14 Streets/Storm Drain Conveyance System

## 6.14.1 Background

This section is applicable to the General Services Department, Street Division which owns, operates, and maintains the streets and storm drain systems of San Diego. The goal of this program is to reduce the impact of streets and storm drain operations and maintenance activities on storm water quality in the San Diego region. This section contains storm water best management practices (BMPs) the Street Division will implement for street and storm drain systems operations and maintenance activities, in addition to inventory, inspection, pollutant discharge reporting, education, and annual reporting requirements.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit," see Appendix I), as described in Table 6.14-1.

**Table 6.14-1. Municipal Permit Requirements – Streets and Storm Drain Conveyance System.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.14.2 | (Pg. 32) D. 3. a. (1); (Pg. 42) D.4.b. | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.14.3 | (Pg. 32-34) D. 3. a. (2,3,4,5,6) | Implement and maintain BMPs. |
| 6.14.4.1 | (Pg. 35) D. 3. a. (7) | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.14.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.14.3 | (Pg. 45) D. 5. b. (1) (d) | Implement and designate an educational program for all City personnel and contractors. |
| 6.14.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.14.2 Source Characterization

The Street Division inventory includes the buildings and operations yards that the division occupies (see Appendix III, "Municipal Inventory"). Additionally, Street Division uses GIS to identify the locations of the storm drain system for the City of San Diego (see Appendix IV, "Storm Drain System Map"). Street Division's activities, their associated potential pollutants, and designated BMPs are listed in Table 6.14-2. Street Division will update any changes to the streets and storm drain system facilities inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.14.4.4, "Annual Report Forms."

## 6.14.3 Best Management Practice Requirements

### 6.14.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.14.3.1.1 to 6.14.3.1.2 below are Street Division's BMPs for operations and maintenance activities.

If the Street Division determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the San Diego Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance"), the Street Division will modify its activities to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, the Street Division will provide updates to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.14.4.4). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in "Illicit Discharge Detection and Elimination."

#### 6.14.3.1.1 Minimum BMPs

The Street Division will ensure that all City staff implement the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.14-2.
2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by Storm Water Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.
4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the "Storm Drain Inspection/Cleaning Schedule" in Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately the Street Division's responsibility to prevent pollutant discharges to the storm drain system. Therefore, the Street Division and/or contractors will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

The Street Division will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

#### 6.14.3.1.2 Activity-Specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.14-2 will be implemented during the Street Division's operations and maintenance activities by City employees.

**Table 6.14-2. BMPs Designated for Areas and Activities Related to Street and Storm Drain System Maintenance.**

<table>
<tr><th>Activity</th><th>Potential Pollutants</th><th>Best Management Practices</th></tr>
<tr><td>Sweeping Municipal Areas (sweeping of improved streets, possessing a curb and gutter. municipal roads, streets, highways and parking facilities).</td><td>sediments, trash and debris</td><td>• Collect sweeping debris and contain in a temporary storage area and protected from storm water runoff.<br>• Dispose of sweeping debris through an approved disposal facility.<br>• Clean sweepers at the wash rack area in Chollas Operations Yard.<br>• Discharge wash water to the sanitary sewers through the oil/water separator.<br><br>Sweeping Schedule<br>(Based on each street's historical debris volumes collected)<br><table><tr><th>Debris Volume</th><th>Frequency</th></tr><tr><td>1. High</td><td>Twice/month</td></tr><tr><td>2. Moderate</td><td>Monthly</td></tr><tr><td>3. Low</td><td>Once/year</td></tr><tr><td>4. “Unimproved Roads” (roads that lack curb and gutter)</td><td>As needed</td></tr></table></td></tr>
<tr><td>Storm Drain System Inspection and Cleaning (including flood control devices)</td><td>sediments, nutrients, trash and debris</td><td>• Vacuum water runoff and/or remove any silt build up from activity.<br>o Use acceptable vacuum; e.g. Wet/dry shop vacuum or large hydro-flusher vacuum machine.<br>o Remove water or material to approved dumping site (see Material/Debris Disposal below).<br>• Inspect and clean all storm drain facilities (catch basins, storm drain inlets, open channels, etc.) of debris or other foreign material according to the schedule below. When practical, work is to be done when conditions are dry.<br><br>Storm Drain Inspection/Cleaning Schedule<br><table><tr><th>Debris Volume</th><th>Frequency*</th></tr><tr><td>1. High (e.g., tends to clog during rains)</td><td>Annually, between May 1 and September 30.**</td></tr><tr><td>2. Medium (e.g., tends to collect measurable debris without clogging)</td><td>Annually at any time during the year.**</td></tr><tr><td>3. Low (e.g., generally free of debris)</td><td>Annually at any time during the year for Fiscal Year 2008 and 2009. Every other year thereafter.</td></tr></table></td></tr>
</table>

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| | | ***** Any storm drain facility that is designed to be self-cleaning must be cleaned of any accumulated debris observed during an inspection immediately. Anthropogenic litter observed in open channels must be cleaned in a timely manner after obtaining all appropriate environmental clearances.<br><br>****** Following two fiscal years of inspections, any storm drain facility that does not contain debris may be re-classified as a "Low" priority facility and may be inspected as needed, but not less than every other year.<br><br>• Dispose of debris through an approved disposal facility.<br>• Streets or a private contractor will be responsible for clean-up of private non-sewage discharges if there is no identifyable responsible private party. |
| Storm Drain System Structural Treatment Control Inspection and maintenance | sediments, nutrients, trash and debris | • BMPs are cleaned in September and/or March according to the specifications of the manufacturer.<br>• BMPs are inspected twice a year. |
| Non-sewage Spills | sediments, nutrients, trash and debris, bacteria | • For public spills, responsible department may place a work order for Street Division to clean off surface and remove materials from storm drain system (see Table 9-2 in "Illicit Discharge Detection and Elimination").<br>• For private spills, if responsible party is unknown, Street Division will clean off surface and remove materials from storm drain system.<br>• Dispose of water or material to approved dumping site. |
| Pipe Replacement | sediment | • When practical, work is to be done when conditions are dry.<br>• Prior to beginning activity, locate storm drains, visually inspect and remove debris.<br>• If possible, move activity away from storm drain.<br>• Protect storm drains if there is any chance pollutants could enter.<br>1. For solid pollutants, use sand or gravel bags and/or fiber rolls<br>2. For liquid pollutants, use absorbent socks, pads or containment booms.<br>• Vacuum water runoff and/or remove any silt build up from activity.<br>1. Use acceptable vacuum; e.g., wet/dry shop vacuum or large hydro-flusher vacuum machine.<br>2. Remove water or material to approved dumping site (see Material/Debris Disposal below).<br>• At the conclusion of work activity, visually inspect storm drains and clean where necessary. Remove temporary BMP's. |
| Street/Road/Highway Repair and Maintenance | oil and grease, metals, sediment, | • Schedule asphalt and concrete for dry weather.<br>• Sweep area after materials are broken up.<br>• Cover and seal nearby storm drains systems and manhole covers prior to applying seal coat, slurry seal, etc. Remove |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| | trash and debris, organic compounds | covers when job is complete.<br>• Use as little water as possible.<br>• Ensure shut off valves are working properly.<br>• When job is complete, clean up, sweep area, if needed, and remove stockpiles. |
| Painting and Paint Removal for Bridge Maintenance | organic compounds, sediment, | • If painting near or over a watercourse, use netting or traps to capture pollutants. |
| Stockpile Yard Maintenance | sediment, trash and debris, nutrients | • Filter rain water through gravel bags into a desilting structure.<br>• Remove waste material that has accumulated in the desilting structure with a vactor truck and dispose of through an approved disposal site. |
| Low Flow Diversion System Operation and Maintenance | bacteria and viruses, trash and debris, oxygen demanding compounds, | • Clean valves, vaults, interceptor stations, sump pumps, meter equipment, and wet and dry wells to prevent pollutants from entering receiving waters.<br>• Close upstream and downstream valves during cleaning and repairs.<br>• Clean debris from open channels at interceptor stations.<br>• Dispose of debris at spoil bins, landfill, or as regulated waste when appropriate.<br>• See Appendix XIII "Annual Report Form Questions" for data tracking requirements. |
| Median/Road Embankment Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Painting (Striping) | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Concrete Work (saw cutting and grinding operations) | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Parking Lot/Structure Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping"<br>• |
| Materials Handling, Storage, and Disposal | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Material Loading and Unloading | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Refuse Dumpsters | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Vehicle and Equipment Washing (tool cleaning) | | • See this activity's BMP in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operation Yards" |
| Vehicle and Equipment Fuel Dispensing Areas | | • See this activity's BMP in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operation Yards" |

#### 6.14.3.1.3 Flood Control Devices Evaluations

The Municipal Permit requires that the City evaluate the existing flood control devices and determine if retrofitting is needed as storm drain projects are concept planned and designed. As the City moves forward with strategic planning for total maximum daily load requirements, the Storm Water Pollution Prevention Division will evaluate the potential for retrofitting flood control devices. The evaluation will include the development of criteria to aide in evaluating the feasibility of retrofitting flood control devices under various scenarios and conditions, and identify potentially suitable BMPs. The evaluation criteria and BMP recommendations will be provided to the Engineering and Capital Projects Department, which will be responsible for implementing the retrofits during the design and construction of capital improvement projects, where feasible. In addition, the evaluation criteria and BMP recommendations will be provided to the Development Services Department, which will be responsible for reviewing proposed private development projects to ensure that project proponents implement the retrofits during the design and construction of public storm drain facilities as part of private projects.

### 6.14.3.2 Additional Controls for Municipal Area and Activities

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection as described in detail in Section 6.13.4.1 “Facilities Inspections and Improvements”.

## 6.14.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

### 6.14.4.1 Facility Inspections and Improvements

The Municipal Permit requires that the City inspect all municipal facilities and storm drain system annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, tons of debris or trash removed, modify and improve BMPs where necessary and identify any potential pollutant discharges. Note: see Section 6.14.4.2, “Pollutant Discharge Notification” below for reporting requirements.

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection. As shown in Table 6.14-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to the end of April).

**Table 6.14-3. Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection or cleaning of the storm drain system, the Street Division determines that improvements to its BMPs are required, the Street Division will perform the action (e.g., repair a structural BMP), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved (Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second inspection). If the Street Division determines that the modifications require additional time or funds to implement, the Street Division will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Facility Inspection Forms are attached as Appendix XIV “Inspection Forms” and are also located on the City’s website at http://www.sandiego.gov/thinkblue/resources/index.shtml.

### 6.14.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis by Street Division and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant

accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When Street Division determines that a discharge poses a significant threat to water quality or human health, Street Division must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City's Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the Street Division to the Regional Board within five working days of the day the event was identified.

Street Division will also notify other regulatory agencies as required on Form 304.

### 6.14.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, "Education."

#### 6.14.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

### New Employees

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

### Existing Employees

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

## 6.14.4.3.2 Activity-Specific Training

This section describes staff trainings provided by Street Division staff:

### Municipal Departments

This section describes activity-specific trainings provided by the Street Division. The Street Division will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.14-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.14-4. Activity-Specific BMP Training(s) Provided by the Street Division.**

| Training Module/Item | Staff Level | Schedule |
|---|---|---|
| Concrete finishing and curing | All Street Division Supervisors and Field Employees | Ongoing |
| Grinding and paving operations | All Street Division Supervisors and Field Employees | Ongoing |
| Vehicle and Equip cleaning and fueling | All Street Division Supervisors and Field Employees | Ongoing |
| Material Delivery and Storage | All Street Division Supervisors and Field Employees | Ongoing |
| Spill Prevention and Control | All Street Division Supervisors and Field Employees | Ongoing |
| Storm Drain Inlet Protection | All Street Division Supervisors and Field Employees | Ongoing |
| Gravel Bag Berm and Sandbag Barrier | All Street Division Supervisors and Field Employees | Ongoing |
| Street Sweeping and Vacuuming | All Street Division Supervisors and Field Employees | Ongoing |
| Silt Fence and Fiber Rolls | All Street Division Supervisors and Field Employees | Ongoing |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other factors.*

Training provided to Street Division staff consists of a general training to all employees and then focused training on specific activities. Most training incorporates and question and answer session for the facilitator to determine comprehension. Training logs are kept by each supervisor.

### 6.14.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by the Street Division in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.14-5 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.14-5. Department External Outreach Activities by Target Audience.**

| Department / Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Schedule |
|---|---|---|
| 1. Door hangars with storm water educational message | 3,4 | Ongoing |

### 6.14.4.4 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by Street Division to track expenditures for designing, developing, and implementing BMPs and educational activities. The Street Division's annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

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# 6.15 Vehicle Maintenance/Operations Yards

## 6.15.1 Background

This section is applicable to the General Services Department, Fleet Services Division ("Fleet Services") and all other departments and divisions which perform vehicle maintenance or operate at an operations yard. The goal of this section is to reduce the impact of department or division operations and maintenance activities on storm water quality and provide guidance for the protection of water quality and receiving waters. This section contains storm water best management practices (BMPs) that departments or divisions will implement for departments or division operations and maintenance activities in addition to inventory, inspection, pollutant discharge reporting, education, and annual reporting requirements.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit," see Appendix I), as described in Table 6.15-1.

**Table 6.15-1. Municipal Permit requirements – Vehicle Maintenance/Operations Yards.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.15.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.15.3 | (Pg. 32-34) D. 3. a. (2,3,4,5) | Implement and maintain BMPs. |
| 6.15.4.1 | (Pg. 35) D. 3. a. (7) | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.15.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.15.4.3 | (Pg. 45) D. 5. (b, d); | Implement and designate an educational program for all City personnel. |
| 6.15.4.4 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.15.2 Source Characterization

The City of San Diego operates and maintains a number of vehicle maintenance facilities, and operations yards. The primary operations yards are: Central Operations, Miramar Place, Chollas, and Rose Canyon Operations Yards. Additional vehicle repairs facilities are located at Fire Repair and Police garages (9 facilities). The complete inventory of vehicle maintenance facilities and operation yards are included in Appendix III, "Municipal Inventory." Department activities, their associated potential pollutants, and designated BMPs are listed in Table 6.15-2. The departments or divisions will

update any changes to the inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.15.4.4, “Annual Report Forms.”

## 6.15.3 Best Management Practice Requirements

### 6.15.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.15.3.1.1 to 6.15.3.1.2 below are the BMPs required for departments or divisions that maintain vehicle maintenance facilities and/or operate out of operation yards.

If the departments or division determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the San Diego Storm Water Ordinance, the department or division will modify its activities to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, the department or division will provide updates to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.15.4.4). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in “Illicit Discharge Detection and Elimination.”

#### 6.15.3.1.1 Minimum BMPs

Fleet Services and other applicable departments will ensure that all City staff implement the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.15-2.
2. Only clean rainwater can be discharged to the storm drain system. See the StormWater Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by the StormWater Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.
4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the “Storm Drain Inspection/Cleaning Schedule” in

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.

5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately the Fleet Services and other applicable departments responsibility to prevent pollutant discharges to the storm drain system. Therefore, the Fleet Services and other applicable departments will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

The Fleet Services and other applicable departments will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

#### 6.15.3.1.2 Activity-Specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.15-2 will be implemented by City staff at Fleet Services and other applicable departments.

**Table 6.15-2. BMPs Designated for Areas and Activities Related to Vehicle Maintenance and Operations Yards.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Landscaping | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Material Loading and Unloading | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Materials Handling, Storage, and Disposal | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Painting Activities | metals | • Do not perform paint preparation and equipment cleaning near storm drains.<br>• Monitor weather and wind direction to ensure that paint is not entering storm water system or receiving waters.<br>• Place canvas or plastic tarps under work to capture excess paint chips.<br>• Dispose of paint leftovers according to the hazmat requirements. |
| Parking Lot/Structure Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping"" |
| Refuse Dumpsters | sediments, metals, organic, compounds trash and debris, oxygen-demanding substances, oil and grease, bacteria and viruses, | • Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.<br>• Relocate dumpsters and bins away from storm drains systems.<br>• Contaminated rain water that has accumulated from an open container must be discharged to the sanitary sewer with MWWD permission or infiltrated onto landscaping.<br>• Ensure dumpsters are not leaking. If so, repair, cover, and/or exchange dumpsters.<br>• Place absorbent socks or equivalent around bottom of scrap metal roll-off bins to capture pollutants and check integrity of absorbent socks or equivalent regularly. |
| Storm Drain System Inspection and Cleaning | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Vehicle and Equipment Fuel Dispensing Areas | sediments, metals, organic compounds, trash and debris, oil and grease | • Prior to starting activities, locate storm drain system and prevent pollutants from entering.<br>• Use spill kits (dry clean up methods) for any spills. |
| Vehicle and Equipment | sediments, metals, | • Prior to starting activities, locate storm drain system and |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Maintenance | organic compounds, trash and debris, oil and grease | prevent pollutants from entering.<br>• Use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste.[2]<br>• Ensure wash water for specialized equipment and bleed line releases from air compressor units are disposed of properly.[2]<br>• Use spill kits (dry clean up methods) for any spills. |
| Vehicle and Equipment Washing | sediments, metals, organic compounds, trash and debris, oil and grease | • Prior to starting activities, locate storm drain system and prevent pollutants from entering.<br>• Wash vehicles in wash rack areas or car washes only. Maintain wash rack and car wash sanitary sewer drains regularly.<br>• For automated vehicle washers, recycle wash water in a closed loop system where feasible.<br>• Capture and properly dispose of all power washing water.[3] |
| Yard Clean Ups | sediments metals trash and debris, oil and grease | • Conduct annually between May 30 and September 30. |

### 6.15.3.2 Additional Controls for Municipal Areas and Activities

The Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection as described in detail in section 6.15.4.1 “Facilities Inspections and Improvements.”

## 6.15.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

### 6.15.4.1 Facility Inspections and Improvements

The Municipal Permit requires that the City inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify

[2] Contact ESD-HMMP for assistance.
[3] See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.

and improve BMPs where necessary and identify any potential pollutant discharges Note: see Section 6.15.4.2, “Pollutant Discharge Notification” below for reporting requirements.

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection to its portion of the Operations Yard. As shown in Table 6.15-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to the end of April).

**Table 6.15-3. Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection the department or division determines that improvements to its BMPs are required, the department or division will perform the action (e.g., repair a structural BMP), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second inspection. If the department or division determines that the modifications require additional time or funds to implement, the department or division will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Facility Inspection Forms are attached as Appendix XIV, “Inspection Forms” and are also located on the City’s website at http://www.sandiego.gov/thinkblue/resources/index.shtml.

### 6.15.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must

contain a non-storm water substance and enter the storm drain system. See The StormWater Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When a department determines that a discharge poses a significant threat to water quality or human health, they must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City’s website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City’s Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by Fleet Services or other applicable department to the Regional Board within five working days of the day the event was identified.

Department or divisions will also notify other regulatory agencies as required on Form 304.

### 6.15.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, “Education.”

#### 6.15.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a "Storm Water and You" training module presented at the "New Employee Orientation" workshop. Staff that do not take the "New Employee Orientation" workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive "refresher" training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via "e-tests" for randomly selected City employees with regular computer access will occur periodically between the mandated "refresher" courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

#### 6.15.4.3.2 Activity-Specific Training

This section describes activity-specific trainings provided by Fleet Services or other applicable department. Fleet Services or other applicable department will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.15-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.15-4. Activity-specific BMP Training(s) Provided by the Department.**

| Training Module/Item | Staff Level (i.e., Supervisor, Crew, etc.) | Available |
|---|---|---|
| Parking Lot Cleanup BMPs | Supervisor, Crew | Ongoing |
| Material Management BMPs | Supervisor, Crew | Ongoing |
| Painting and Paint Disposal BMPs | Supervisor, Crew | Ongoing |
| Equipment Washing and Cleaning BMPs | Supervisor, Crew | Ongoing |

*Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.*

### 6.15.4.4 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget

is developed and maintained by departments to track expenditures for designing, developing, and implementing BMPs and educational activities. Fleet Services annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, “Annual Report Form Questions” for department-specific reporting requirements.

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# 6.16 Water Systems

## 6.16.1 Background

This section is applicable to the Water Department which owns and operates the potable water supply and distribution systems for the citizens of the City of San Diego. The goal of this section is to reduce the impact of water operations and maintenance activities on storm water quality and provide guidance for the protection of water resources. This section contains storm water best management practices (BMPs) the Water Department will implement for water operations and maintenance activities, in addition to inventory, inspection, pollutant discharge reporting, education, and annual reporting requirements applicable to water systems operations.

The water systems for the City of San Diego include 3,000 miles of pipeline, 49 potable water pump stations, three treatment plants, 22 potable water reservoirs, five potable water clear wells, nine raw water reservoirs, and eight groundwater basins. Some of the City's water resources (raw water reservoirs and ground water basins) are located outside the City limits. Water Department systems serve 1.2 million City customers and provide water and water storage to other municipalities and water districts in San Diego County.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit," see Appendix I), as described in Table 6.16-1.

**Table 6.16-1. Municipal Permit Requirements – Water Systems.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 6.16.2 | (Pg. 32) D. 3. a. (1) | Inventory municipal areas, activities and potential sources of pollutants. |
| 6.16.3 | (Pg. 32-34) D. 3. a. (2,3,4,5) | Implement and maintain BMPs. |
| 6.16.4.1 | (Pg. 35) D. 3. a. (7) | Inspect municipal areas, activities and implement any necessary follow up actions. |
| 6.16.4.2 | (Pg B-6) Attachment B. 5. (e) | Report pollutant discharges to the storm drain system or receiving waters. |
| 6.16.4.4 | (Pg. 45) D. 5. (b, d); | Implement and designate an educational program for all City personnel, contractors, and community groups. |
| 6.16.4.5 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 6.16.2 Source Characterization

The Water Department's inventory includes water treatment plants, pump stations, potable water reservoirs, buildings, and operations yards as well as a laboratory and a

training facility (see Appendix III, "Municipal Inventory"). Water Department activities, their associated potential pollutants, and designated BMPs are listed in Table 6.16-2. The Water Department will update any changes to the water systems facilities inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.16.4.5, "Annual Report Forms."

## 6.16.3 Best Management Practice Requirements

### 6.16.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.16.3.1.1 to 6.16.3.1.2 below are the Water Department's minimum and activity-specific BMPs for water systems operations and maintenance activities. The activity-specific BMPs are also referenced in the Water Department's Standard Operations Policy and Procedures (SOPPs) (see Appendix XVI).

If the Water Department determines that a municipal activity or procedure does or could result in a significant pollutant discharge in violation of Section 43.03 of the San Diego Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance"), the Water Department will modify its activities to reduce the potential for future significant pollutant discharges. Whenever the BMPs are improved or revised, the Water Department will provide updates to its SOPPs, to the Storm Water Pollution Prevention Division with the annual report form (see Section 6.16.4.5). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in "Illicit Discharge Detection and Elimination."

#### 6.16.3.1.1 Minimum BMPs—Water Systems

The Water Department will ensure that all City staff implement the following minimum guidelines, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.16-2.
2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" for allowable discharges.[1]
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain is prohibited by Storm Water Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the

[1] http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.

4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the "Storm Drain Inspection/Cleaning Schedule" in Table 6.3-2, "Buildings/Parking/Landscaping." Annually inspect and clear open channels in a timely manner.
5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division's municipal inventory (Appendix III) with "No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue", as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.
10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately the Water Department's responsibility to prevent pollutant discharges to the storm drain system. Therefore, the Water Department will identify and implement any additional BMPs that may be required to avoid the discharge of pollutants to the storm water system. For planned declorinated potable water discharges, ensure the flow path to the storm drain system is free of pollutants.

The Water Department will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of March 24, 2008).

#### 6.16.3.1.2 Activity-Specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.16-2 will be implemented by City employees during the Water Department's routine and emergency water systems operations and maintenance activities.

**Table 6.16-2. BMPs Designated for Areas and Activities at Water Systems Facilities.**

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Operation and Maintenance of Distribution Lines, Pressure Regulating Stations, Potable Water Reservoirs and Facilities | sediments, oil and grease | • SOPP C.01 to C.06, C.09, C.11 to C.17,C.22 to C.24 Construction*<br>• SOPP D.01 to D.03, D.08, D.24 Systems Operations* |
| Operation and Maintenance of Transmission Lines From The Lakes to Treatment Plants | sediments, oil and grease | • SOPP E.01 to E.02 Facilities Maintenance* |
| Water Main Repair (emergency) | sediments | • After the water has been shut off, immediately deploy containment BMPs as described in SOPP C.12, C.13 Water Main Breaks*<br>• Remove as much sediment as possible from the work area.<br>• If residual is damp, secure the area for access, leave containment BMPs in place, and let dry.<br>• Clean the residual from the work area and other areas adversely affected no later than 48 hours after the initial discharge.<br>• If rain is anticipated, hose down the sediments and vactor up.<br>• Before intentionally dewatering the work area, put BMPs in place to ensure that no pollutants enter the storm drain system.<br>• Ensure that all pollutants that may have entered the storm drain system (including piping) as a result of the work are removed as soon as possible and disposed of properly in a timely manner. |
| Water Main Repair (routine or planned) | sediments | • SOPP C.04, E.5.2 Routine maintenance*<br>• Before intentionally dewatering the work area, put BMPs in place to ensure that no pollutants enter the storm drain system.<br>• Ensure that all pollutants that may have entered the storm drain system (including piping) as a result of the work are removed as soon as possible and disposed of properly in a timely manner. |
| Water Resource Management (surface and groundwater) | sediments | • SOPP E.03 Resource protection during access activity*<br>• E.08 Land use permits* |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Reservoir Maintenance<br>• Paved surfaces<br>• Picnic areas<br>• Boat cleaning, boat docks<br>• Boat fueling<br>• Sewage containment and collection<br>• Pressure washing of equipment and vehicles, of building facades and pavement<br>• Irrigation Repair | bacteria, viruses, organics, nutrients, herbicides, fertilizers | • SOPP F.04<br>• SOPP F.05<br>• SOPP F.06<br>• SOPP F.08<br>• SOPP F.09<br>• SOPP F.10, SOPP F.11<br>• SOPP F.12<br>• SOPP F.13<br>• SOPP F.14, SOPP F.15*<br>• See Table 6.3-2, Section 6.3, "Buildings/Parking Facilities/Landscaping" |
| Hydrant Flushing | sediments | • SOPP D.01, D.02* |
| Main Flushing | sediments | • SOPP C.03* |
| Highline and Water Wagons (temporary water services during construction and water main breaks) | sediments | • SOPP C.04, C.17* |
| Water Transfers between Reservoirs<br>(Dam galleries and outlet towers of raw water reservoirs) | sediments | • SOPP F.02* |
| Diversion Channels to Protect Raw Water Reservoirs | sediment | • SOPP F.01* |
| Cleaning and Maintaining Building Exteriors and Roofs at Reservoirs | bacteria and viruses, organic compounds, oils and grease, nutrients, trash, debris | • SOPP F.02*<br>• SOPP F.03*<br>• SOPP F.14*<br>• SOPP F15* |
| Comfort Stations at Reservoirs | bacteria, viruses | • SOPP F.07* |
| Operations and Maintenance at Water Treatment Plants for Chemical Spill Procedures | organic and inorganic compounds | • SOPP G.01 for treatment plants' operations* |
| Operations and Maintenance at Water Treatment Plants for Process Safety Management Reports | organic and inorganic compounds | • SOPP G.02 for mandated process safety and hazard management (PSM/H) plans and spill prevention control and countermeasures (SPCC) plans<br>• Offsite consequence analyses for Risk Management Program |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Operations and Maintenance at Water Treatment Plants | organic and inorganic compounds bacteria, viruses, metals, oils grease | • SOPP G.04 for operations and maintenance*<br>• Water Treatment Plants SWPPPs* |
| Operations and Maintenance at Water Quality Laboratory | bacteria, viruses, organic and inorganic compounds | • SOPP H.01* |
| Storm Water Agencies Reporting Procedures for Emergency/Unplanned Discharges/Main Breaks | sediment | • SOPP I.01 Stock piles must have flow line* |
| Storm Water Management and Control | sediment | • SOPP I.02* |
| Vehicle and Equipment Washing | sediments, metals, organic, compounds, trash and debris, oil and grease | • Prior to starting activities, locate storm drain system and prevent pollutants from entering.<br>• Only clean vehicles in wash rack areas or car washes. |
| Materials Handling, Storage, and Disposal | nutrients, metals, organics, oxygen demanding substances, oils and grease, pesticides | • SOPP C.01 Bulk handling of oils and fuels*<br>• See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Material Loading and Unloading | nutrients, metals, organics, oxygen demanding substances, oils and grease, pesticides | • SOPP C.01 Bulk handling of oils and fuels*<br>• See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Sump Pump Maintenance for comfort stations | organics | • SOPP F.07* |
| Concrete, Asphalt Work, and Cold Asphalt Mix Piles (non-emergency) | sediments, oils and grease | • SOPP C. 06 Salvage yard operations*<br>• E.03 Policy for resource protection for access activity*<br>• E.03 - 2.20 per URMPs*<br>• E.03 - 2.21 BMPs per CA Storm Water Quality Assoc. BMP Handbook current edition*,<br>• E.03 - 4.1 Unlawful to dump in waterways* |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Special Event Permitting | all | • Regulations that protect drinking water sources are enforced during special events, thereby protecting storm water quality.<br>• Storm drain inlets in the parking lots drain to the reservoir through filter systems which are cleaned at least annually by City staff.<br>• Special event permits contain clean up requirements, and extra dumpsters and port-a-lets may be required depending on the size of the event.<br>• City staff perform inspections of event area after each event.<br>• City staff clean up after events if necessary (deposit is held from event holder for this purpose).<br>• Provide secondary containment underneath all portable restrooms (ADA accessible restrooms excluded). If secondary containment is not available through any manufacturer, it will be provided when new restrooms are phased in. |
| Parking Lot/Structure Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Storm Drain System Inspection and Cleaning at Water Department Facilities | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| HVAC, Chillers and Refrigerators Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Boiler Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Cooling Tower Maintenance | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Fire Sprinkler Flushing | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Landscaping | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |
| Water Systems Design (CIP Program) | | • See this activity's BMP in Table 4-2 in Section 4.0, "Development Planning" |
| Water Systems Construction (CIP Program) | | • See this activity's BMP in Table 5-2 in Section 5.0, "Construction" |
| Refuse Dumpsters | | • See this activity's BMP in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yards" |
| Vehicle and Equipment Fuel Dispensing Areas | | • See this activity's BMP in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yards" |

| Activity | Potential Pollutants | Best Management Practices |
|---|---|---|
| Vehicle Equipment Maintenance | | • See this activity's BMP in Table 6.15-2, Section 6.15, "Vehicle Maintenance/Operations Yards" |
| Storm Drain System Inspection and Cleaning | | • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping" |

* See Appendix XVI, "Water Department SWPPP/ SOPPs"

### 6.16.3.2 Additional Controls for Municipal Areas and Activities

The Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection as described in detail in section 6.16.4.1, "Facilities Inspections and Improvements."

## 6.16.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

### 6.16.4.1 Facility Inspections and Improvements

The Municipal Permit requires that the City inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges Note: see Section 6.16.4.2, "Pollutant Discharge Notification" below for reporting requirements.

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection. As shown in Table 6.16-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to the end of April).

**Table 6.16-3. Municipal Facility Inspection Requirements.**

| Inspection | Timeframe |
|---|---|
| First | September |
| Second | January - April |

If as a result of the inspection the Water Department determines that improvements to its BMPs are required, the Water Department will perform the action (e.g., repair a structural BMP and/or update the SOPPs), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved (Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second inspection). If the Water Department determines that the modifications require additional time or funds to implement, the Water Department will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Permit also requires inspections of special events. The Water Department will conduct periodic inspections (no less than once annually) of each category, or type, of special event, to ensure that the Reservoirs and Recreation Program Special Event Permit Requirements identified in Table 6.16-2, above are effectively being implemented. Water Department staff will note any deficiencies during the inspection and coordinate with the Event Hosts/Organizers to resolve the issue. If potential discharges to the storm drain system are identified during the inspection, Water Department staff will report the potential discharge to the City's Storm Water Hotline, (619) 235-1000. These inspections will be included in the annual reporting information provided to the Storm Water Pollution Prevention Division each year (see Section 6.13.4.5, below).

A Municipal Facility Inspection Form and a Special Event Inspection Form are attached as Appendix XIV "Inspection Forms" and are also located on the City's website at http://www.sandiego.gov/thinkblue/resources/index.shtml, if the department chooses to use them.

### 6.16.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis by the Water Department and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be

considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When the Water Department determines that a discharge poses a significant threat to water quality or human health, The Water Department must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City’s website at http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also be forwarded to the City’s Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the Water Department to the Regional Board within five working days of the day the event was identified.

The Water Department will also notify other regulatory agencies as required on Form 304.

### 6.16.4.3 Groundwater

The Water Department desires to protect its interests in groundwater resources for the development of water supply and storage. In some cases, the City’s interests extend beyond City of San Diego limits. The Water Department intends to be active in the review of storm water BMP selection and standards (with particular attention to infiltration BMPs because of their potential to degrade groundwater resources). The Water Department will work with the City and other jurisdictions as pollution sources and groundwater basin supply and storage priorities are identified. Although not a part of the City’s Urban Runoff Management Program, the Water Department plans to develop and implement one or more Groundwater Management Plan(s) for groundwater basins during the course of Storm Water Permit implementation. The Plan or Plans may establish site specific monitoring programs, where appropriate, to assess impacts of Storm Water Permit implementation on the basin water quality. In particular, monitoring programs could be utilized to evaluate the use of a combination of BMPs where storm water is discharged and percolated into groundwater basin supply and storage areas. For example, combination BMPs could include natural vegetative type processes, catch basins with filters, avoidance of use of high toxic chemicals, use of slow release fertilizers to reduce nitrate load in runoff, and use of pesticides with low water solubility. The City's groundwater basins that are utilized for supply and storage

may be monitored on an ongoing basis to determine the water quality condition. The source of pollution would be traced, if possible, to identify the responsible party. Information would be provided to the Storm Water Pollution Prevention Division or City Attorney for enforcement. More information about enforcement methods is included in Section 9.5, ”Illicit Discharge Detection and Elimination.” Groundwater activities will be included in the annual report submitted by the Water Department to the Storm Water Pollution Prevention Division.

### 6.16.4.4 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, “Education.”

#### 6.16.4.4.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

### Existing Employees

Existing employees with regular access to a computer will be mandated to receive "refresher" training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via "e-tests" for randomly selected City employees with regular computer access will occur periodically between the mandated "refresher" courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

## 6.16.4.4.2 Activity-Specific Training

### Municipal Departments

This section describes activity-specific trainings provided by the Water Department. The Water Department will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.16-4. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

**Table 6.16-4. Activity-specific BMP Training(s) Provided by the Water Department.**

| Training Module/Item | Staff Level | Schedule |
|---|---|---|
| Storm Water P/P General | All WD Employees | Ongoing |
| Storm Water P/P Dams/Reservoirs | All WD Lakes Employees | Ongoing |
| Storm Water P/P Customer Services | All WD CSR's | Ongoing |
| Storm Water P/P Field Ops | All WD Field Employees | Ongoing |
| Storm Water P/P Supervisor | All WD Field Supervisors | Ongoing |
| Storm Water BMP Policy Refresher | All WD Field Supervisors and Employees | Ongoing |

Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.

## 6.16.4.4.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by the Water Department in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.16-5 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 6.16-5. Department External Outreach Activities by Target Audience.**

| Department / Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Schedule |
|---|---|---|
| **Water Operations** | | |
| 1. Watershed Sign Program | 4 | Ongoing |

| Department / Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Schedule |
|---|---|---|
| a. Billboards<br>b. Radio PSAs<br>c. Print Advertising<br>d. Movie Theater Ads<br>e. Web page<br>f. Other (TBD) | | |
| 2. Annual Drinking Water Quality Report | 1, 2, 3, 4, 5 | Ongoing |
| 3. City Hall elevator posters | 3, 4 | Ongoing |
| 4. Letter to Miramar Lake Residents | 4, 5 | Ongoing |
| 5. Lakes Brochures and Insert | 4 | Ongoing |
| 6. Customer Survey for Street Division Services | 3, 4 | Ongoing |
| 7. Customer Survey for Water Operations Services | 3, 4 | Ongoing |
| 8. City of San Diego Weekly Web Feature | 3, 4 | Ongoing |
| 9. San Diego River, Otay River, San Dieguito River Watershed Management Plans | 2, 3, 4 | Ongoing |
| 10. Annual Article on Lake Murray for *Mission Times Courier* | 4 | Ongoing |
| **Customer Support** | | |
| 1. Water Bill Inserts | 2, 3, 4, 5 | Ongoing |
| 2. Web Site | 1, 2, 3, 4, 5 | Ongoing |
| **Water Conservation** | | |
| 1. Fleet Science Center Presentation | 4 | Ongoing |
| 2. Water Conservation Calendar | 3, 4 | Ongoing |
| 3. Article on California Native Plants for local media | 3 | Ongoing |
| **Capital Improvement Program** | | |
| 1. Alvarado Water Treatment Plant *Water Lines* Newsletter | 3, 4 | Ongoing |

### 6.16.4.5 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by The Water Department to track expenditures for designing, developing, and implementing BMPs and educational activities. The Water Department's annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

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# 7.0 Industrial and Commercial Section

## 7.1 Introduction

Principally, the General Services Storm Water Pollution Prevention Division staff carries out the industrial and commercial section of the Jurisdictional Urban Runoff Management Plan (URMP). Other departments such as Metropolitan Wastewater Department (MWWD) also conduct storm water inspections during restaurant inspections to assist the Storm Water Pollution Prevention Division's efforts. In addition to conducting industrial/commercial inspections, there is also code enforcement staff within the Storm Water Pollution Prevention Division to enforce the City's Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance"). Each staff member is responsible for patrolling a portion of the City, visually inspecting for storm water violations, and conducting follow-up investigations of businesses when issues are identified during routine industrial/commercial inspections. In addition, they respond to complaints received from the storm water hotline (619-235-1000) or referrals from other departments within the City and County.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit," see Appendix I), as described in Table 7-1.

**Table 7-1. Municipal Permit requirements – Industrial/Commercial Uses.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 7.2 | (Pg. 35) D.3.b. | Implement an Industrial and commercial program |
| 7.3.4.1 | (Pg. 44) D.5.B(1)(c,d) | Education, training, and outreach |
| 7.3.4.2 and Appendix XIII "Annual Report Form Questions" | (Pg. 68) J. 3. (c,d,g,j); (Pg. 51) G.3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 7.2 Stationary Sources Element

### 7.2.1 Background

Each facility within the City's jurisdiction has been inventoried and categorized as either commercial or industrial. Based on the prioritized category, certain best management practices (BMPs) are required, and inspection frequencies implemented. The industrial and commercial facilities that violate the Municipal Permit are notified, reported, and enforced against as described in subsequent sections.

### 7.2.2 Source Characterization

#### 7.2.2.1 Source Identification

A watershed-based inventory of known industrial and commercial facilities within the City's jurisdiction has been developed and will be updated annually (see Appendix V, "Industrial and Commercial Inventory"). The current inventory is almost 20,000. There are around 250 industries in the City that are permitted under the State of California's General Industrial Permit. This inventory is based on multiple sources of information including the City's business tax license list, the State's general industrial storm water database, the City's Food Elimination Waste Discharge (FEWD) and Industrial Waste Control Program (IWCP) databases, and any other sources of information, as appropriate.

The purpose of this inventory is to assist in identifying industrial and commercial activities and pollutants, prioritize industrial/commercial sites according to their potential impacts to the storm drain system, providing a compliance history for each site, and allocating resources for future inspection, enforcement, and outreach efforts. The inventory will include site/source name; address; pollutants potentially generated, identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body, and a narrative description including Standard Industrial Classification codes which best reflects the principal products or services provided by each facility.

#### 7.2.2.2 Prioritization Based on Threat to Water Quality

The facility prioritization will be used to assist in establishment of inspection requirements. Prioritization involves classifying a facility as being a high, medium, or low priority threat based on the facility's location with respect to sensitive water bodies, the facility's activities' potential risk of discharging pollutants into the storm drain system, past Municipal Permit compliance, concurrent coverage under the State's General Industrial Permit, field observations during site inspections, and any other additional information that may be relevant.

### 7.2.3 Best Management Practice Requirements

#### 7.2.3.1 Updated BMP Requirements

The City has identified minimum BMPs that will be required at all industrial and commercial facilities based on the type of activity that is being conducted (see Appendix X, "Minimum BMPs for Industrial and Commercial Sites/Sources"). Industrial and commercial facilities will be notified over the next three years of the City's requirements through distributed materials and during site visits and inspections. Any future changes to the BMPs will be reported to the Regional Board.

#### 7.2.3.2 Additional Controls for Stationary Commercial Sites/Sources

Environmentally sensitive receiving waters within the City of San Diego are of special concern in terms of sensitivity to discharges from industrial and commercial facilities. City- identified BMPs to be used at facilities that have the potential to discharge directly to Clean Water Act section 303(d) impaired water bodies, coastal lagoons, or water bodies on environmentally sensitive lands have been incorporated into the list of minimum BMPs that will be required at all industrial and commercial facilities (see Appendix X, “Minimum BMPs for Industrial and Commercial Sites/Sources”).

### 7.2.4 Program Implementation

#### 7.2.4.1 Inspections of Industrial and Commercial Facilities

The goal of the inspections is to ensure that pollutants from runoff have been reduced to the maximum extent practicable or to technology-based standards, if applicable. Inspectors who meet the San Diego Regional Water Quality Control Board (Regional Board) standards for industrial inspectors physically visit the facilities checking for evidence of non-storm water discharges, verifying BMP implementation, and assessing BMP effectiveness. The facility operator is required to determine the effectiveness of the BMP in controlling pollutants during his/her self-inspection/quality assurance program, and during the inspection or review by the Storm Water Pollution Prevention Division. Storm Water Pollution Prevention Division inspectors may also provide educational materials and technical or regulatory updates, refer the facility to BMP reference materials, review storm water pollution prevention plans (SWPPPs), provide feedback about BMPs appropriate for a given activity, and identify any illicit discharges and connections to the municipal storm drain system. The inspections also provide an opportunity to verify and/or collect additional information for updating the prioritized watershed-based inventory.

The City’s Storm Water Pollution Prevention Division will use the inventory database to obtain baseline facility information. An inspection sheet, provided in Appendix XIV, “Inspection Forms,” is used to help guide the inspection and ensure that adequate data is collected at each facility. The inspection form includes questions about BMP implementation and assessment, review of monitoring data (if available), training documentation, visual observations, compliance with municipal ordinances, and coverage under the General Industrial Permit (when applicable). Photographs are also taken as needed to document findings.

The Storm Water Pollution Prevention Division staff coordinates with the City’s MWWD and the Regional Board in order to avoid repeat inspections. Storm Water Pollution Prevention Division staff reviews these inspections sheets for possible non-compliant or high risk activities. When these activities are identified Storm Water Pollution Prevention Division staff will perform follow-up inspections or other actions in order to alleviate the threat to water quality. All industrial facilities subject the State’s General

Industrial Permit that do not have coverage under that program (non-filers) will be reported to the Regional Board in the annual reporting process (see Section 7.3.4.2).

#### 7.2.4.2 Inspection Frequencies

The City will inspect, at a minimum, 25% of its Industrial and Commercial Inventory each year. The City will inspect 100% of the industrial and commercial facilities that pose a high threat to water quality each year. In any year that the number of high threat facilities is greater than 25% of the inventory, all high threat facilities will be inspected. The inventory database will be used to track the frequency of inspections (see Section 7.2.2.1).

#### 7.2.4.3 Monitoring of Industrial Facilities

The City requires that high priority industrial facilities implement monitoring programs for runoff from their facilities. The details of this program are provided in Section 9.0, “Illicit Discharge Detection and Elimination.”

#### 7.2.4.4 Documentation

The Storm Water Pollution Prevention Division has developed an inspection form/checklist to be used by all departments conducting inspections within the City to ensure consistency. Inspection records will be maintained by the Storm Water Pollution Prevention Division for all inspections conducted by City staff. Establishing good record keeping procedures during the inspection, follow-up, and enforcement process is critical. When follow-up action is necessary, individual files will be prepared containing results of all inspections, photographs, and communications related to the facility. The tasks that will be performed for this element are as follows:

- Update inspection forms as needed for easy recording and inputting into database/inventory
- Update and maintain database/inventory

#### 7.2.4.5 Pollutant Discharge Notification

Non-compliant sites that are deemed to pose a significant threat to water quality or human health will be reported by Storm Water Pollution Prevention staff to the Regional Board within 24 hours of discovery of the incident. A significant threat to water quality or human health is determined by the City on a case-by-case basis and will be dependent on the type of pollutant, the degree of the violation (i.e. the amount of pollutant discharged into the municipal storm drain system), the proximity to sensitive habitat or water bodies, the potential for exposure to the public, and the potential for environmental damage. City staff will use the Chemical Release Reporting Form 304 available in Appendix XV and also on the City’s website at: http://www.sandiego.gov/thinkblue/resources/index.shtml. A copy of the form must also

be forwarded to the City's Storm Water Pollution Prevention Division (URMP Program) for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions must be sent by the Storm Water Pollution Prevention to the Regional Board within five working days of the day the event was identified.

The Division will also notify other regulatory agencies as required on Form 304.

#### 7.2.4.6 Enforcement of Regulations at Industrial and Commercial Facilities

Inspections or complaint investigations of industrial and commercial facilities may result in situations requiring enforcement action. Enforcement of storm water regulations are conducted by City staff members with enforcement authority and, when necessary, by legal counsel. The inspectors, in accordance with the existing procedures for recording violations, will properly document each observed violation.

Based on the site inspection, when a violation of federal, state or local regulations has been observed, follow up activities include communication with the facility in the form of phone calls or letters. The purpose of this communication is to provide additional education and verification that corrective actions have been taken. When facilities are not adequately addressing compliance issues, the facility will be turned over to the enforcement section of the Storm Water Pollution Prevention Division. Depending on the severity of the violation, enforcement can range from a Notice of Violation to large fines. A more detailed discussion of the enforcement program can be located in section 9.5, "Illicit Discharge Detection and Elimination."

#### 7.2.4.7 Education and Training

Education and training for municipal staff that implement the Industrial and Commercial Facilities Program along with public outreach to target audiences is that same as that for the Mobile Businesses Program (see section 7.3.4.1). Training for industrial and commercial inspectors will occur annually.

#### 7.2.4.8 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by departments to track expenditures for designing, developing, and implementing BMPs and educational activities. The Storm Water Pollution Prevention Division's stationary industrial and commercial sources annual report information will be compiled for annual reporting purposes on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for department-specific reporting requirements.

## 7.3 Mobile Sources Element

### 7.3.1 Background

Mobile businesses have been identified as a significant potential source of non-storm water discharges. The very nature of mobile businesses makes the task of achieving compliance with storm water regulations difficult. The City of San Diego has developed a program to identify mobile businesses that operate within the City, include these businesses in the industrial/commercial inventory, notify them of BMP requirements, inspect them on an as needed basis, and take enforcement actions when necessary.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit," see Appendix I), as described in Table 7-2.

**Table 7-2. Municipal Permit requirements – Mobile Businesses.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 7.3 | (Pg. 39) D.3.b.(4) | Implement a Mobile Businesses program |
| 7.3.4.1 | (Pg. 44) D.5.B(1)(c,d) | Education, training, and outreach |
| 7.3.4.2 and Appendix XIII "Annual Report Form Questions" | (Pg. 68) J. 3. (c,d,g,j);<br>(Pg. 51) G.3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

### 7.3.2 Source Characterization

An inventory of mobile businesses known to operate within the City's jurisdiction has been developed and will be updated annually. The purpose of this inventory is to assist in identifying different mobile businesses, identifying potential pollutants these businesses may discharge, providing a compliance history for each business, and allocating resources for inspections, enforcement, and outreach efforts.

### 7.3.3 Best Management Practice Requirements

#### 7.3.3.1 Updated BMP Requirements

The City has identified minimum BMPs that will be required for all mobile businesses based on the type of activity that is being conducted (see Appendix XI, "Minimum BMPs for Mobile Businesses"). Mobile businesses will be notified by March 24, 2009 of the City's BMP requirements through distributed materials and during inspections. Any future changes to the BMPs will be reported to the Regional Board.

#### 7.3.3.2 Additional Controls for Environmentally Sensitive Areas

Environmentally sensitive receiving waters within the City of San Diego are of special concern in terms of sensitivity to discharges from industrial and commercial facilities. City-identified BMPs to be used at facilities that have the potential to discharge directly to Clean Water Act section 303(d) impaired water bodies, coastal lagoons, or water bodies on environmentally sensitive lands have been incorporated into the list of minimum BMPs that will be required of mobile businesses (see Appendix XI, "Minimum BMPs for Mobile Businesses").

### 7.3.4 Program Implementation

The goal of mobile business inspections is to ensure that pollutants from runoff have been reduced to the maximum extent practicable or to technology-based standards, if applicable. This is accomplished by checking for evidence of non-storm water discharges, verifying BMP implementation and assessing BMP effectiveness. Inspectors may also provide educational materials and technical or regulatory updates, refer the business to BMP reference resources, review SWPPPs and provide feedback about BMPs appropriate for a given activity, and identify any illicit discharges and connections to the municipal storm drain system. The inspections also provide an opportunity to verify and/or collect additional information for updating the prioritized watershed-based inventory.

Mobile businesses will be inspected as needed by Storm Water Pollution Prevention Division's Industrial/Commercial Program staff in order to ensure that mobile businesses are implementing minimum BMPs and are not discharging pollutants to the storm drain system. The Storm Water Pollution Prevention Division's Code Enforcement Section will enforce mobile businesses in violation of the Storm Water Ordinance, see Section 7.2.4.6).

#### 7.3.4.1 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;

2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, “Education.”

#### 7.3.4.1.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

#### 7.3.4.1.2 Public Outreach

Public outreach efforts are implemented by the Storm Water Pollution Prevention Division’s Education and Outreach Program. The Storm Water Pollution Prevention Division will produce and distribute flyers addressing Minimum BMP requirements and other storm water related requirements. Staff will utilize addresses from the City’s business tax license roll as a mechanism to reach residents, mobile businesses (complete coverage requires Copermitee cooperation), and commercial and industrial facilities to educate them on the Minimum BMPs. Storm water pollution prevention messages are also printed on water bills and storm water informational flyers are distributed with business tax license renewals through the Department of the City Treasurer. The City will continue to explore the distribution of storm water messages through City water customers and business tax license renewal process as appropriate. Industrial/commercial/mobile businesses that wish to contract with the City will receive

information regarding the Minimum BMPs during the bidding process with the Purchasing and Contracting Department (see Section 6.3 “Buildings/Parking/Landscaping”).

#### 7.3.4.2 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by departments to track expenditures for designing, developing, and implementing BMPs and educational activities. The Storm Water Pollution Prevention Division’s Mobile Business Program annual report information will be will be compiled for annual reporting purposes on or before July 21 each year. See Appendix XIII, “Annual Report Form Questions” for department-specific reporting requirements.

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# 8.0 Residential Section

## 8.1 Introduction

The Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit", see Appendix I) mandates that all Copermittees implement a Regional Urban Runoff Management Program (RURMP), including a residential component, in an effort to further reduce the discharge of pollutants and prevent urban runoff. The City's program must meet the requirements of the Municipal Permit, as described in Table 8-1.

**Table 8-1. Permit Requirements – Residential.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 8.4 | (Pg 50) F.1;<br>(Pg.44) D.5 | Provide pollutant specific education which focuses on bacteria, nutrients, sediment, pesticides and trash |
| 8.5 | (Pg. 67) J. 3. (c, g, j);<br>(Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 8.2 Source Characterization

The Municipal Permit requires the City to identify high threat to water quality residential areas and activities. The City considers all residences within City limits be identified as high threat to water quality. See Appendix VII, "High Priority Residential Areas Inventory."

## 8.3 Best Management Practice Requirements

### 8.3.1 Updated BMP Requirements

The Municipal Permit requires that the City designate minimum best management practices (BMPs) for high threat to water quality residential areas and activities and that these BMPs be area- or activity-specific (see Appendix XII, "Minimum BMPs for Residential Areas and Activities"). Any future changes to the BMPs will be reported to the Regional Board.

### 8.3.2 Updated Additional Controls for Residential Areas and Activities Discharging or Tributary to ESAs

The Municipal Permit requires that the City implement additional controls at residences that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (the City considers all residential areas to fall into this category), and, therefore, the BMPs for all residential areas and activities have been selected for the purpose of protecting such water bodies (see Appendix XII,

"Minimum BMPs for Residential Areas and Activities" for the BMP(s) designated for this category).

## 8.4 Program Implementation

This section describes the steps that will be taken to require, encourage, and verify the implementation of prescribed minimum BMPs for high priority residential activities.

### Outreach for BMPs

The Municipal Permit requires Copermittees to address bacteria, nutrients, sediment, pesticides, and trash. The City has changed the focus of its residential education strategy to target the greatest sources for these pollutants of concern in specific areas. The City and Copermittees have these pollutants in common; therefore, a shared mass media campaign will be most effective and beneficial for all Copermittees in reaching residents across the region. Therefore, the City of San Diego and its Copermitees will implement a regional "Think Blue" outreach program. "Think Blue" provides a broader, more universal message and normative behavior reinforcement than individual cities can provide on their own.

The City and the Copermittees will provide "Think Blue" with funding to develop, place and track overarching education, outreach, and advertising tools on behalf of the region. "Think Blue" defines priorities, target audiences and target pollutants each fiscal year. These elements will be developed with input from a designated subcommittee that will review "Think Blue" goals and objectives for the region as identified at the beginning of each fiscal year.

During this permit cycle, the program will be active on three levels:

- Regional – a joint residential education campaign where funds from all of the Copermittees will be leveraged for broad based media buys and activities that will benefit all Copermittees at the macro level
- Watershed – the City and each Copermittee will be responsible for implementing a minimum of two educational or outreach activities in each watershed
- Jurisdictional – the City and each Copermittee will be responsible for conducting more localized outreach using regional "Think Blue" messaging to augment their individual jurisdictional campaigns

The City will also use the "Regional Residential Education Program" published by the County of San Diego (see Appendix XX). Section 10.0, "Education", also provides details on the myriad of tools available including information regarding Community Based Social Marketing (CBSM) strategies including the regional "Think Blue" outreach campaign.

### Verification of BMPs

Verification and enforcement of the Minimum BMPs for Residential Areas and Activities will occur at the Jurisdictional level (see Section 9.0, “Illicit Discharge Detection and Elimination”). The Storm Water Hotline (619) 525-1000 will be used to report violations of the Storm Water Management and Discharge Ordinance (Storm Water Ordinance), as well as observed violations witnesses by Code Enforcement staff. Changes to the BMPs will be reported to the Regional Board. The Storm Water Ordinance will be updated to reflect changes in the Minimum BMPs as needed. Outreach regarding any Storm Water Ordinance changes will be performed by the Storm Water Pollution Prevention Division’s Education and Outreach Program and Code Enforcement staff.

## 8.5 Residential Section Effectiveness Assessment

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. In addition, each fiscal year a budget is developed and maintained by the Education and Outreach program to track expenditures for designing, developing, and implementing educational and outreach activities. Storm Water Pollution Prevention Division Education and Outreach Program annual report information will be submitted to the Storm Water Pollution Prevention Division URMP Program on or before July 21 each year. See Appendix XIII, “Annual Report Form Questions” for department-specific reporting requirements and effectiveness assessment questions.

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# 9.0 Illicit Discharge Detection and Elimination Section

## 9.1 Introduction

This program section is applicable to the General Services Department, Storm Water Pollution Prevention Division. The goal of the Illicit Discharge Detection and Elimination Program is to actively seek and eliminate illicit discharges and connections to the storm drain system. This goal is achieved through implementation of required monitoring, enforcement, and public education programs. Required sections of the Illicit Discharge Detection and Elimination include, for example:

- Dry Weather Field Screening and Analytical Monitoring,
- Investigation/Inspection and Follow-up,
- Ordinance Enforcement,
- Preventing and Responding to Sewage and Other Spills, and the
- Facilitation of a Public Hotline for Reporting Illicit Discharges and Connections.

In addition to the Illicit Discharge Detection and Elimination requirements, the City conducts other programs that result in the discovery of illicit discharges and connections. An example of an existing program is the Coastal Storm Drain Monitoring Program and commercial/industrial inspections (see section 7.0, “Industrial and Commercial Section”). Monitoring programs under development include municipal separate storm sewer system monitoring, (“MS4 Outfall Monitoring”), Source Identification Monitoring, a Trash Monitoring Component to be included in several programs, and a Pyrethroids Monitoring Program. The Code Enforcement Section implements a public hotline for the purpose of public reporting of illicit connections and discharges to the storm drain system. The Storm Water Pollution Prevention Division’s Monitoring Section currently conducts permit-required monitoring programs, including Dry Weather Monitoring, Coastal Storm Drain Monitoring, and all Investigations/Inspections and Follow-Ups that have not yet resulted in the identification of a responsible party. The Code Enforcement Section is responsible for ensuring the abatement of illicit discharges and connections. Beyond monitoring and enforcement, the City relies on its Storm Water Pollution Prevention Division Public Education and Outreach Program to reduce discharges by raising public awareness and encouraging behaviors that reduce the amount of pollutants released to the storm drain system.

The City’s program must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-0001, “Municipal Permit,” Appendix I), as described in Table 9-1.

**Table 9-1. Municipal Permit Requirements - Illicit Discharge Detection and Elimination.**

| URMP Section | Municipal Permit Section | Municipal Permit Requirement (Summary) |
|---|---|---|
| 9.2 | (Pg. 43) D.4.h | Facilitate public reporting of illicit discharges and connections, including a public hotline. |

| URMP Section | Municipal Permit Section | Municipal Permit Requirement (Summary) |
|---|---|---|
| 9.3 | (Pg. 43) D.4.g | Prevent and respond to sewage and other spills into its storm drain system from any source and provide a mechanism to receive notification of spills. |
| 9.4.1 | (Pg. 42) D.4.d; Section II. B.1 of Receiving Waters Monitoring; Reporting Program No. R9-2007-0001 | Develop and Implement an MS4 Outfall Monitoring Program. |
| 9.4.2 | (Pg. 42) D.4.c; Section II.B.2 of Receiving Waters Monitoring; Reporting Program No. R9-2007-0001 | Develop and Implement a Source Identification Monitoring Program. |
| 9.4.3 | (Pg.42) D.4.c; Section II.B.3 of Receiving Waters Monitoring; Reporting Program No. R9-2007-0001 | Implement a Dry Weather Field Screening and Analytical Monitoring Program prior to May 1, 2008. |
| 9.4.3.1 | (Pg. 51) H | Implement a TMDL program |
| 9.4.3.2 | (Pg. 50) F | Implement a Regional Harbor Monitoring program |
| 9.5 | (Pg.42) D.4.(d,e,f) | Investigate and inspect the potential for illicit discharges and illicit connections. Eliminate detected illicit discharges and connections. Describe enforcement mechanisms and how they will be used. |
| 9.6 | (Pg. 45) D. 5. (b, d) | Implement and designate an educational program for all City personnel and contractors. |
| 9.7 and Appendix XIII "Annual Report Form Questions" | (Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures. |

## 9.2 Public Reporting of Illicit Discharges and Connections

The City of San Diego has an established hotline to promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from the storm drain system. Reports of illicit discharges and connections can be conveyed to the City of San Diego Storm Water Division in English and Spanish 24 hours per day/seven days per week through the hotline (619-235-1000) and faxes (619-758-2309). Other public comments are also received via the "Think Blue" website.[1]

## 9.3 Spill Reporting, Response, and Prevention

Preventing and responding to sewage spills into the storm drain system from any source (including public systems, private laterals, and failing septic systems) is covered under Section 6.8, "Metropolitan Wastewater Collection." For public non-sewage, hazardous material, unknown spills, or where a spill does not have an identifiable

[1] http://www.sandiego.gov/thinkblue/contact.gov

responsible party, the responsibility for abatement and cleanup depends on several factors as outlined in Table 9-2.

**Table 9-2. Responsible Parties for Spill Abatement and Cleanup.**

| | Public Spill | Private Spill |
|---|---|---|
| **Sewage** | | |
| Abate | MWWD | Reponsible party or if unknown, notify MWWD staff |
| Clean off surface | MWWD | Reponsible party or if unknown, notify MWWD staff |
| Clean out storm drain system | MWWD | Reponsible party or if unknown, notify MWWD staff |
| **Hazardous Material / Unknown** | | |
| Abate/Mitigate | Fire | Fire |
| Clean off surface and disposal | Street Div. (via licensed Hazardous Waste Hauler) | Responsible private party, or if unknown, Street Div. (via licensed Hazardous Waste Hauler) |
| Clean out storm drain system | Street Div. (via licensed Hazardous Waste Hauler) | Responsible private party or if unknown, Street Div. (via licensed Hazardous Waste Hauler) |
| **Other** | | |
| Abate | Responsible department (staff or via private contractor | Responsible party if known, if unknown, Storm Water Div. |
| Clean off surface | Responsible Dept (via Streets or private contractor) | Responsible private party, or if unknown, Street Div. |
| Clean out storm drain system | Responsible Dept (via Streets or private contractor) | Responsible private party, or if unknown, Street Div. |

## 9.4 Urban Runoff Monitoring

### 9.4.1 MS4 Outfall Monitoring

The City began implementation of a MS4 Outfall Monitoring Program in the 2007-08 monitoring year. The goal of this program is to characterize pollutant discharges from storm drain system outfalls in each watershed during wet and dry weather. This program includes collection of samples for those pollutants known to be causing or contributing to violations of water quality standards within the watershed. This program will result in the identification of illicit discharges and connections, requiring follow-up investigations and enforcement actions.

### 9.4.2 Source Identification Monitoring

The City will begin implementation of a Source Identification Monitoring program in the 2008-2009 monitoring year. The goal of this program is to identify sources of discharges of pollutants causing the priority water quality problems within each watershed. Focused monitoring which moves upstream into the watershed will be necessary to identify pollution sources. Monitoring efforts will be guided by source inventories and "Threat to Water Quality" analyses. It is expected that this program will result in the finding of illicit discharges and connections, requiring follow-up investigations and enforcement actions.

### 9.4.3 Dry Weather Field Screening and Analytical Monitoring

The goal of the Dry Weather Program is to detect and eliminate illicit connections and illegal discharges to the storm drain system by monitoring dry weather discharges at 500 monitoring stations (excluding alternate stations). Street Division maintains and is continually updating a "Storm Drain System Map" (see Appendix IV) which is used to determine dry weather monitoring stations. Stations are selected based a non-random system that ensures equivalent and adequate coverage of the entire storm drain system. The non-random system considers locations that are downstream of suspected illegal or illicit activity; are located to the farthest downstream accessible location practicable; hydrological conditions, total drainage area, traffic density, age of structures/buildings, area history, and land use. The City has clearly identified each dry weather field screening and analytical monitoring station in a GIS layer (see Appendix XXII, "Dry Weather Field Screening and Analytical Monitoring Sites").

The City has developed written procedures for dry weather field screening and analytical monitoring that are consistent with 40 CFR part 136. These procedures include standardized field observations, monitoring, analyses, including numeric action levels that trigger follow-up investigations. The City will conduct dry weather field screening and analytical monitoring at least once per station during the prescribed dry weather monitoring period of May 1 through September 30. If flowing or ponded runoff is observed at a station, and there has been at least 72 hours of dry weather, staff makes observations and collects appropriate grab samples. Standard observations include general information such as station identification/sample/sampler information, static station information, land use information, atmospheric observations, runoff characteristics, and flow information. A minimum of 25% of flowing or ponded stations will be analyzed for analytical constituents including the following:

(a) Total Hardness
(b) Oil and Grease
(c) Diazinon and Chlorpyrifos
(d) Cadmium (Dissolved)
(e) Lead (Dissolved)
(f) Zinc (Dissolved)
(g) Copper (Dissolved)

(h) Entercoccus bacteria
(i) Total Coliform bacteria
(j) Fecal Coliform bacteria

Field Screening constituents collected at all locations where flowing or ponded runoff is present include the following:

(a) Specific Conductance (to calculate Total Dissolved Solids)
(b) Turbidity
(c) pH
(d) Reactive Phosphorous
(e) Nitrate Nitrogen
(f) Ammonia Nitrogen
(g) Surfactants (MBAS)

At locations where no flowing or ponded runoff is present, the sampler will make appropriate observations, and will then choose another station from a list of alternate monitoring locations.

Trash assessments will be completed at each monitoring location in order to provide information on the spatial extent, amount of trash, and nature of types of trash present at the location.

#### 9.4.3.1 Total Maximum Daily Loading (TMDL) Development for Impaired Water Bodies

**Chollas Diazinon TMDL**

The City monitors for Diazinon, Chlorpyofros, and dissolved metals in Chollas Creek as required by Order R9-2004-0277. The City has implemented a monitoring program that:

- Collects wet weather samples at two existing locations, and
- Inspect storm drain facilities.

The City is required to strictly manage the runoff and discharge of Diazinon to Chollas Creek. The City implemented educational best management practices (BMPs) and inventoried large pesticide applicators in the watershed. Monitoring data has shown a dramatic decline in the Diazinon and Chlorpyofros levels in the creek.

**Chollas Creek Dissolved Metals TMDL**

The San Diego Regional Water Quality Control Board (Regional Board) adopted the Chollas Creek Dissolved Metals TMDL on June 13, 2007. Once adopted by the State, the Regional Board will require the watershed jurisdictions to develop a Pollutant Source Reduction Plan. The City will collaborate with the other watershed dischargers to develop and submit the required plan to the Regional Board for approval. Upon approval of the plan, the City will assist in the implementation of the plan which includes

initiation of BMPs and monitoring. The City is planning to implement a monitoring program that will:

- Collecting wet weather samples at two existing locations, and
- Inspect storm drain facilities.

Once the TMDL has been implemented, the City will be required to strictly manage the runoff and discharge of dissolved metals to Chollas Creek.

It is important to note that the City has initiated program planning efforts to address the Metals TMDL, among other pending and anticipated TMDLs throughout the City's jurisdiction, through its Watershed Urban Runoff Management Plans (WURMPs). Information regarding the City's planning and implementation efforts will be reported through the WURMP annual reporting process.

#### 9.4.3.2 Regional Harbor Monitoring

The Regional Harbor Monitoring Program (RHMP) was developed by the Port of San Diego, Orange County, the City of San Diego, and the City of Oceanside in response to a July 24, 2003 request by the Regional Board under §13225 of the California Water Code. The RHMP is a comprehensive effort to survey the general water quality and condition of aquatic life in the harbors and to determine whether beneficial uses are being met for the following four local harbors: San Diego Bay, Mission Bay, Oceanside Harbor, and Dana Point Harbor. The program is composed of a core monitoring program with potential focused studies to answer specific questions. The core monitoring program was designed to address the following five major questions posed in the Regional Board's request:

1. What are the contributions and spatial distributions of inputs of pollutants to harbors in the San Diego Region and how do these inputs vary over time?
2. Are the waters in the harbors safe for body contact activities?
3. Are fish in harbors safe to eat?
4. Do the waters and sediments in the harbors sustain healthy biota?
5. What are the long-term trends in water quality for each harbor?

Implementation of the RHMP began with a Pilot Program to verify the design of the program. Prior to the initiation of sampling in the Pilot Program the following tasks were completed to finalize the design:

- Acquire and analyze relevant available historical information.
- Complete detailed mapping to verify stratum areas.
- Identify the indicators to be monitored.
- Establish the threshold levels.
- Establish the preset target proportions.

- Develop a Quality Assurance Project Plan.

A key element of the RHMP is the identification of strata within and across the harbors. This element was modeled after the regional Southern California Bight (Bight) and national Environmental Monitoring and Assessment (EMAP) programs. The use of strata allows delineation of harbor inputs based on activities within each area. Five strata were identified for monitoring in the core program: marinas, industrial/port, freshwater influenced, shallow water, and deep water. The shallow and deep water strata encompass all areas within the harbors not within the other three specific strata. The freshwater influenced stratum includes areas that may be affected by input from streams or storm water runoff (Weston, 2005).

Sampling for the Pilot Program began in August 2005. The Pilot Program is designed to run for three years with sampling conducted during the summer months. Full implementation of the RHMP will occur in 2008 and coincide with the next regional Southern California Bight Monitoring Program. The Pilot Program is a scaled down version of the RHMP that focuses on a limited number of indicator measurements and samples in two of the five identified strata. The strata sampled in the Pilot Program, marinas and freshwater influenced, were selected because the variability within them is anticipated to be greater than in the other three strata and thus will provide a conservative estimate of the amount of sampling needed to detect trends.

The RHMP report reviewing the results of the second year of the Pilot Program has been submitted to the Regional Board in July 2007. As such, it focuses on the measurements made in August 2006 for the marina and freshwater influenced strata in the four harbors, making comparisons using the binomial approach to historical data and compares the results of the two sampled strata to each other. At the end of the third year of the Pilot Study, the stakeholders will submit a report reviewing and analyzing the analytical results.

## 9.5 Follow-up and Enforcement

The following section is a description of the procedures utilized by the Storm Water Pollution Prevention Division Code Enforcement Officers when investigating violations of the City's Storm Water Management and Discharge Control Ordinance. This discussion is followed by a description of the actual enforcement mechanisms utilized by the Code Enforcement Section staff. In all cases the City will attempt to abate illegal discharges.

### 9.5.1 Investigative Procedures

1. *Monitor for storm water violations including commercial, industrial, mobile, residential, and municipal activities.*

Code compliance officers are assigned to work a specific area and respond to reports of alleged violations. Methods of investigation include direct observation, drive-bys, foot patrols, odors, evaluation of ecological assemblages, and storm drain inspections.

2. *Investigations*

Code enforcement staff will respond in a timely manner to reports of alleged discharges to the storm drain system, such as alleged spills from private sewer laterals. Code enforcement staff documents the nature of the discharge using complainant information, observations, photographs and/or waste/wastewater sampling. From the information gathered during investigation of the discharge, code compliance staff eliminates the discharge, establishes required corrections, evaluates the storm water BMPs, provides suggestion to prevent future discharges, and takes appropriate enforcement action. Any complaint not within the jurisdiction of the City will be forwarded to the appropriate agency or jurisdiction within one working day.

*3. Follow-up Investigations*

Follow-up investigations/inspections will be conducted by the code enforcement staff for verified discharges and non-compliance infractions to ensure the elimination of illegal discharges, illegal connections, and compliance requirements have been met.

*4. Referrals*

Code enforcement staff will notify the Neighborhood Code Compliance Division, Environmental Services Department, Park and Recreation Department, Fire Department, MWWD, Street Division, Engineering and Capital Projects Department, or other appropriate agencies if additional remedial assistance is necessary. There are also coordination meetings between departments with code enforcement activities.

The Environmental Services Department addresses reports of illegal dumping and littering, enforcing San Diego Municipal Code (SDMC) Sections 54.0209 and 54.0210. The Environmental Services Department has Solid Waste Code Enforcement Officers who are responsible for anti-waste education and enforcing compliance with the City of San Diego Municipal Codes dealing with solid waste issues.

The Neighborhood Code Compliance Department (NCCD) addresses reports of illegal grading (i.e. grading without a permit). The Engineering and Capital Projects Department has responsibility for construction sites with permits. More details about construction site enforcement are included in the Construction Contracts section.

NCCD also abates “nuisance flows.” “Nuisance flows” are defined as discharges that are exempted under the storm water ordinance where the discharge is creating a habitat for the growth of algae, mosquitoes, or other health hazards.

The Park and Recreation Department has jurisdiction over all City beaches. Dog feces on public property is defined as a nuisance under SDMC §44.0304.1 which states that failure to immediately remove dog feces to a proper receptacle constitutes a violation. This code is being aggressively enforced at Dog Beach at the mouth of the San Diego River. According to SDMC §12.0201, SDMC §43.0304.1 can be prosecuted as a misdemeanor (6 months in jail or $1000 fine) or at the discretion of the City Attorney's Office, an infraction (fine not to exceed $250).

*5. Education*

Educational material is provided to all responsible parties. When a responsible party for a discharge cannot be determined, the discharge will be abated and the residences or businesses in the surrounding area receive a letter or educational materials that explain how to comply with the Municipal Code. The Code Compliance Officers will use education to enforce the new minimum BMPs for municipal, residential, industrial/commercial sectors (see Appendices V, VI, and VII and sections 6.X.3.1.1).

For violations of the Storm Water Ordinance, if a responsible party is identified and sufficient evidence exists, a notice of violation or citation may be issued. Factors that are considered are: the activity, past violations, nature of discharge, intent, and potential to cause harm to people or the environment. A description of available enforcement and education tools is more thoroughly described in Section 9.5.2, “Enforcement Mechanisms.”

*6. Complaint and Violation Database*

Code enforcement staff maintains case files on all complaints for reference, follow-up, and reporting to management and the Regional Board (e.g., the Jurisdictional Urban Runoff Management Program (URMP) Annual Report).

*7. Follow-up call to complainant*

Code enforcement staff will conduct a follow-up call to the complainant(s) if additional details on the nature of the complaint are needed, or when a return call is requested.

### 9.5.2 Enforcement Mechanisms

The City’s ultimate aim is compliance with the Municipal Code and the Municipal Permit. While the City Code Compliance Officers have several different methods available to obtain compliance with applicable regulations, officers generally follow an established enforcement system to abate the violation and get the responsible party into compliance. This system is described below as progressive levels of enforcement.

**Level 1. Educational letters, BMP documents, or pamphlets**

Code enforcement staff utilizes level one enforcement when proof of an alleged discharge cannot be found or when the responsible party cannot be determined after a thorough investigation.

**Level 2. Education and Issuance of a Notice of Violation**

For initial violations of new regulations such as the Minimum BMPs (municipal, industrial and commercial, mobile businesses, and residential), educational letters, BMP documents, or pamphlets will be distributed to the violator and potentially a Notice of Violation (NOV). The NOV states that an illegal discharge has occurred (or is occurring) and establishes an abatement deadline. After the City completes adequate outreach and education regarding Minimum BMPs to businesses and residents, the City may pursue additional levels of enforcement for failure to implement the Minimum BMPs.

**Level 3. Issuance of a Notice of Violation/Administrative Citation**

Code enforcement staff utilizes level three enforcement when proof of discharge and a responsible party can be identified. Discharges that are less severe and smaller in nature generally receive an administrative citation. The Code Compliance Officer will generally include educational information on the types of BMPs that should be implemented thereafter to avoid future violations. In some cases (e.g., when additional time for research is needed to create a prosecutable case), a Notice of Violation may be issued before an Administrative Citation.

The administrative citation process has been revised and the maximum fine amounts have increased. The changes provide more flexibility and also will expedite enforcement actions for some discharges that are currently addressed under administrative civil penalties.

**Level 4. Issuance of a Notice of Violation and Order (Administrative Civil Penalties)**

Code enforcement staff utilizes level four enforcement when proof of discharge and a responsible party can be identified and the discharge is more severe. A Notice of Violation (NOV) states that an illegal discharge has occurred (or is occurring) and establishes an abatement deadline. The Code Compliance Officer will generally include educational information BMPs that should be implemented thereafter to avoid future violations.

After reviewing all the case information, the Code Compliance Official determines the appropriate civil penalty, and issues a Notice and Order. The City may assess civil penalties up to $10,000 each day the violation continues, may recover the costs of enforcement, and may establish other appropriate corrective measures. In the event the

violator does not comply with the Notice and Order within the 14-day time period, an appeal hearing is scheduled, after which the Hearing Officer issues an Administrative Enforcement Order. The violator may appeal the Hearing Officer's decision by filing a writ requesting a hearing before the Superior Court.

**Level 5. City Attorney Referral (Civil or Criminal Prosecution)**

Code enforcement staff utilizes level five enforcement when the violator continues to discharge waste after the issuance of several NOVs or Administrative Citations. The case will be referred to the City Attorney Office to review for criminal prosecution. City Attorney referral is also appropriate for discharges of hazardous substances or hazardous waste.

### 9.5.3 Illicit Discharge Investigation/Inspection

The City will take immediate action to eliminate detected illicit connections, discharges, or discharge sources. The City refers to established action levels to determine if a monitoring result requires a follow-up investigation. The City has developed procedures for source identification and follow-up investigations to address monitoring results that have exceeded the established action levels.

Within two business days of receiving field screening results indicating an exceedance of action levels, the City will initiate an investigation to identify the source of the exceedance, or will provide the rationale for why the discharge does not pose a threat to water quality and does not require follow-up. Within two business days, where applicable, of receiving analytical monitoring results indicating an exceedance of action levels, the City will initiate an investigation to identify the source of the exceedance, or will provide the rationale for why the discharge does not pose a threat to water quality and does not require follow-up. City staff will immediately investigate monitoring stations where an illicit discharge is obvious.
City staff uses many of the following tools, data, and monitoring principles to aid in the detection of illicit connections, discharges, or discharge sources:

- Conveyance system bifurcation model to identify strategic sampling locations for IC/ID pollution tracking and abatement
- Basic and advanced water testing methods for use by lab technicians, biologists, code compliance officers, and other non-storm water field personnel
- Land use maps (including sensitive environmental resources).
- Watershed boundaries
- Storm drain facility maps
- 303(d) list for impaired water bodies
- Historical water quality sampling data
- High use recreational beaches and bays
- Inter- and Intradepartmental programs goals and objectives
- Region-wide benthic invertebrate monitoring data

## 9.6 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, “Education.”

### 9.6.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

**New Employees**

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a “Storm Water and You” training module presented at the “New Employee Orientation” workshop. Staff that do not take the “New Employee Orientation” workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

**Existing Employees**

Existing employees with regular access to a computer will be mandated to receive “refresher” training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-

based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

### 9.6.2 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by the Storm Water Pollution Prevention Division Monitoring and Code Enforcement Sections in consultation with the Storm Water Pollution Prevention Division Education and Outreach Program (e.g., including the Think Blue logo on materials). Table 9-3 lists the activities, specific targeted communities, and the anticipated completion dates.

**Table 9-3. Department External Outreach Activities by Target Audience.**

| Department / Division Activity | Target Audience(s)<br>1. Construction Site Owners and Developers<br>2. Industrial Owners and Operators<br>3. Commercial Owners and Operators<br>4. Residential Community, General Public, and School Children<br>5. Under-represented audiences in 1-4 | Schedule |
|---|---|---|
| Copy of Storm Water Municipal Code | 1-5 | Ongoing |
| 235-1000 Storm Water Hotline number to report illegal discharges | 1-5 | Ongoing |
| Think Blue educational brochure | 1-5 | Ongoing |
| Distribute “Contain, Control, Capture” BMP document | 1-5 | Ongoing |
| Business specific BMP Fact Sheets | 1-3, 5 | Ongoing |
| Clean Construction Brochure for construction sites | 1 | Ongoing |
| Construction BMPs flyer | 1 | Ongoing |

## 9.7 Annual Report Forms

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by departments to track expenditures for designing, developing, and implementing BMPs and educational activities. The Storm Water Pollution Prevention Division Code Enforcement and Monitoring Sections’ annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, “Annual Report Form Questions” for department-specific reporting requirements.

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# *10.0 Education Section*

## 10.1 Introduction

This section is primarily applicable to the City's Storm Pollution Prevention Division's Education and Outreach Program. Other departments also perform training and outreach, and those details are found in section 6.X.4.3 of each municipal section. The goal of this section is to ensure education and outreach is being conducted to the targeted audiences as outlined in the Municipal Storm Water Permit (Order No.R9-2007-0001 "Municipal Permit", Appendix I). Additionally, this section will outline the strategies, methods, and communication vehicles the City will employ to increase awareness, knowledge, and retention of storm water best management practices in an effort to improve overall water quality.

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial/Commercial Owners and Operators
- Mobile Businesses
- Residential Community, General Public, and School Children

The Municipal Permit mandates that the City:

- Implement a public outreach and education program
- Measurably increase the knowledge of target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential MBP solutions for the target audience
- Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment

To meet this mandate, the City will implement an evolving training and public information and outreach plan utilizing a wide array of tools, tactics, and activities. The City's program must meet the requirements of the Municipal Permit, as described in Table 10-1.

**Table 10-1. Permit Requirements – Education.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 10 | (Pg. 45) D.5.a.1 | Educate each target community on laws, regulations, best management practices (BMPs), Jurisdictional Urban Runoff Management Plan (URMP), and other topics as appropriate |

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 10.2 | (Pg. 45) D.5.(b)1 | Municipal Departments and Personnel Education |
| 10.3 | (Pg. 45) D.5.a.(2) | Create educational programs with an emphasis on underserved audiences, high-risk behaviors, and "allowable" discharges, including various ethnic and socioeconomic groups and mobile sources |
| 10.3 | (Pg. 46) D.5.b.(1)(c) | Educate Industrial/Commercial Owners and Operators |
| 10.3 | (Pg. 39) 3.a.(4)(a)iii | Educate Mobile Businesses |
| 10.3 | (Pg. 46) D.5.(b)(2) | Educate New Development and Construction |
| 10.3 | (Pg. 46) D.5.(b)(3) | Educate Residential, General Public, School Children |
| 10.3 | (Pg. 50) F.1. | Develop and implement a regional residential education program |
| 10.4 | (Pg. 67) J. 3. (c, g, j);<br>(Pg. 51) G. 3 | Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures |

## 10.2 Staff Training Element

In general, the Storm Water Pollution Prevention Division will continue to be responsible for developing and delivering general training to employees to provide a guideline and promote awareness of storm water issues to City employees whose primary jobs have little or no impact and relation to storm water. Individual departments, particularly those with field crews that have more opportunity to cause a discharge into the storm drain system will be responsible for training its employees in the Best Management Practices for protecting storm drains as well as proper cleanup of potential pollutants. Training specifics include:

### Municipal General Storm Water Training

*New Employees*

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. New staff will receive a basic introduction to storm water issues through a "Storm Water and You" training module created by the Storm Water Pollution Prevention Division and presented at the "New Employee Orientation" workshop. Staff that do not take the "New Employee Orientation" workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation from their department.

*Existing Employees*

Existing employees with regular access to a computer will be mandated to receive "refresher" training in storm water pollution prevention every two years through a City-wide training element to be developed by the Storm Water Pollution Prevention Division. Additionally, knowledge assessment through "e-tests" for randomly selected City employees with regular computer access will occur periodically between the mandated

"refresher" courses. Finally, the Storm Water Pollution Prevention Division will develop a computer based, activity specific training module addressing storm water BMPs for common activities shared by multiple departments.

The following Table 10-2 diagrams the type of City employee and the type of trainings that will be provided over the term of the Municipal Permit.

**Table 10-2. Comprehensive Municipal Training Table.**

| Training | New City Employees- Field and Non-Field | All Existing City Employees (Non-Field) | Field Crew Employees |
|---|---|---|---|
| New Employee Orientation Training "Storm Water and You" | RQ | | |
| Computer-Based General Refresher Training - once every two years | | RQ | RQ (for employees with regular computer access) |
| Activity-specific BMP Training –Annual | | | RQ |
| E-test of Randomly Selected City Employees – Annual | R | R | R (for employees with regular computer access) |
| Computer Based Activity-Specific Training – Annual* | | | RQ |

RQ= Requirement; R=Recommended
*or other equivalent annual review as identified by the Department

## Municipal Activity-Specific Training

Departments that perform work activities specifically identified in the Municipal Permit and/or perform work that can directly impact water quality will create, execute, and fund activity-specific training sessions for their employees. These trainings must introduce work processes, functions, and behaviors that incorporate the Minimum BMPs necessary for staff to prevent illegal discharges into the City's storm drain system. It is the City's intention to provide the most in-depth and frequent trainings to those employees and departments whose work has the most potential impact to storm water.

Activity-specific BMP training(s) and their frequencies are detailed in the various specific sections of the URMP (see Section 3.0, "Development Planning Section", Section 4.0, "Construction Section", Sections 6.X.4.3 in the municipal sections, Section 8.0, "Residential Section", and Section 7.3.4.1.1 in the "Industrial/Commercial Section").

## 10.3 Educational Outreach Element

This subsection describes the content, form, and frequency of education and outreach efforts for residential, general public, school children, and underserved target communities including high risk behaviors, "allowable" behaviors, mobile sources, and various ethnic and socioeconomic groups. New development and construction target audiences as well as industrial/commercial outreach programs are discussed briefly in this chapter and in detail in their individual sections (see sections 5.5.5.3 and 7.3.4.1.2).

### Background

The City's successful education and outreach programs are founded on a carefully aligned set of communication goals that complement one another, yet recognize the varied audiences, tools, and techniques to be considered in order to achieve meaningful changes in behavior.

Specific education and outreach goals and objectives identified by the City include:

- Support the mission and objectives of the City's overall Storm Water Program and the URMP to *"increase the knowledge and reduce the polluting behaviors of target audiences"*
- Identify diverse audiences and carefully target sustained communications through Community Based Social Marketing (CBSM)
- Ensure distribution of clear, concise and consistent information to target audiences
- Foster cooperative approaches with regional Copermittees to ensure widespread distribution of consistent information
- Cultivate an employee base that is knowledgeable about storm water pollution prevention issues and techniques, and carries pollution prevention messages throughout their communities
- Demonstrate a measurable increase in target audience knowledge and behavior of the target audiences regarding storm water pollution prevention
- Foster widespread, comprehensive and long-term school-age education programming related to storm water pollution prevention

*City of San Diego 2007 Survey*

In January 2007 the City of San Diego conducted a population representative random digit dial telephone survey of 800 residents. The objectives were to provide a new baseline measure of awareness, attitudes, and behaviors relative to storm water pollution, determine potential barriers to behavioral change, assess different potential motivations for change, and provide information that can be used in formulating a community based social marketing program. The questionnaire and data analysis are

available at www.ThinkBlue.org in the "Literature" section for the "2007 Survey of City Residents."

Results from the survey demonstrated that the majority of residents believe pollution of the ocean, bays and beaches continues to be a very important issue facing the City, and a willingness to take steps to help improve water quality. Information from the survey served as a guide to the City's outreach strategy.

**Outreach Strategy**

A major component of the Municipal Permit requires the City to measure the effectiveness of its education and outreach program by observing and quantifying behavior changes of target audiences. The City will employ CBSM practices in an effort to develop sustainable behavior change in target populations and audiences located in areas of the City that have significant levels of pollutants of concern as identified by the Municipal Permit.

CBSM packages basic principles of social psychology with applied research methods to provide a usable framework for practitioners working to promote behavior change. CBSM uses a four-step process to foster sustainable behavior change:

(1) Identify the barriers to a target behavior - A barrier is anything that decreases the likelihood that an individual will engage in the desired behavior. Barriers to engaging in sustainable behaviors vary depending on the population, context, and behavior of interest, and multiple barriers can exist simultaneously for each behavior. Barriers can be either internal to the individual (e.g., motivation) or external to the individual (e.g., structural elements of the program). Barriers for the target behavior will be identified through literature reviews, focus groups, and surveys, as appropriate.

(2) Use behavior change tools to overcome the barriers - Psychological research offers a variety of principles and techniques that can be used to motivate behavior change. These tools may include providing normative information, using commitment and consistency, and using the norm of reciprocity. The most appropriate tool will be selected and incorporated into the City's program materials.

(3) Pilot the selected tools using empirical research methodology and a control group - A key element of the CBSM approach is to pilot a program with a small portion of the community using an intervention and a control group. If the pilot is not successful, the strategy will be refined and then piloted again. If the pilot is successful in determining changing behavior, the strategy will be implemented on a larger scale.

(4) Evaluate the project once it has been widely implemented - CBSM requires that the program be carefully evaluated by comparing baseline measures of behavior to behavior at several points in time following the intervention. Wherever possible, the large-scale evaluation should also include a control group.

## Planned Outreach Initiatives

*Tools for Special Targeted Groups*

As required by the Municipal Permit, the City has identified BMP requirements for the following audiences:

- Commercial and Industrial Sites/Sources
- Mobile Businesses
- Residential Areas and Activities
- New Development and Construction owners and operators
- Municipal personnel

These BMP requirements are included in Appendices X, XI, and XII, in Section 3.0, "Development Planning", in Section 4.0, "Construction", and in Sections 6.X in each municipal section. To achieve Municipal Permit compliance, BMPs will be promoted and presented to the various target audiences above through a variety of outreach tools and threaded into the City's CBSM pilot projects as appropriate. Special care will be taken to contact hard-to-reach and underserved communities from various ethnic and socioeconomic groups through alternative media, non-traditional outreach partnerships, and social organizations. Some of the outreach tools the City intends to employ include:

- The "Think Blue" web site (www.ThinkBlue.org)
- Press Releases
- Fact sheets
- Brochures
- Public Service Announcements
- Code compliance officer interaction with the public
- Speakers Bureau presentations
- Special events
- Television interviews

*Tools for the General Public*

This subsection describes the ways Storm Water Pollution Prevention Division delivers its "Think Blue" messages to the public. Additionally, the Division enlists the aid of other City departments to this end. Specific education and outreach activities offered by the various departments are included in their department's primary section (see Table 2-1 in Section 2.0, "Administrative and Legal Procedures" for primary sections). For example, "Think Blue" messages can be found in bill inserts, information racks in department community service centers, libraries, and the Office of the City Treasurers. Other departments will assist by distributing storm water related messaging through mailings, newsletters, bill messaging, and at special events.

Outreach with traditional education and outreach tools will be ongoing or implemented as needed based on the evolving CBSM strategy. These tools and materials may include the following:

***"Think Blue" Program Logo and Slogan –*** The Think Blue logo and slogan ("you're the solution to storm drain pollution") have been incorporated into the majority of outreach materials in an attempt to brand and legitimize the City's Storm Water Pollution Prevention program to the public. While the logo has generated a great deal of recognition with the public, the City is currently looking to refresh the recognizable "Think Blue" brand in an attempt revitalize interest in the campaign and the messages it carries.

***Advertising –*** Well-placed advertising of Think Blue Public Service Announcements is a critical part of the City's overall Storm Water Program's outreach and education efforts. Forms of advertising have included and will continue to include:

- Billboard space
- Radio drive-time
- Air time on local network and cable stations
- Free time from cable, radio, TV network during prime time
- New media including movie theatres, pod casting, blogs, etc.

***Public Access Channels –*** The City's City TV 24 government access cable channel will continue to be a useful resource for the delivery of storm water messaging to the public. The station will continue to air Think Blue Public Service Announcements and Storm Water Hotline slides.

***Special Events –*** Special events offer a wide variety of opportunities for the Education and Outreach Program to educate the public about storm water pollution. In collaboration with Regional Copermittees and the City's Office of Special Events, the Storm Water Pollution Prevention Division will seek out appropriate venues to relay storm water pollution messages to the public. Such messages may include proper disposal of trash and liquids at events and general storm water messaging as appropriate.

There may also be appropriate occasions for the program to sponsor its own events including Community Clean-up Days; Toxic Collection Events and more.

***Web Page –*** www.ThinkBlue.org provides a wide variety of storm water related information for residents and businesses. The site provides a number of resources including downloadable program brochures, fact sheets, reports, news, Project SWELL information, and a wealth of other resources. BMP information is available for businesses and industries located in the City and Minimum BMP Fact Sheets will be housed on the City web page for all targeted audiences. In addition, an educational

resources link connects users to storm water and watershed educational resources available from other institutions. Visitors to the site will also be able to view storm water television PSAs and the City's general storm water training video.

***Speakers Bureau –*** A variety of civic, volunteer, business groups and others hold periodic meetings which spotlight invited speakers. The City will develop presentation materials, train key speakers, and work to get speakers on the agendas of these groups to deliver information about projects and cooperative support efforts by 2009.

***Partnerships –*** Success in reaching diverse residents and businesses from throughout the City will be accelerated by implementing cooperative support efforts among two or more organizations and groups. Such cooperative ventures expand the pool of individuals providing information and obtaining feedback, show that the issue is of significant importance, provide third-party credibility to the issue by involving others and assist in reaching specialized target audiences. Partnerships can take on many forms as well – from joint sponsorship of special events, BMP material development and dissemination, joint news releases, joint letters to legislators, and more.

Among groups that the Storm Water Pollution Prevention Division has worked with in the past and will continue to foster collaborative partnerships include:

- Higher Education Institutions
- Environmental Organizations (San Diego Coastkeeper, Surfrider Foundation, the Environmental Health Coalition, San Diego River Foundation, Sierra Club, Audubon Society, I Love A Clean San Diego Inc, etc)
- Local School Districts/ San Diego Unified Schools, Oceanside School District
- Construction Industry
- Business and Industry Groups
- Tourism
- Civic Associations
- Legislators

***Collateral Materials –*** The City has developed a number of "Think Blue" related collateral materials and will continue to update and create new pieces as needed. The City will continue to create pieces in alternative languages as appropriate. Collateral materials that will continue to be used include:

> ***Fact Sheets*** – Information sheets provide bulleted, factual information about the overall Storm Water Program or BMPs for specific activities. These will be revised and updated to include Minimum BMPs for commercial and industrial sites/sources, mobile businesses, and residential areas and activities.

***Frequently-Asked Question Sheets*** – Brief handouts that address questions most often encountered about the program, or specific elements, along with thorough responses.

***Brochures*** – The City's "Think Blue" brochure will continue to be a primary component in delivering general storm water pollution messages to the public. The brochure, printed in English and Spanish is a concise call to action to residents and businesses to be mindful of storm water pollution and their impacts on water quality. The City has also produced a "3 C's" brochure, which demonstrates the concepts of 'Contain, Control and Capture,' and gives the public practical steps they can take to stop runoff from entering the storm drain conveyance system. The City, through both its education and enforcement teams, has handed out thousands of these brochures to municipal employees, businesses and the general public.

***Storm Water Door Hanger*** – this item serves as a friendly reminder for enforcement officers who see potential violations on residential and commercial property. The door hangers point out potential storm water violations or potential property issues, and provides useful suggestions on steps that can be taken to alleviate possible fines.

***Integrated Pest Management Cards (IPM)*** – Working in conjunction with the County of San Diego, the City helped produce 11 IPM cards promoting environmentally safe alternatives for removing common insects instead of pesticides. The cards, printed in English and Spanish, were distributed at Home Remodeling and other various community events. Versions are also available on the "Think Blue" web site.

***Informational Booklets*** – The City will continue to distribute informational booklets providing Best Management Practices in an effort to provide information to specific business types that have a higher potential for causing illegal discharges into storm drains. Examples include a "What's Cookin'" booklet for restaurants regarding the proper disposal of grease and other restaurant waste as well a "Green Wrench Guide" booklet which provided tips and procedures for home and commercial auto repair.

***Bill Inserts*** – The Storm Water Pollution Prevention Division will utilize the City's billing system as a mechanism to reach residents, licensed business, including mobile businesses, and commercial/industrial facilities to educate them on the Minimum BMPs. Storm water pollution prevention messages have been imprinted on water bills in collaboration with the Water Department and storm water informational flyers are distributed with Business License renewals in collaboration with the Office of the City Treasurer. The City will continue to explore distribution of storm water messages through City billing as appropriate.

***Promotional Items*** – Promotional items sponsored by the Storm Water Pollution Prevention Division will provide reminders of the Program and key messages. The Storm Water Pollution Prevention Division has already developed a host of promotional items including "Think Blue" surfboard key chains, pencils, frisbees, and "Sweep It Up" dust pans. Additional promotional items will be developed as appropriate.

*Tools for Student-Age Groups*

Student-age directed outreach and education will continue to be a long-term commitment for the City. Through the Project SWELL elementary school curricula, the City will continue to educate school children about the importance of our recreational waterways and human-water interaction through a well-balanced, comprehensive and hands-on water quality and pollution prevention curricula.

The goal of the Project SWELL program is to develop and implement a water quality and pollution prevention curricula for K-12 classrooms in San Diego Schools by 2009. Project SWELL is expected to reach approximately 140,000 students, grades K-12, in San Diego by 2009. Currently lesson plans have been developed for 2nd, 4th, 5th, and 6th grade classrooms, and Kindergarten and 7th grade curricula will be completed and implemented per approval by 2010.

## 10.4 Outreach Section Effectiveness Assessment

The Municipal Permit requires the City to report on its storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by the Storm Water Pollution Prevention Division Education and Outreach Program to track expenditures for designing, developing, and implementing educational and outreach activities. The Storm Water Pollution Prevention Division Education and Outreach Program annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, "Annual Report Form Questions" for Department-specific reporting requirements and effectiveness assessment questions.

# *11.0 Public Participation Section*

## 11.1 Introduction

This section will describe the steps that will be taken primarily by the Storm Water Pollution Prevention Division to include public participation in the development and implementation of the City's Jurisdictional Urban Runoff Management Plan (URMP) and additional activities related to public participation. While closely linked to public education efforts (see Section 10.0, "Education"), public participation involves interacting and assessing the public's willingness to participate and ability to retain storm water messages. In the past, public participation efforts focused on activities and communication efforts that not only allow for, but encourage, public input and involvement, and potentially collaborative decision making on programs and decisions related to storm water pollution prevention. Additionally, the City has chosen to pursue Community Based Social Marketing (CBSM) strategies, and therefore public participation plays the critical role in soliciting buy-in for behavior changes and utilizing their willingness to change behaviors to influence others.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No.R9-2007-0001 "Municipal Permit" see Appendix I), as described in Table 11-1.

**Table 11-1. Permit Requirements – Public Participation.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 11.2 | (Pg. 46) D.6 | Incorporate a mechanism for public participation in the updating, development, and implementation of the URMP. |
| 11.2 | (Pg.61) 6.j | Describe steps to be taken to include public participation in the development and implementation of the URMP. |

According to the recent 2007 survey, the City's Storm Water Pollution Prevention Division has an energized and concerned population with which to work. Community members are keenly interested in issues related to pollution of the ocean, bays and beaches (for a copy of the "Survey of City Residents 2007," prepared for the Storm Water Program (see Appendix XXI).

## 11.2 Public Participation Goals and Objectives

The City of San Diego has engaged and embraced the role public participation plays in the success of pollution prevention efforts. Specific goals and objectives identified by the City of San Diego for its storm water pollution prevention public participation efforts have, and will continue to, include:

- Continuing to promote the City of San Diego as not only a clean water leader but also a community partner and supporter of storm water pollution prevention efforts
- Fostering established long-term relationships with stakeholder groups that will be beneficial to City's water quality efforts and other community programs
- Continuing successful ongoing programs like Project SWELL, among others, under which key stakeholders are routinely involved
- Furthering support of the overall mission and objectives of the City of San Diego's Storm Water Pollution Prevention Division and this URMP to *"increase the knowledge and reduce the polluting behaviors of target audiences."*
- Assessing the general understanding of the storm water pollution issue and developing collaborative ideas for changing and/or modifying behaviors through an annual random digit dial telephone survey of residents
- Continuing to solicit and address specific concerns and opportunities for various stakeholder groups through speakers bureau presentations
- Utilizing CBSM practices to identify messages that will resonate with key stakeholders and encourage behavioral changes (see Section 10.0, "Education" for details)
- Utilizing CBSM pilots to receive direct feedback from residents and businesses regarding best management practices (BMPs) identified for their particular community
- Holding public workshops on various storm water related projects and activities.
- Identifying evolving community concerns/interests
- Allowing for collaborative decision making on key issues impacting the general community or specific areas and interests
- Building a supportive group of citizens from various communities who will help shape and ultimately implement storm water pollution prevention activities and programs
- Providing measurements of program achievements through community input
- Utilizing the storm water hotline (619-525-1000) and web site (www.thinkblue.org) as information access points

**Audiences/Stakeholders**

During the Municipal Permit cycle, key stakeholders will be routinely assessed and evaluated. While initial efforts may focus generally on the topic of storm water pollution, subsequent participation efforts may be very narrowly focused either by watershed issues, or property-use issues, for example. At the outset, however, potential public participation audiences will include:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators Commercial Owners and Operators
- Residential Community, General Public, and School Children

For purposes of this plan, the City of San Diego has further broken down target audiences under “Residential Community, General Public and School Children.”

**Public Participation Strategies and Tactics**

The City will actively engage the public and key stakeholders in the development and implementation of the URMP. The City has and will continue to make presentations and receive input and feedback regarding the URMP to the Public Utilities Advisory Committee (PUAC) meetings and the Natural Resources and Culture Council. In addition, the City has twice met with and received input and comments from stakeholders within the industrial and commercial communities to discuss the minimum BMP requirements. The public has provided input for the URMP through the California Environmental Quality Act (CEQA) process, during which a website was created specifically for review of the URMP document with a 30-day public comment period.

Additionally, the Storm Water Pollution Prevention Division will regularly interact with the public. The division has been and will continue to be called upon to provide testimony to the Natural Resources and Cultural Council and staff is involved in the PUAC and its Storm Water Subcommittee in an effort to keep the public apprised of storm water issues and receive public input. As needed, the City will pose specific questions and bring significant issues forward to the committee for consideration.

Public participation will also be provided through traditional outreach and education venues. As the issues surrounding storm water evolves, so too will the City’s outreach methods. Tools available to the City of San Diego include:

*Telephone Surveys* – The City of San Diego has been and will continue conduct a baseline survey specifically related to Storm Water Pollution Prevention (see Appendix XXI, “Survey of City Residents”). This survey will be conducted annually to measure attitudinal and behavioral changes.

*Focus Groups* – Focus groups has been and will continue to be utilized as an excellent means of quickly obtaining useful input in testing the effectiveness and resonance of strategic communications messages.

*Storm Water Hotlines* – The 619-235-1000 Storm Water Hotline has received more that 17,000 calls since its inception in 2002. The hotline provides the public the opportunity to contact the City if someone witnesses an illegal discharge entering the storm drain system. The hotline will continue to be an invaluable asset in helping the Storm Water Pollution Prevention Division Code Enforcement Section cite and educate those residents and businesses that violate the City’s Stormwater Management and Discharge Control Ordinance (Stormwater Ordinance). In addition, the City will continue to partner with the County of San Diego’s 888-Think Blue Hotline that allows County residents to call in illegal discharges.

*Web Site* –The City's web site, www.ThinkBlue.org has been and will continue to provide the public the ability to offer comments and a variety of programs and initiatives regarding storm water issues. As a comprehensive information repository, the Storm Water Program web site will continue to encourage public involvement by informing the public about the important issues associated with the Storm Water Program.

*Stakeholder Interviews* – The City will continue to meet with key local and regional stakeholders in an effort to create partnerships and trust. The City will continue to consult stakeholders about concerns, issues of interest, and opportunities for the improving the Program.

*Speakers Bureau* – The City will format its speakers bureau engagements to allow time for audience questions. Questions will be recorded and logged as appropriate to ensure the public issues are understood and will be potentially useful in helping to guide future outreach efforts.

*Door-to-Door Canvassing* – The City will continue to utilize door to door canvassing to ensure residents in a particular area are receiving critical storm water related information, especially as it relates to potential construction issues. Providing one-on-one communication will be useful in identifying issues particular to that geographic region.

*Meetings, Hearings, Open Houses, and Workshops* –.The City will continue to host public meetings in an effort to provide the public the opportunity to have it questions answered and its concerns acknowledged. The City will continue to properly notify these meetings and provide times and locations that are convenient for the public to attend.

*Partnerships* – The City will continue to seek out and coordinate initiatives and activities with well-established organizations in an effort to engage the public and encourage their support and participation. Examples of such groups include:

- Educational Institutions
- Environmental Groups
- Scouting Groups
- Construction Industry
- Business and Industry Groups
- Tourism
- Civic Associations
- Legislators

# 12.0 Fiscal Analysis

## 12.1 Introduction

The Storm Water Pollution Prevention Division is the City's division responsible for reporting on the Jurisdictional Urban Runoff Management Program's (URMP) fiscal analysis to the San Diego Regional Water Quality Control Board ("Regional Board") each year. The Storm Water Pollution Prevention Division annually collects financial information from City departments through the "Annual Report Form Questions" in Appendix XIII, as well as financial information from within the Division, analyzes the fiscal information, and reports the findings in the City's URMP annual report to the Regional Board.

This URMP section focuses on first identifying the estimated costs associated with the implementation of the URMP activities, and second, describes the processes the City will use to conduct the fiscal analysis each year. The goals of the fiscal analysis are to:

- Document the need for City departments and divisions other than the Storm Water Pollution Prevention Division to budget for URMP activities (e.g., administration, training, and BMP deployment).
- Document the need for the Storm Water Pollution Prevention Division to budget for all permit-required activities.
- Document the City's expenditures for activities that improve storm water quality but that are not specifically required by the URMP (e.g., trash and sewage collection, recycling programs, enforcement of littering ordinances).
- Provide data for future program and cost effectiveness analyses through the permit-required "Effectiveness Assessment" (see Section 13.0).

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No.R9-2007-0001 "Municipal Permit," Appendix I), as described in Table 12-1.

**Table 12-1. Municipal Permit requirements – Fiscal Analysis.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 12 | (Pg. 51) G.1 and G.3 | Each Copermittee secures the resources necessary to meet all requirements of the Municipal Permit. |
| 12.3 | (Pg. 51) G.2 | As part of the Regional Urban Runoff Management Program, the Copermittees will collectively develop a standardized method and format for annual reports in Fiscal Year 2009. |

## 12.2 Fiscal Analysis Methods

Each City department reports on storm water activities and fiscal expenditures to the Storm Water Pollution Prevention Division as part of the URMP Annual Reporting

process by July 21 each year. Additionally, each fiscal year a budget is developed and maintained by departments to track expenditures for designing, developing, and implementing BMPs and educational activities.

After receiving the annual report form fiscal information from departments, Storm Water Pollution Prevention Division Fiscal Analysts prepare the Fiscal Analysis section of the URMP Annual Report for the entire City.

Our current Fiscal Analysis methods are as follows:

- Departments will be responsible for identifying and obtaining costs associated with Municipal Permit compliance, and will annually track and report its expenditures (see "Annual Report Form Questions", Appendix XIII).
- Storm Water Pollution Prevention Division will compile, review, and possibly modify all cost data from departments.
- Annually review financial assessment forms for all URMP sections, compile information, and incorporate into each year's annual report.
- Determine the annual budget for Storm Water Pollution Prevention Division, and include in the annual report to the Regional Board.
- Determine potential revenue sources for Storm Water Pollution Prevention Division.
- The final budget is approved by City Council through a budget ordinance prior to the beginning of each fiscal year.

### 12.2.1 Five-Year Budget Forecast

The adoption and implementation of the updated URMP will increase expenditures by the City. While the majority of the City's expenditures for URMP are administered by the Storm Water Pollution Prevention Division, the General Services Department's Street Division budgets significant amounts of money for permit-required street sweeping and storm drain system inspection, cleaning, and maintenance. Other departments also designate funds from their budget to comply with the Municipal Permit.

In the Mayor's Five-Year Financial Outlook for 2008-2012 Storm Water has been identified as a critical City program that requires additional funding for the next 5 years. Based on preliminary estimates, the Municipal Permit will require Storm Water Pollution Prevention Division expenditures of $22.9 million in fiscal year 2008. Additional expenditures will be required by other City departments. The City's estimated costs to implement the 2007 Municipal Permit are reflected Table 12.2.

**Table 12-2. Estimated Storm Water Pollution Prevention Division and Streets Division Budgets for Storm Water Permit Compliance.**

| Municipal Permit Year/ Budget Period[1] | Jurisdictional URMP | Watershed URMPs | Regional URMP |
|---|---|---|---|
| Fiscal Year 2008 | $36,000,000 | $6,000,000 | $100,000 |
| Fiscal Year 2009 | $45,000,000 | $9,000,000 | $150,000 |
| Fiscal Year 2010 | $45,000,000 | $9,000,000 | $150,000 |
| Fiscal Year 2011 | $46,000,000 | $9,000,000 | $200,000 |
| Fiscal Year 2012 | $47,000,000 | $9,000,000 | $200,000 |
| Fiscal Year 2013 | $48,000,000 | $9,000,000 | $200,000 |
| **Total Program Costs:** | **$267,000,000** | **$51,000,000** | **$1,000,000** |
| **Total City-Wide Costs:** | **$319,000,000[2]** | | |

[1] The 5-year 2007 Municipal Permit cycle extends over six fiscal years (March 24, 2008 to March 24, 2013).

[2] Actual implementation of the activities identified in the Urban Runoff Management Programs is dependent upon identification of funding in future yearly budgets and City Council approval. Only Street Division and Storm Water Pollution Prevention Division estimates are included; other department estimates are not included. Estimates include initial planning costs for TMDLs/ASBS regulations.

Currently, funding for Permit-required activities undertaken by the Storm Water Pollution Prevention Division and the Street Division is provided by the City's General Fund with approximately $6 million in revenue from the City's Storm Drain Fund. In the future, some of this cost could be offset by increased storm drain fees, but any additional dedicated funding would require a vote of the public.

To comprehensively address the water quality and storm drain infrastructure improvement needs within the City, including the complex series of Municipal Permit, Total Maximum Daily Load (TMDL), and Areas of Special Biological Significance (ASBS) regulations that are either in effect or scheduled to be adopted during this Municipal Permit cycle, the City needs to prepare a storm drain system master plan. This plan is anticipated to result in capital projects and priorities for system improvement. Because the majority of future system improvement cost estimates will not be identified until TMDL regulations are fully adopted, these costs are not included in Table 12-2 and will be addressed at a later date.

## 12.3 Update to Fiscal Analysis Methods

The City's fiscal analysis process will be updated and expanded in the Fiscal Year 2009 Annual Report after a standardized format is developed by the co-permitted jurisdictions (Copermittees) under the Municipal Permit.

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# 13.0 Effectiveness Assessment Component

## 13.1 Introduction

The requirements of the Municipal Storm Water Permit (Permit) specify that the City shall assess, annually and long-term (five-year intervals) the effectiveness of each significant activity implemented (as defined in Section 13.2.2) permit component, and the overall Urban Runoff Management Program (URMP). This section outlines the planning, implementation, and assessment that the City will use to assess the effectiveness of its efforts at improving surface water quality both annually and long-term (five-year intervals).

Primary responsibility for the assessment of the overall program is with the Storm Water Pollution Prevention Division in the General Services Department. However, other departments are also subject to JURMP requirements and are responsible for self-evaluation and reporting to the Storm Water Pollution Prevention Division. Appendix XIII, "Annual Report Form Questions," contains effectiveness assessment questions that are distributed to responsible departments to evaluate their effectiveness.

The City's program must meet the requirements of the Municipal Storm Water Permit ("Municipal Permit", Order R9-2007-001, see Appendix I), as described in Table 13-1.

**Table 13-1. Permit requirements – Assessment.**

| URMP Section | Municipal Permit Section | Requirement (Summary) |
|---|---|---|
| 13.2 | (Pg.52) I.1 | Implement an updated approach to annually assessing the effectiveness of the JURMP. |
| 13.3 | (Pg. 53) I.1.b | Review and update the Copermittees' effectiveness assessment process. |

According to the California Stormwater Quality Association (CASQA) document, *An Introduction to Storm Water Program Effectiveness Assessment,* effectiveness assessment is "necessary and fundamental" to the development and implementation of a successful urban runoff pollution prevention program. Effectiveness assessment assists managers in (1) determining whether activities and programs are resulting in a reduction of pollutants in urban runoff and (2) planning future efforts to maximize resources.

Like most management programs, the City uses assessment as part of an iterative feedback loop (Figure 13-1) involving (1) Planning, (2) Implementation, and (3) Assessment. Because assessment is not independent of planning and implementation, these two aspects of program management are also discussed in this section. The City incorporates planning on an annual and long-term cycle.

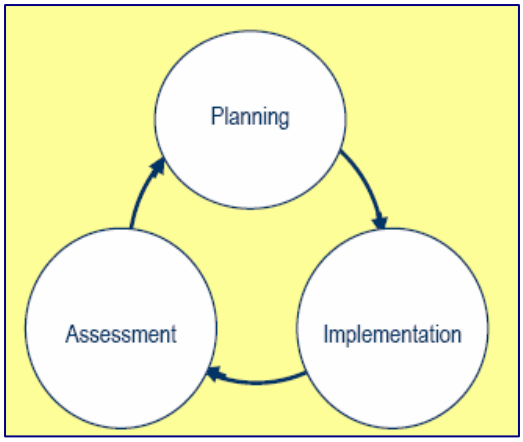


**Figure 13-1. CASQA Iterative Program Management Process**

The City views the Watershed Urban Runoff Management Program (WURMP) and Jurisdictional Urban Runoff Management Program (JURMP) as integrated components to its overall municipal Storm Water Program. The City's overall Storm Water Program incorporates the JURMP, WURMP, and other programs as needed to implement and comply with the Permit. The City first complies with all aspects of the Permit, implementing activities as required. In addition, the City identifies certain projects in both its WURMP and JURMP programs for special efficiency assessment. Projects identified as such in the WURMP are referred to as "pilot" activities, while those identified as such in the JURMP are called "significant" activities. In general, most activities identified for special efficiency assessment will be WURMP activities. This allows the City to perform the "pilot" activities to determine their effectiveness at reducing pollutant loads on a small scale, before implementing wide-scale. This, however, will not preclude the identification of JURMP activities for special efficiency assessment, if feasible. When efficiency is assessed, the unit of measurement for efficiency will be a pollutant load reduction to cost ratio. Where feasible, the City will integrate into its program those effectiveness assessment approaches that are developed collaboratively by the Copermittees. Data will be collected in units using the regional standards developed collectively by the Copermittees (e.g., tons and not cubic yards for street sweeping debris). If a pilot activity proves effective and efficient, it may be transferred to the JURMP program for City-wide large scale implementation, or implemented on a watershed-level. If a significant activity proves effective and efficient, it will be recommended for continued implementation into the next Permit cycle; those that do not prove effective and efficient may be recommended for discontinuance or modification in the next Permit cycle.

## 13.2 Effectiveness Assessment Approach

Assessment is not possible without program planning and implementation. A summary of program planning and implementation is presented below. The cycle of planning,

implementation, and assessment, which is presented in Figure 13-2 on page 13-5, is explained and referenced in the text.

### 13.2.1 Annual Program Planning

Management questions serve as the framework to help focus future activities and assess the program as a whole. The process of annual assessment is presented in Figure 13-2 on page 13-5, Steps 1-3.

Step 1: All Permit-required activities are implemented according to the Permit. The City selects pilot and/or significant activities for special efficiency assessment based on data gaps in the Activity Efficiency Ratings Table from the previous years (discussed in Step 8) or based on management questions and other strategic plans. Pilot activities are selected for the WURMP to gather information on a small scale to determine if an activity is effective and efficient before implementing on a larger scale. Significant activities are selected for the JURMP to undergo additional study to gather further effectiveness and efficiency information.

Step 2: The City develops activity-specific management questions. An example of management questions for an inspection activity could include:

- Do inspections increase rate of BMP implementation?
- Does increased rate of BMP implementation affect load reduction?
- What is the optimal frequency of inspection (point of diminishing returns)?
- Are spot inspections more effective than scheduled inspections?
- Does enforcement alter future behavior (implementing BMPs)?
- Does education increase rate of BMP implementation?
- How can an estimate of load reduction be made from inspection data?

Step 3: The City defines targeted outcomes, assessment methods, and assessment measures for each activity. Continuing the example from Step 2, an example might include (see Appendix X for current outcomes):

| | |
|---|---|
| **Targeted Measurable Outcome(s)** | • Achieve load reduction from optimized inspection rate<br>• Achieve greater BMP implementation from optimized inspection rate |
| **Assessment Method(s)** | • Inspections (e.g., track number of BMPs implemented, increased number of BMPs, number of follow-up inspections)<br>• Quantification (e.g., use frequency of BMP implementation to calculate estimated load reduction)<br>• Monitoring (e.g., collect special study information to collect concentrations and flows to estimate load reduction)<br>• Tabulation (e.g., amount of money spent on inspections, amount of money spent on educational materials)<br>• Reporting (e.g., estimates of load reduction for BMPs from 3rd party data) |

| | |
|---|---|
| **Assessment Measures, Assessment Outcome Levels & Data:** | • Number of inspections (spot and scheduled) (Outcome Level 1)<br>• Number of BMPs implemented (Outcome Level 1)<br>• Change (%) in BMP implementation pre and post-education (Outcome Level 3)<br>• Number of missing BMPs (Outcome Level 1)<br>• Number of follow-up inspections (Outcome Level 1)<br>• Number of enforcement follow-ups (Outcome Level 1)<br>• Number of educational information items passed out (Outcome Level 1)<br>• How much money spent on inspections (follow ups, initial inspections, enforcement actions)? (Outcome Level 1)<br>• Literature review or other information to provide data to estimate load reductions (Outcome Level 3)<br>• Dataset of load contributions for specific activities (Outcome Level 4) |

### 13.2.2 Implementation

Implementation is shown as part of the iterative program management loop in Figure 13-2, below.

> Step 4: Permit-required activities will be implemented as required. Pilot and significant activities will be monitored to collect data and information needed to calculate or estimate activity efficiencies.

Significant activities are JURMP Permit-required activities that will undergo the full assessment described in Section 13.2.3 below to answer questions about efficiency or effectiveness. They will be selected at the City's discretion, and implementation results may be reported through either the WURMP or JURMP.

Data will be collected during implementation. Some data may be used to show compliance with the Permit, while other data may be used to assess effectiveness and efficiency. Outcome Levels 1-5 refer to the Targeted Outcome Levels presented in the Municipal Stormwater Program Effectiveness Assessment Guidance document published by CASQA. Outcome Levels 4-5 data can be used to estimate load reduction to cost ratios, while Outcome Levels 1-3 data are reported in annual reports and may be used to help estimate load reduction to cost ratios.

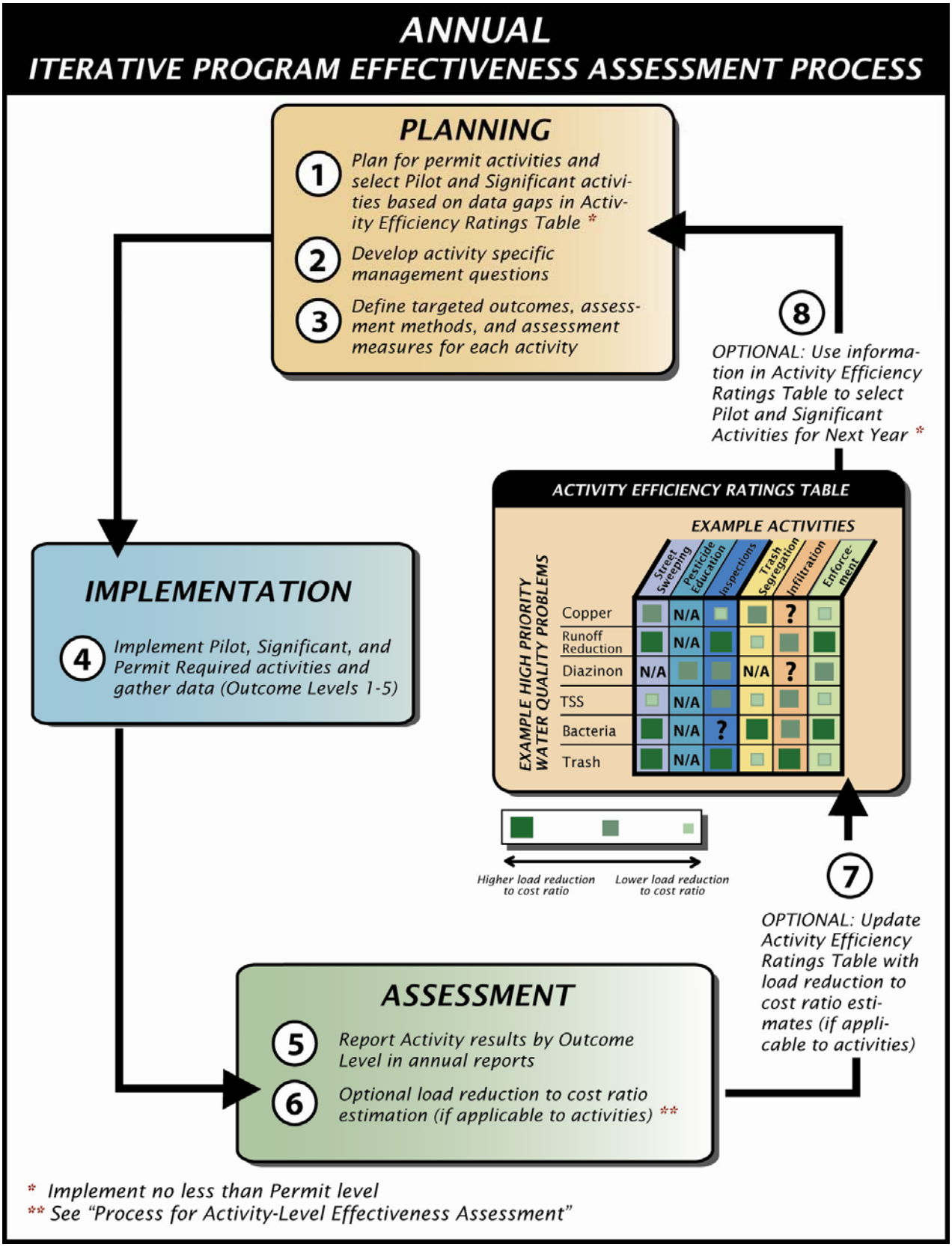


**Figure 13-2: Annual Planning, Implementation, and Assessment Process for Urban Runoff Management.**

### 13.1.2 Annual Assessment

Following the cycle shown in Figure 13-2 on page 13-5, Steps 5-7 will be completed during annual assessment.

### 13.2.3.1 Annual Assessment

The City will annually assess the implementation of its Storm Water Program, JURMP components, and significant activities for compliance with the Permit through the annual reporting process (see Appendix XIII, “Annual Report Form Questions”).

> Step 5: Compliance assessment will follow the regional assessment tables developed during 2007 through a regional effort with the San Diego Copermittees. The tables include common assessment measures and methods, allowing for information sharing and comparison across jurisdictions. City of San Diego components include the following Permit components Municipal, Residential, Commercial/Industrial, Development Planning, Education, and ICID.
>
> Step 6: The optional load reduction to cost ratio will be completed by following the process shown in Figure 13-3 on page 13-8. Management questions for each pilot or significant activity will be answered by assessing the targeted outcomes using the assessment methods and measures for each activity. For WURMPs the management questions, targeted outcomes, assessment methods, and assessment measures will be included in the activity summary sheets and the Annual Reports. For JURMPs, the significant activity management questions, targeted outcomes, assessment measures, and assessment methods will be included in the Annual Reports’ effectiveness assessment sections.

This process is illustrated in Figure13-3 on page 13-8. Data will be collected to answer the management questions and calculate or estimate load reduction to cost ratios for each water quality and education activity. It may not be possible to report load reduction to cost ratios for all activities, and therefore those data will be reported as Outcome Levels 1-3 data in the annual report. As stated above, if Outcome Level 4 data are not available, Outcome Levels 1-3 data may be used to estimate load reductions.

If, after implementation, it is determined that an activity has led to a pollutant load reduction, then the efficiency of the activity will be assessed by calculating or estimating the load reduction to cost ratio. This information will be used to update the Activity Efficiency Ratings Table each year.

If the activity did not lead to a pollutant reduction but was required by the Permit, then implementation of the activity will continue, and improvements to future Permit requirements can be justified through data tracking.

If the non-load reducing activity was not required by the Permit, then it would be further assessed to determine if changes can be made that would potentially lead to a pollutant

reduction, and the activity would be re-implemented and re-assessed. If no changes to the activity to improve its effectiveness are possible, then the activity would be terminated and not considered for future implementation.

Activities that reduce loads can be further refined and assessed to maximize their efficiency. The load reduction to cost ratio (e.g., tons reduced/dollar) is estimated for pilot and significant activities that were focused on collecting Outcome Levels 4-6 data. In some cases, it may be possible to infer or estimate load reductions from data collected by other Jurisdictions, agencies, or as part of the applicable scientific literature. The costs will include every aspect of the activity, for example, planning, implementation, and assessment costs. The Activity Efficiency Ratings Table is updated with the new data.

If an activity shows load reduction, but is costly, it will be assessed and refined to improve the load reduction to cost ratio. If no refinement can be made, equivalent load-reducing activities that are less costly may be piloted and phased in as substitutes for that inefficient activity if it was not required by the Permit. If the activity was required by the Permit, improvements to future Permit requirements can be justified through data tracking.

Once efficiency of all activities has been maximized, then the City will have been successful in identifying and implementing feasible activities that positively affect water quality, which is the building block of an effective program.

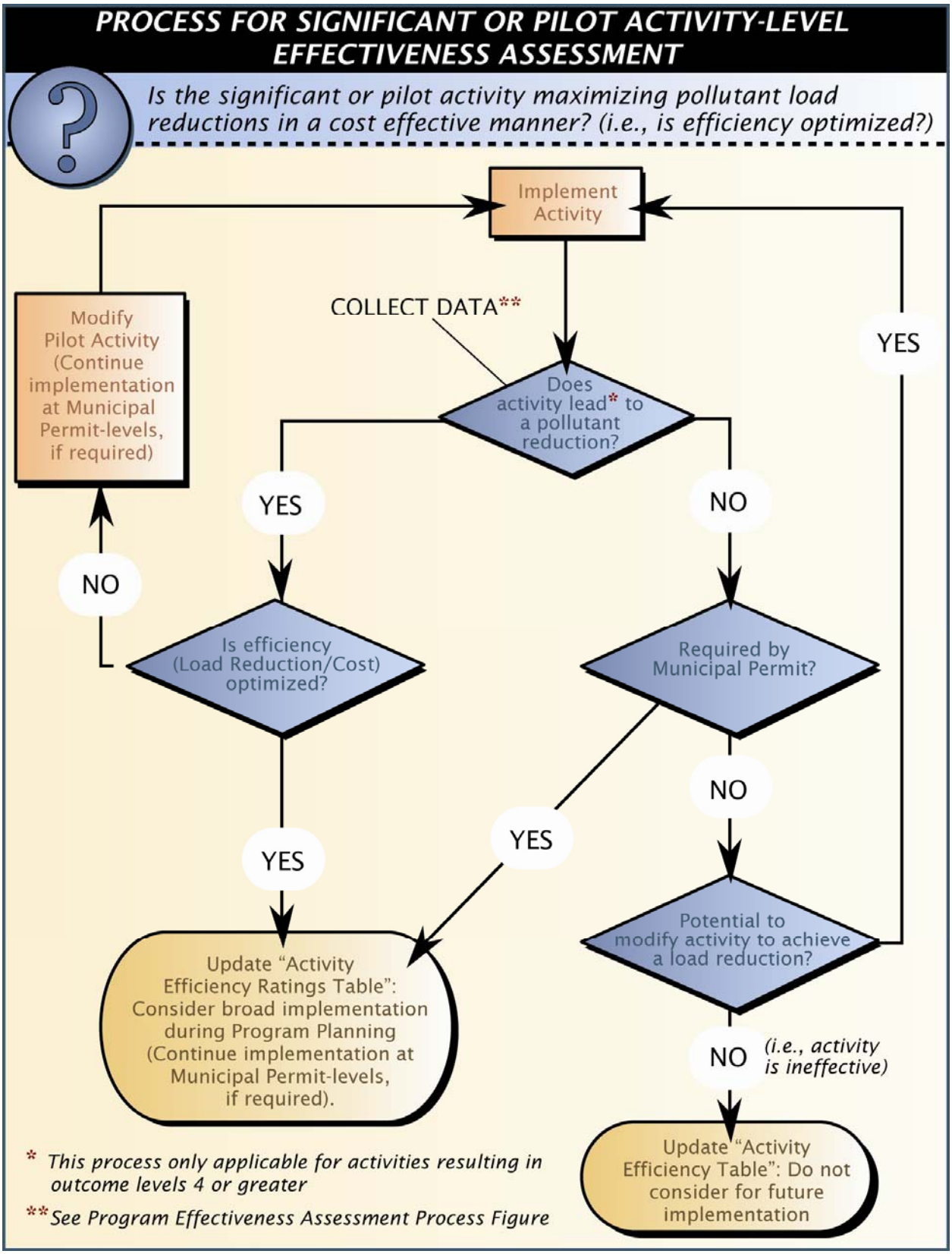


**Figure 13-3. Flow Diagram of Activity-Level Effectiveness Assessment.**

Step 7: Each year, the City will update load reduction to cost ratios for pilot, significant, and applicable Permit-required activities completed during the prior year. The size of the square within each activity-pollutant combination is an indication of the load reduction to cost ratio of that activity for that water quality problem. Small squares indicate a small ratio (small reduction for the cost), while large squares indicate a large ratio (large reduction for the cost). Note that, during the first years of the Permit cycle, the efficiency within the Activity Efficiency Ratings Table may be only *estimated* load reduction to cost ratios. In the example given in Figure 13-4 most of the boxes are filled with a question mark (**?**) during the first year of the Permit (Year 1). This is because at the beginning of the Permit cycle, ratios may be estimates based on best professional judgment. Because management decisions must be made, sometimes in the absence of information, the question marks serve as a reminder that more data are needed to provide a quantitative assessment. As activities are completed and assessed, estimates and calculations of load reduction to cost ratios will be updated in the table each year. If an activity is not applicable to a pollutant, it is marked not applicable (**N/A**) in the table.

The goal is to have collect and store data within the Activity Efficiency Ratings Table over the Permit cycle (5 years) and use it as a planning tool for the next Permit cycle. It is not necessary to complete the table before the next Permit cycle.

Step 8: Use Information from Activity Efficiency Ratings Table for Activity Selection.

This step is the same as Step 1 in Section 13.2.1 above. It is repeated here to illustrate how the process begins during the first year of a Permit cycle (with activity selection), and how it is repeated each year to select activities for the next fiscal year.

### 13.2.3.2 Long-Term Assessment

Figure 13-4 on page 13-12 illustrates the steps that will help the City assess the effectiveness of its URMP every Permit cycle (long-term). This figure is very similar to Figure 13-2, except that implementation and annual assessment are not shown in the figure. At the end of every Permit cycle, an attempt is made to optimize resources based on the load reduction to cost ratio information present in the Activity Ratings Efficiency Table. Note that the Activity Ratings Efficiency Table need not be complete to optimize. Additionally, Integrated and Water Quality assessments will be completed to answer the management questions as described in the examples below.

Step 1: Define Long-term Management Questions

The first step is to answer management questions developed during the inception of the Permit to determine if any progress toward improving water quality has been observed.

Examples of long term management questions and assessment:

- *Is the City observing an improvement in water quality (both of urban runoff/discharge and of receiving waters) as shown through long-term water quality assessments?*

  An Integrated Assessment is used here. Qualitative analysis of various regional programs and activities implemented within the City during the Municipal Permit cycle will be related to receiving water quality data collected within the City's jurisdiction (including upstream inputs). If successful, Outcome Levels 5 and 6 data may be reported in the Annual Reports. If unsuccessful, the data gathering or assessment methods may be modified to allow better comparison of activities to receiving water data.

- *Is the City making progress towards achieving its program goal of water quality improvement in a way that maximizes resources, is cost effective, and achieves the maximum water quality benefit possible?*

  A Water Quality Assessment is used here. Information collected from regional, City, and Municipal Permit-required programs will be compiled and assessed for areas within the City's jurisdiction. These data will be assessed for trends or other applicable analyses. Qualitative assessments will also be completed from the Activity Efficiency Rating Table, and an integrated assessment of all aspects of the urban runoff management program. If the answer is yes, the City will continue to use the suite of activities at a broader scale in future years.

- *Is the City able to determine the efficiency of its activities?*

  This question will be answered by examining the Activity Efficiency Ratings Table. Successful updates over the Permit cycle will mean that the City's assessment strategy, management questions, data needs assessment, and data gathering strategies are working. If it was not possible to update much information in the table that will mean that the City may need to modify its methodology to be able to better assess its activities and programs.

- *Is the City implementing the most efficient suite of activities to improve water quality?*

  The answer to this question will be based on the optimization of the Activity Efficiency Ratings Table (Step 3 in Figure 13-4). Overall high pollutant load to cost ratios will mean that the City is moving towards its goal of implementing the best suite of activities. If the City is consistently spending money with small or no observed load reductions, then changes to the program can be made to improve future water quality. The City will determine which pilot and/or significant activities to continue, expand, discontinue, or add.

- *How is the City doing in terms of identifying, characterizing, and targeting pollutant sources of the high priority water quality problems?*

  The answer to this question will be based on activities such as source identification studies and inspections. If pollution sources are identified, the City can better target activities to maximize their effectiveness and efficiency.

Step 2: Compile Annual Activity Efficiency Ratings Table

Information gathered and stored in the Activity Efficiency Ratings Table over the Permit cycle will be summarized into one comprehensive database that can be used to assist in answering management questions, as well as for optimization of the Program.

Step 3: Optimize Activity Efficiency Ratings Table

Determine where money may be best spent to get the largest load reduction to cost ratio for each high priority water quality problem. This step will also help answer the management questions.

Step 4: Define Management Goals and Questions

This is the same as Step 1 above and uses results from Steps 2 and 3 to help develop new management goals and questions for the next Permit cycle.

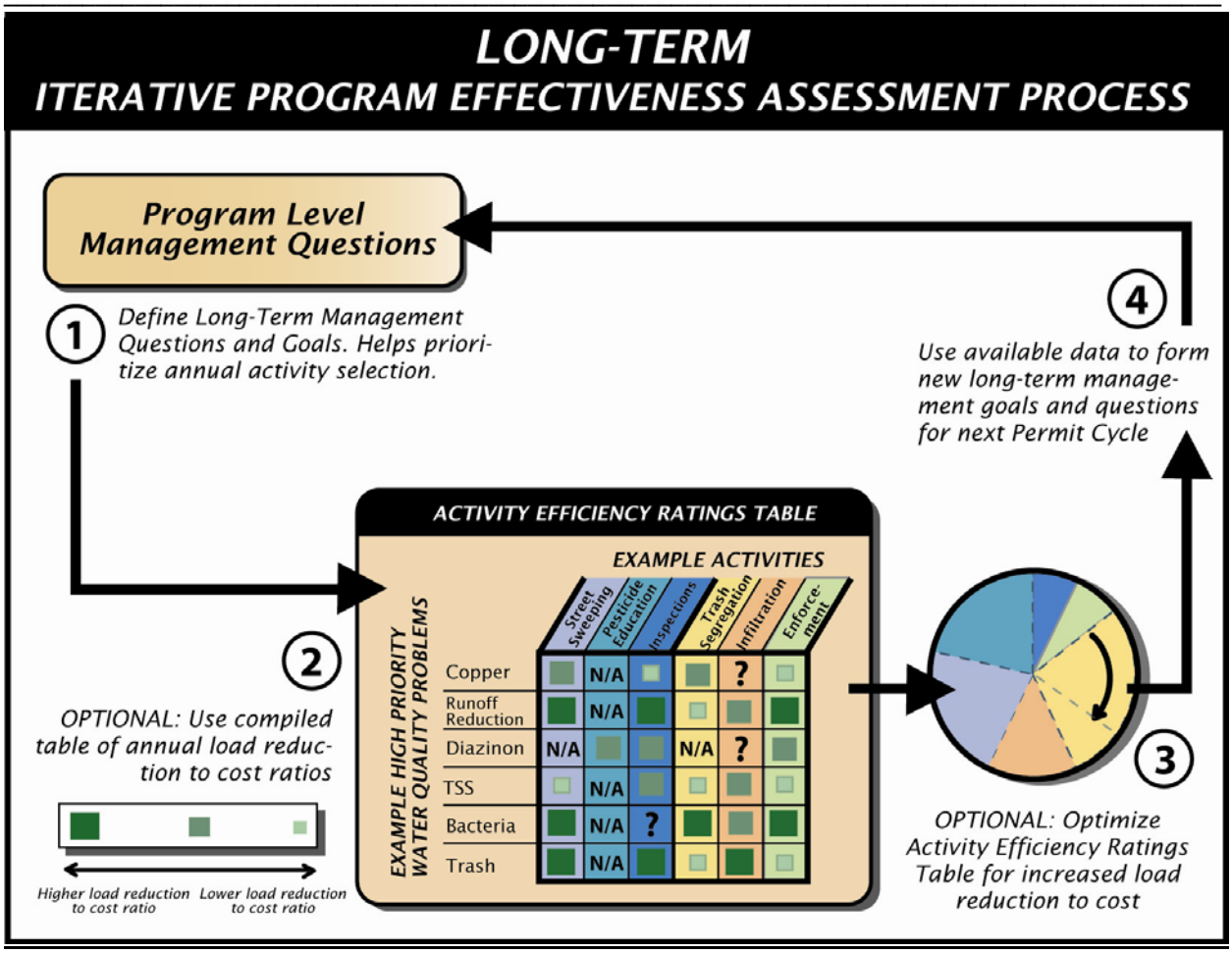


**Figure 13-4: Long-Term Program Effectiveness Assessment Process**

## 13.3 Program Review and Modification

Annually, Permit-required activities and component assessments will be assessed. The larger URMP will be assed every five years. As mentioned above, in Section 13.2, the Activity Efficiency Ratings Table will be used as a tool to allocate funds within the URMP. Annually, a qualitative assessment of which activities provide the most efficient pollutant reduction will be used as a method to determine where more data need to be collected. Based on the annual assessment of the City's URMP, as well as from results of the assessment process detailed above, improvements and modifications to the program will be identified. Significant activities that show no reduction in pollution, or are highly inefficient, will be identified, modifications and/or improvements made, or eliminated.

## 13.4 Definitions

- Efficiency: A measure of how well an activity helps reduce pollutant loads divided by the amount of money spent to implement the activity (measured in load reduction to cost ratio)

- Efficiency Activity Ratings Table: Database of load reduction to cost ratios

- Effectiveness: Determination of whether or not implementation of an activity resulted in a load reduction

- Load Reduction to Cost Ratio: Standard unit of measure, and is used in reporting efficiency of City activities

- Management Questions: Questions developed as a basis for assessment, they serve as a framework to design activities and programs, and data are collected to answer them

- Pilot Activities: Special studies implemented through the WURMP program to determine effectiveness at reducing pollutant loads on a small scale, before implementing watershed-wide.

- Significant Activities: Significant activities are JURMP Permit compliance activities that undergo additional study to gather further effectiveness and efficiency information.

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# 14.0 Modifications to the JURMP

In order to improve the efficiency and effectiveness of the City's efforts in protecting and improving water quality, the City updated its Jurisdictional Urban Runoff Management Plan (URMP) with notable changes as described below in Table 14-1. The changes not only ensure compliance with the Municipal Storm Water Permit (Order No. R9-2007-0001, "Municipal Permit", see Appendix I), but in many cases exceed the minimum requirements in the Municipal Permit in the City's continual effort to clean up our creeks, rivers, beaches and bays.

**Table 14-1. Modifications to the URMP from 2002 to 2007.**

| Section | Notable Changes |
|---|---|
| Introduction | – No major changes |
| Administrative and Legal Procedures | – No major changes |
| Non-Storm Water Discharges | – Updated list of allowable non-storm water discharges |
| Development Planning | The updated Storm Water Standards Manual reflects:<br>o A regional Hydrologic Modification Plan in order to curb erosion of channel beds and banks<br>o Low impact development (LID) concepts required for all new development and redevelopment projects<br>o More effective best management practices (BMPs)<br>o Priority Development Projects are required to employ LID site design BMPs<br>o The amount of impervious surface runoff that must be routed to pervious areas has been clarified<br>– Developed an inspection program to ensure maintenance of permanent BMPs<br>– The updated General Plan and Multiple Species Conservation Plan reflect a watershed-based, low impact approach to improving water quality in the region |
| Construction | The updated Storm Water Standards Manual reflects:<br>– Additional controls for construction sites that could result in a discharge of sediment directly to 303(d) listed water bodies, coastal lagoons, and water bodies on environmentally sensitive lands<br>– Phased grading must be implemented at construction sites according to a designated maximum disturbed area and exposure period.<br>– Advanced treatment for sediment at construction sites determined to be an exceptional threat to water quality<br>– More effective, prioritized site inspection schedule<br>– More stringent enforcement measures<br>– Monthly construction site inventory |

| Section | Notable Changes |
|---|---|
| Municipal (in general) | – Established minimum BMPs for all City staff and contractors<br>– Increased activity/area-specific BMPs with associated pollutants<br>– Increased municipal facility inspections from one to two per year for areas discharging to sensitive lands/waters (all facilities)<br>– Increase in staff education and training<br>– Improved BMPs in municipal operation and maintenance contracts<br>– Improved data tracking capabilities |
| Airports | – Non-aviation leased properties now categorized as industrial/commercial and will be inspected by Storm Water Pollution Prevention Division |
| Buildings/Parking/ Landscaping | – Additional departments are involved in the URMP process<br>– Focus on Integrated Pest Management<br>– Additional public outreach through libraries, community service centers, business licensing |
| City-Owned Leased Properties | – All City-owned leased properties categorized as industrial/commercial or residential and will be inspected as such by Storm Water Pollution Prevention Division |
| Household Hazardous Waste Program | – Established BMPs for one-day collection events |
| Non-Emergency Fire/Rescue Activities | – Improved vehicle rinsing and washing procedures for lifeguards |
| Non-Emergency Police Activities | – Section developed specifically for Police<br>– Includes BMPs for canine, mounted patrol, and shooting ranges |
| Metropolitan Wastewater Collection | – Clarified the roles of Metropolitan Wastewater Department (MWWD) in private/public sewer spill clean-ups |
| Metropolitan Wastewater Treatment and Maintenance | – Activity-specific BMPs expanded |
| Recreational Lands and Facilities | – Established inspections for special events |
| Solid Waste Management | – Activity-specific BMPs expanded |
| Special Events | – Improved BMPs and inspections for special events |
| Stadium | – Improved BMPs and inspections for special events<br>– Updated contract language for lessees |
| Streets | – Prioritized schedule for increased street sweeping frequency based on trash and debris accumulated in streets<br>– New schedule for storm drain system maintenance<br>– Clarification on the frequency and timing of storm drain and municipal parking lot cleaning |
| Vehicle Maintenance/ Operations Yards | – Activity-specific BMPs expanded |
| Water Systems | – Improved BMPs for special events |
| Industrial and Commercial | – Created mobile businesses program<br>– Included City owned-leased properties in inventory and inspection responsibilities<br>– Increased inspection requirements to 500 in dry weather<br>– Established minimum industrial/commercial BMPs |

| Section | Notable Changes |
|---|---|
| Residential | – Use of community based social marketing (CBSM) methods to promote behavioral changes<br>– Regional approach developed by Copermittees will be tailored for URMP program<br>– Established minimum residential BMPs |
| Illicit Discharge Detection and Elimination | – Increased number of dry weather program samples and sites<br>– New sampling programs include trash monitoring, pyrethroid monitoring, storm drain outfall monitoring, and upstream source identification monitoring for water bodies with a specific constituent of concern<br>– Accelerated follow-up investigations for dry weather exceedances to within two working days<br>– Improved coordination procedures between Storm Water Pollution Prevention Division, MWWD, and Street Division to abate and clean up sewage spills in the storm drain system<br>– Investigations and follow-ups are more proactive<br>– Increased enforcement program hours to nights and weekends |
| Education | – Targeted underserved audiences<br>– Increased outreach to commercial/industrial businesses<br>– Increased assistance for departments' municipal activity- specific training<br>– Increased oversight on general municipal employee training and follow-up evaluations |
| Public Participation | – Targeted underserved audiences |
| Fiscal Analysis | – Incorporated cost component to program effectiveness assessment methodology (i.e., cost-benefit analysis) in order to maximize pollutant reduction efforts<br>– Improved data tracking capabilities |
| Effectiveness Assessment | – Expanded focus from simply maximizing pollutant load reductions (effectiveness), to also include cost effectiveness (efficiency) |

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# *15.0 Conclusions and Recommendations*

Since the last Municipal Storm Water Permit ("Municipal Permit") was issued in January of 2001, the City has made great strides in its efforts to protect and improve water quality. The Mayor and City Council have shown a strong commitment to clean storm water by increasing Storm Water Pollution Prevention Division funding by over 800% between Fiscal Year 2005 and 2008. The Mayor identified storm water as one of his eight significant areas within the City's Five Year Financial Plan (http://www.sandiego.gov/mayor/pdf/five_year _plan_11_15.pdf). The Storm Water Pollution Prevention Division continues to be a leader in the region and nationally through its "Think Blue" education and outreach campaign, and its partnerships with stakeholders in the region.

Continuing in this leadership role, the City incorporated many improvements into the URMP— above and beyond basic Municipal Permit requirements— to improve effectiveness, efficiency, and streamline resources. A summary of the changes is outlined in Section 14.0, "Modifications to the JURMP." Notable changes include:

- Each department made significant improvements to municipal storm water quality protection practices and procedures.
- The City will conduct a second inspection of municipal areas and facilities each year to ensure proper maintenance and use of good housekeeping practices and other best management practices (BMPs).
- For both public and private new development/redevelopment projects, the Storm Water Standards Manual has been updated with increased BMP requirements and inspection schedules.
- Increased staff education and training will occur across the City.
- Street Division will significantly increase its storm drain cleaning and street sweeping programs.
- The Storm Water Pollution Prevention Division will significantly increase efforts in all of its core programs including facility inspections, enforcement, water quality monitoring, education and outreach, and municipal coordination.

In conclusion, the City of San Diego is committed to its mission to protect and improve the quality of its receiving waters through the implementation of this URMP and its other programs. Furthermore, the City is committed to continual improvement of its pollutant reduction efforts. At the core of its URMP program, the Storm Water Pollution Prevention Division has established an iterative implementation strategy that most efficiently obtains its goals through continual program planning, implementation, assessment, and improvement. A summary of the key program recommendations the Storm Water Pollution Prevention Division has identified to guide future efforts is highlighted below.

## Recommendations

### *1. Strategically and Comprehensively Address Regulatory Programs*

The City must address several state and federal storm water quality regulatory programs now and in the coming years. In addition to Municipal Permit requirements, the City must comply with State-mandated Areas of Special Biological Significance, or ASBS, requirements in the La Jolla Shores area. The ASBS requirements require zero discharge of any pollutants from the City's storm drain system at any time, regardless of storm size. In addition, the City must address future storm water quality regulations called Total Maximum Daily Load programs, or TMDLs. Drawing from the Clean Water Act, TMDL programs will set numeric or concentration based pollutant discharge limits at every storm drain outfall within the City. Though compliance costs are not definitively known, it is clear that achieving this network of requirements and protecting our valuable natural surface and recreational water resources will require early strategic planning efforts and an approach that considers all regulations concurrently. The City anticipates effectuating these strategic planning efforts through comprehensive water quality BMPs and drainage master plans.

### *2. Maximize Efficiencies of Program Efforts*

Updating and improving the URMP document is but one component of the Storm Water Pollution Prevention Division's overall efforts; the Storm Water Pollution Prevention Division recognizes the critical importance of maximizing efficiencies and water quality protection efforts. Rather than taking an activity's effectiveness for granted, the Storm Water Pollution Prevention Division is continually asking, 'How can we achieve greater pollutant reductions through our efforts?' To help answer this question, the City recently completed a "Strategic Plan for Watershed Activity Implementation" (July 2007), which outlines a process for piloting a series of coordinated activities and assessing and improving their effectiveness so that the City can both maximize the efficiency of individual activities, such as street sweeping efforts, and also implement the most effective combination of activities at a program level to maximize overall water quality protection efforts. After improving activities through pilot programs, the City will implement these activities City-wide to continually strengthen its URMP program and address TMDLs and other regulations. These master plans are anticipated to result in the identification of non-structural activities as well as capital projects and priorities for system improvement.

### *3. Explore Options for Securing Dedicated Funding*

The adoption and implementation of the updated URMP will increase City expenditures. While the majority of the City's expenditures for URMP are administered by the Storm Water Pollution Prevention Division, the General Services Department's Street Division budgets significant amounts of money for permit-required street sweeping and storm

drain system inspection, cleaning, and maintenance. Other departments also designate funds from their budget to comply with the Municipal Permit.

In the Mayor's Five-Year Financial Outlook for 2008-2012, Storm Water has been identified as a critical City program that requires additional funding for the next 5 years. Based on preliminary estimates, the Municipal Permit will require Storm Water Pollution Prevention Division expenditures of $22.9 million in fiscal year 2008. Additional expenditures will be required by other City departments. The City's estimated costs to implement the 2007 Municipal Permit are reflected Table 15-1 (this table is also included in section 12, "Fiscal Analysis").

**Table 15-1. Estimated Storm Water Pollution Prevention Division and Streets Division Budgets for Storm Water Permit Compliance.**

| Municipal Permit Year/ Budget Period[1] | JURMP | WURMPs | RURMP |
|---|---|---|---|
| Fiscal Year 2008 | $36,000,000 | $6,000,000 | $100,000 |
| Fiscal Year 2009 | $45,000,000 | $9,000,000 | $150,000 |
| Fiscal Year 2010 | $45,000,000 | $9,000,000 | $150,000 |
| Fiscal Year 2011 | $46,000,000 | $9,000,000 | $200,000 |
| Fiscal Year 2012 | $47,000,000 | $9,000,000 | $200,000 |
| Fiscal Year 2013 | $48,000,000 | $9,000,000 | $200,000 |
| **Total Program Costs:** | **$267,000,000** | **$51,000,000** | **$1,000,000** |
| **Total City-Wide Costs:** | **$319,000,000[2]** | | |

[1] The 5-year 2007 Municipal Permit cycle extends over six fiscal years (March 24, 2008 to March 24, 2013).

[2] Actual implementation of the activities identified in the Urban Runoff Management Programs is dependent upon identification of funding in future yearly budgets and City Council approval. Only Street Division and Storm Water Pollution Prevention Division estimates are included; other department estimates are not included. Estimates include initial planning costs for TMDLs/ASBS regulations.

Currently, funding for Permit-required activities undertaken by the Storm Water Pollution Prevention Division and the Street Division is partially funded by approximately $6 million in revenue from the City's Storm Drain Fund. All additional funding is provided by the City's General Fund, except for expenses that can be offset by grant funding or State appropriations. In the future, an increased portion of Municipal Permit compliance costs could be offset by increased storm drain fees, but any additional dedicated funding from the storm drain fee would require a vote of the public.

In addition to Municipal Permit costs, the City is faced with additional costs to comply with Total Maximum Daily Load (TMDL), and Areas of Special Biological Significance (ASBS) regulations that are either in effect or scheduled to be adopted during this Municipal Permit cycle. As stated above, to comprehensively address the water quality and storm drain infrastructure improvement needs within the City, including the complex

series of Municipal Permit, ASBS and TMDL regulations, the City needs to prepare a storm drain system master plan. Because the majority of future system improvement cost estimates will not be identified until TMDL regulations are fully adopted, these costs are not included in Table 15-1 and will be addressed at a later date. While detailed TMDL and ASBS cost estimates are not known at this time, preliminary estimates indicate that compliance costs for these regulations will exceed the City's current estimates for Municipal Permit compliance.