



Stormwater Program

Local Implementation Plan (LIP)

April 1, 2017

Revised January 18, 2019

Certified Statement

City of Rancho Santa Margarita

Local Implementation Plan

Prepared for the
California Regional Water Quality Control Board
San Diego Region

April 1, 2017

Revised January 18, 2019

I certify under penalty of law that this document and all attachments (City of Rancho Santa Margarita's Local Implementation Plan) were 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 true, accurate, and complete to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of knowing violations. [40 CFR 122.22(d)]

Date: 1-29-19

By: 
Public Works Director/City Engineer
City of Rancho Santa Margarita

**City of Rancho Santa Margarita
Stormwater Program
Local Implementation Plan**

Table of Contents

Section 1.0	INTRODUCTION.....	1-1
1.1	Background	1-1
1.2	Regulatory Requirements	1-2
1.3	Objectives of the Local Implementation Plan	1-3
1.4	Permittee Commitments.....	1-4
1.5	DAMP/LIP Coverage	1-4
1.6	Description of Drainage Area and Climate	1-5
1.6.1	Geography and Climate	1-5
1.6.2	Watersheds	1-5
1.6.3	Environmentally Sensitive Areas (ESAs)/Impaired Waters.....	1-7
1.7	Program Assessment and Modification.....	1-9
Section 2.0	PROGRAM MANAGEMENT	2-1
2.1	Introduction.....	2-1
2.2	Plan Development.....	2-1
2.2.1	Management Framework	2-1
2.2.2	Agreement for Program Implementation	2-8
2.2.3	NPDES Permit Responsibilities	2-8
2.2.4	NPDES Reporting Requirements.....	2-9
2.2.5	Fiscal Analysis.....	2-10
Exhibit 2.1	Jurisdictional Runoff Management Program Annual Report Form	
Section 3.0	PLAN IMPROVEMENT AND WATERSHED PLANNING	3-1
3.1	Introduction.....	3-1
3.2	Regulatory Requirements	3-1
3.2.1	Approach to Plan Development and Improvement	3-1
3.2.2	Methodology for Examining Retrofit Opportunities	3-1
3.2.3	BMP Selection and Effectiveness Assessment	3-1
3.2.4	Plan Revision	3-3
3.3	Funding of Structural Controls	3-3
3.4	Employee Training and Outreach	3-3
Exhibit 3.1	Summary of Water Quality Improvement Plan Strategies	
Section 4.0	LEGAL AUTHORITY	4-1
4.1	Introduction.....	4-1
4.2	Regulatory Requirements	4-1
4.3	Authority to Control Pollutant Discharges	4-1
4.3.1	Other City of Rancho Santa Margarita Pollution Prevention Codes/Ordinances.....	4-2
4.4	Enforcement	4-4
4.5	Assessment.....	4-4
Exhibit 4.1	Enforcement Response Plan	
Exhibit 4.2	Statement of Legal Authority	

Section 5.0	MUNICIPAL ACTIVITIES	5-1
5.1	Introduction.....	5-1
5.1.1	Program Overview.....	5-1
5.1.2	Program Commitments	5-4
5.1.3	Regulatory Requirements	5-5
5.2	Model Municipal Activities Program Details	5-5
5.2.1	Municipal Inventories	5-5
5.2.2	Prioritization.....	5-5
5.2.3	Model Maintenance Procedures	5-5
5.2.4	Municipal Inspection and Requirements	5-6
5.2.4.1	Inspection Frequencies.....	5-6
5.2.4.2	Inspection Documentation Procedures.....	5-7
5.2.4.3	Enforcement Procedures	5-7
5.2.4.4	Municipal Retrofitting	5-8
5.3	Model Integrated Pest Management, Pesticides and Fertilizer Guidelines	5-8
5.4	Training and Education	5-8
Exhibit 5.1	Municipal Areas and Activities Inventory	
Exhibit 5.2	Municipal Facility Inspection Form	
Exhibit 5.3	[Reserved]	
Exhibit 5.4	Fixed Facility, Field Program, and Drainage Facility Inspection Forms	
Exhibit 5.5	Integrated Pest Management Plan	
Section 6.0	PUBLIC EDUCATION	6-1
6.1	Introduction.....	6-1
6.2	Regulatory Requirements	6-1
6.3	Model Public Education Program	6-1
6.3.1	Foundational Campaign Elements	6-2
6.3.1.1	School Outreach	6-2
6.3.1.2	Business Outreach.....	6-3
6.3.1.3	Pollutant-Specific Outreach	6-3
6.3.1.4	Residential Program	6-3
6.3.1.5	Speakers Bureau	6-3
6.3.1.6	Common Interest Areas/Homeowner Association Activities Program	6-3
6.3.2	Action Campaigns	6-4
6.4	City Education Program	6-4
6.4.1	Public Education Material Distribution	6-4
6.4.2	Employee Training and Outreach	6-5
6.4.3	Outreach Events.....	6-5
6.4.4	Industrial/Commercial and Construction Outreach	6-5
6.4.5	Outreach to Quasi-Governmental Agencies/Districts	6-7
6.4.6	Residential, General Public and School Outreach	6-7
6.4.7	Jurisdictional Program Effectiveness Assessment	6-8

Section 7.0	NEW DEVELOPMENT/REDEVELOPMENT	7-1
7.1	Introduction.....	7-1
7.1.1	Background	7-1
7.2	Organization Structure	7-1
7.3	General Plan Assessment	7-2
7.4	CEQA Environmental Review Process	7-2
7.5	Development Project Review, Approval and Permitting	7-2
7.5.1	Project Review, Approval and Permitting Process Overview	7-2
7.5.2	Public Agency Projects	7-4
7.5.3	Conditions of Approval	7-4
7.5.4	Review and Approval of Project WQMPs	7-6
7.5.5	Review and Approval of Non-Priority Project Water Quality Plans	7-7
7.5.6	Plan Check: Issuance of Grading or Building Permits	7-7
7.5.7	Permit Closeout, Certificates of Use, and Certificates of Occupancy	7-8
7.6	Project Water Quality Management Plan (WQMP) Preparation	7-10
7.6.1	Project WQMP Requirements	7-11
7.7	Education and Training	7-11
Section 8.0	CONSTRUCTION COMPONENT	8-1
8.1	Introduction.....	8-1
8.1.1	Program Overview.....	8-1
8.1.2	Program Commitments	8-2
8.1.3	Regulatory Requirements	8-2
8.2	Model Construction Program	8-3
8.2.1	Model Program Overview.....	8-3
8.2.2	Inventory of Construction Sites	8-3
8.2.3	Prioritization of Construction Sites	8-3
8.2.4	BMPs for Construction Projects	8-3
8.2.5	Documentation Requirements.....	8-7
8.2.6	Municipal Inspections and Enforcement	8-9
8.3	Education and Training	8-11
Exhibit 8-1	Active Construction Projects	
Exhibit 8.2	Construction Site Inspection Form	

Section 9.0	EXISTING DEVELOPMENT	9-1
9.1	Introduction.....	9-1
9.1.1	Overview	9-1
9.1.2	Program Commitments	9-3
9.1.3	Regulatory Requirements	9-3
9.2	Industrial/Commercial Program.....	9-3
9.2.1	Source Identification and Facility Inventory	9-4
9.2.2	Prioritization for Inspection	9-5
9.2.3	BMP Implementation	9-5
9.2.4	Inspection, Monitoring and Enforcement	9-8
9.2.4.1	Inspection.....	9-8
9.2.4.2	Monitoring	9-9
9.2.4.3	Enforcement.....	9-10
9.2.5	Outreach and Education	9-10
9.3	Food Service Facilities Inspection Program.....	9-10
9.4	Mobile Business Program	9-11
9.4.1	Mobile Business Inventory.....	9-11
9.4.2	Best Management Practice (BMP) Implementation.....	9-11
9.4.3	Inspections/Self-Certifications	9-11
9.4.4	Enforcement.....	9-12
9.5	Residential Program.....	9-12
9.5.1	Program Overview	9-12
9.5.2	Source Identification and Inventory	9-13
9.5.3	Best Management Practice (BMP) Requirements.....	9-13
9.5.4	Implementation	9-14
9.5.5	Enforcement.....	9-14
9.6	Common Interest Areas/Homeowners Association Activities Program	9-15
9.6.1	Program Overview	9-15
9.6.2	Current Practices and Activities of Concern	9-15
9.6.3	Prioritization of Locations.....	9-16
9.6.4	Best Management Practice (BMP) Implementation.....	9-17
9.6.5	Implementation Strategy	9-18
9.6.6	Enforcement.....	9-19
9.7	Retrofitting Existing Development Program	9-19
9.8	Training Program.....	9-20
Exhibit 9-1	Commercial and Industrial Facility Inventory	
Exhibit 9-2	Best Management Practices Industrial-Commercial Factsheets	
	Rancho Santa Margarita Educational Brochures	
	Pollution Prevention Activity Sheets	
Exhibit 9-3	Best Management Practices Inspection Forms	

Section 10.0	ILLEGAL DISCHARGES/ILLICIT CONNECTIONS COMPONENT	10-1
10.1	Introduction	10-1
10.1.1	Program Overview	10-1
10.1.2	Program Commitments	10-1
10.1.3	Regulatory Requirements	10-1
10.2	Illegal Discharges/Illicit Connections Program	10-2
10.2.1	Program Introduction	10-2
10.2.2	Program Administration and Implementation	10-2
10.2.3	Detection and Elimination of Illegal Discharges	10-3
10.2.4	Model Spill Response Procedures	10-5
10.2.4.1	Record Keeping	10-6
10.2.4.2	Notifications and Response Requests	10-6
10.2.4.3	Response	10-6
10.2.4.4	Investigations	10-7
10.2.4.5	Clean-up	10-7
10.2.4.5.1	Trauma Scene Clean-up	10-8
10.2.4.6	Reporting	10-8
10.2.5	Sewage Spill Response Procedures	10-8
10.2.5.1	Program Responsibilities	10-9
10.2.5.2	Management Measures	10-9
10.2.5.3	Response	10-9
10.2.6	Illicit Connections Investigations	10-10
10.2.7	Source Investigations	10-10
10.2.7.1	Tracking a Pollutant Upstream	10-10
10.2.7.2	Documentation	10-11
10.2.7.3	Elimination of ID/ICs	10-11
10.3	Education and Enforcement	10-12
10.3.1	Introduction	10-12
10.3.2	Choosing the Type of Enforcement	10-12
10.3.2.1	Educational Letters	10-12
10.3.2.2	Administrative Remedies	10-12
10.3.2.3	Criminal Remedies	10-12
10.3.2.4	Administrative Hearings	10-13
10.4	Training	10-13
10.4.1	Training Records	10-13
Figure 1.1	Regional Map—City of Rancho Santa Margarita	1-6
Figure 1.2	San Juan Creek Watershed TMDL and 303(d) Listed Water Bodies	1-8

Table 1.1.	Watersheds, ESAs, 303(d) Pollutants and TMDL status for Waterbodies in City of Rancho Santa Margarita	1-7
Table 2.1	City of Rancho Santa Margarita Participation in Countywide Program	2-2
Table 2.2	City of Rancho Santa Margarita Internal Implementation of the LIP	2-4
Table 2.3	Fiscal Analysis for City Capital Costs	2-11
Table 2.4	Fiscal Analysis for City Operations and Maintenance Costs	2-13
Table 2.5	Fiscal Analysis for City Funding Sources.....	2-14
Table 4.1	City of Rancho Santa Margarita Pollution Prevention Related Codes.....	4-2
Table 4.2	Independent Water/Sewer Agency Pollution Prevention-Related Ordinances/Programs	4-2
Table 4.3	City of Rancho Santa Margarita Water Quality Related Department Functions.....	4-5
Table 5.1	Inspection Frequencies	5-6
Table 7.1	Priority Project Categories	7-3
Table 8.1	Minimum Requirements for All Construction Sites	8-4
Table 8.2	Designated Construction BMPs	8-6
Table 8.3	Inspection Frequency of Construction Projects Based on Construction Site Priority	8-9
Table 8.4	Enforcement Actions for Construction Problems	8-10
Table 9.1	Industrial Activity BMPs	9-6
Table 9.2	Commercial BMPs	9-7
Table 9.3	Designated Residential Activities BMPs	9-14
Table 9.4	Potential Pollutants from CIA/HOA Activities	9-16
Table 9.5	BMPs for CIAs/HOAs with Publicly-Owned and -Maintained Streets and Storm Drains	9-17
Table 9.6	BMPs for CIAs/HOAs with Privately-Owned and -Maintained Streets and Storm Drains	9-18

1.0 INTRODUCTION

This document constitutes the City of Rancho Santa Margarita's Local Implementation Plan (LIP) prepared as part of a compliance program pursuant to the California Regional Water Quality Control Board, San Diego Region, Order No. R9-2013-0001 as amended by Order Nos. R9-2015-0001 and R9-2015-0100, NPDES Permit No. CAS0109266 (termed *Fifth Term Permit*). The LIP contains all the information specified for the Jurisdictional Runoff Management Plan (JRMP) and should, for purposes of compliance, be considered to be a JRMP.

This plan describes the activities that the City is undertaking to meet the requirements of the Fifth Term Permit and to protect and improve the quality of the creeks, streams and coastal waters within the urban areas of San Juan Hydrologic Unit, also referred to as the South Orange County Watershed Management Area (WMA) to which the City contributes runoff. Although the LIP is intended to serve as the basis for City compliance during the entire period of the Fifth Term Permit, the LIP is subject to modifications and updates as the City determines necessary, or as directed by the Regional Board.

1.1 BACKGROUND

This plan addresses the impacts to creeks, rivers, streams and coastal waters that can arise from the imprint of urban development on the landscape. Urbanization creates impervious surfaces such as rooftops, driveways, roads and parking lots which can (1) increase the timing and volume of rainfall runoff (compared to pre-development conditions) and (2) provide a source of pollutants that are flushed or leached by rainfall runoff or dry weather runoff into surface water systems.

The environmental consequences of urban area runoff can be loss or impairment of aquatic beneficial uses due to:

- Water quality degradation from increased loadings of sediment, nutrients, metals hydrocarbons, pesticides, and bacteria;
- Reduced biotic richness, with increased dominance of tolerant species;
- Changes in channel morphology and habitat loss from increased severity and frequency of runoff events;
- Loss of groundwater recharge, and
- Increased water temperatures from solar energy absorption by urban surfaces and elimination of riparian shading.

These impacts have been referred to by Walsh (2005¹) as the symptoms of "urban stream syndrome" and while these impacts are often mostly attributed to urban stormwater runoff delivered to streams by constructed drainage systems, other stressors, including sanitary sewer

¹Christopher J. Walsh,^{1,*} Allison H. Roy,^{2,†} Jack W. Feminella,^{3,‡} Peter D. Cottingham,^{4,§} Peter M. Groffman,^{5,||} and Raymond P. Morgan II^{6,#}, "The urban stream syndrome: current knowledge and the search for a cure," *Journal of the North American Benthological Society* 24, no. 3 (September 2005): 706-723.

overflows, authorized wastewater discharges and legacy pollutants can also be important determinants of urban stream system condition.

The stormwater pollution control effort, of which this LIP is a part, is the result of four decades of legislative effort beginning with the 1972 Federal Water Pollution Control Act, subsequently known as the Clean Water Act (CWA). In 1987, the Water Quality Act brought stormwater discharges into the National Pollutant Discharge Elimination System (NPDES) program and USEPA subsequently issued implementing regulations on November 16, 1990.

In response to these regulations, the City of Rancho Santa Margarita, the County of Orange, the Orange County Flood Control District and the other incorporated cities of Orange County (collectively referred to as Permittees²) have obtained, renewed and complied with NPDES Stormwater Permits from the Santa Ana and San Diego Regional Water Quality Control Boards. Each permit renewal has required the Permittees to continue to implement stormwater quality management programs and update and develop additional programs at countywide and watershed scales of implementation to control pollutants in dry and wet weather urban runoff.

The City's stormwater quality management program reduces pollutant discharges through the implementation of a variety of measures commonly referred to as Best Management Practices (BMPs). BMPs are integral to the City's construction and maintenance of its urban municipal infrastructure. Regulatory oversight ensures BMP implementation at locations of businesses, commerce and construction activity and public education and outreach encourages adoption of practices protective of water quality in residential areas. When land is developed or re-developed, preparation of a Project Water Quality Management Plan (WQMP) is required for all projects meeting Priority Development Project (PDP) criteria.

Since 2000, the City has cooperated with the County of Orange, the Orange County Flood Control District and the other cities in Orange County (collectively the Orange County Stormwater Program or "Program"). The result of this cooperation has been the development of a series of model stormwater program elements that comprise the countywide Drainage Area Management Plan (DAMP). In developing this LIP, the City of Rancho Santa Margarita has used the DAMP as the foundation for its program development, and the two documents and a watershed management plan (see discussion in **Section 1.2** regarding Water Quality Improvement Plan), in effect, act as companion parts of the City's compliance program.

1.2 REGULATORY REQUIREMENTS

Section 402(p) of the CWA, as amended by the Water Quality Act of 1987, requires that municipal NPDES Permits include:

1. A requirement to effectively prohibit non-stormwater discharges into municipal storm sewers; and
2. Controls to reduce the discharge of pollutants from municipal storm drains to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the

²The terms "Copermittee" and "Permittee" are synonymous. Permittee is used for countywide consistency.

Administrator or the State determines appropriate for the control of such pollutants.

Regulations promulgated by EPA on November 16, 1990, (40 CFR 122.26 (d)(2)(iv)) require municipal NPDES permit applicants to develop a management program to effectively address these requirements. According to these regulations, the management program, “*shall include a comprehensive planning process which involves public participation and where necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable using management practices, control techniques and system, design and engineering methods, and such other provisions which are appropriate.*”

The Fifth Term Permit retains the prescribed program elements of the prior permits and places additional regulatory emphasis on watershed planning with new requirements for the development and implementation of a Water Quality Improvement Plan (WQIP). This plan is intended to guide jurisdictional efforts toward achieving the outcome of improved water quality in discharges and receiving waters by enabling management resources to be directed toward priority water quality constituents of concern and/or underlying priority water quality conditions thereby providing a regulatory basis for addressing both the symptoms and underlying causes of urban stream syndrome.

Currently, some of the Copermittees, including the City, are pursuing a subvention of funds from the State to pay for certain activities required by Order No. R9-2009-0002 and Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100, including some of the activities in the LIP. Nothing in this LIP should be viewed as a waiver of those claims or as a waiver of the rights of the City to pursue a subvention of funds from the State to pay for certain activities required by the Fourth and Fifth Term Permits, including the implementation of certain activities in this LIP. In addition, several Copermittees, including the City, have filed petitions with the SWRCB challenging some of the requirements of the Fifth Term Permit. Nothing in this LIP should be viewed as a waiver of those claims. Because the SWRCB has not issued a stay of the Fifth Term Permit, Copermittees must comply with the Fifth Term Permit's requirements while the SWRCB process is pending.

1.3 OBJECTIVES OF THE LOCAL IMPLEMENTATION PLAN

The main objective of this LIP is to fulfill the commitment of the City to present a plan that satisfies the requirements of its NPDES Permit. This document outlines all of the strategies the City will implement to reduce the discharge of pollutants from its storm drain system in accordance with the Fifth Term Permit and therefore identifies both DAMP/LIP and WQ~~M~~IP strategies.

- 1) DAMP/LIP strategies—these strategies are the baseline programs developed on a countywide or regional basis and which are focused on reducing pollutant discharges from the municipal storm drain system to the MEP.
- 2) WQIP strategies—these strategies go beyond the City's baseline strategies and represent a focus on south Orange County's ~~h~~Highest ~~p~~Priority ~~w~~Water ~~q~~Quality ~~e~~Conditions (HPWQC).

This LIP includes the following programs in subsequent sections:

1. Framework for program management activities and future plan development (**Section 2.0** ~~and Section 3.0~~);
- 1.2. Future plan development (**Section 3.0**);
- 2.3. Legal authority for prohibiting unpermitted discharges to the storm drain system and for requiring BMPs in new development and significant redevelopment (**Section 4.0**);
- 3.4. Municipal activities for pollution prevention and treatment to further reduce the amount of pollutants entering the storm drain system (**Section 5.0**);
- 4.5. Educational program to communicate with the public about urban stormwater and non-stormwater pollution and obtain their support in implementing pollution prevention BMPs (**Section 6.0**);
- 5.6. New development and significant redevelopment controls to incorporate appropriate and required post-construction nonstructural and structural BMPs into the environmental planning and development review process (**Section 7.0**);
- 6.7. Construction site controls that address appropriate and required practices for erosion and sediment control and on-site hazardous materials and waste management (**Section 8.0**);
- 7.8. Existing development programs to prioritize, inspect and implement programs for commercial and industrial facilities (**Section 9.0**); and
- 8.9. Illegal discharges/illicit connections (ID/IC) program to detect and eliminate unpermitted discharges and unauthorized connections to the municipal storm drain system (**Section 10.0**).

The list of strategies the City will implement to address the HPWQC identified in the WQIP and meet numeric goals is provide in Exhibit 1.1 of this LIP. These strategies include the City's baseline programs as well as the additional commitments necessary to meet the goals within the timelines specified in the WQIP. The LIP is the City's primary mechanism for WQIP strategy implementation and Fifth Term Permit compliance.

1.4 PERMITTEE COMMITMENTS

The Permittees are committed to maintaining the integrity of the receiving waters and their ability to sustain beneficial uses. As such, the Permittees have designed and implemented a countywide baseline stormwater management program in order to be able to periodically re-assess the conditions of the waters within Orange County and help determine the impact, if any, of urban stormwater discharges to the beneficial uses of those waters.

This baseline effort is complemented by the WQIP, which focuses resources on the highest priority water quality constituents and conditions. The Highest Priority Water Quality Conditions (HPWQC) are: pathogen health risk in dry weather, unnatural water balance in dry weather and the geomorphic instability of the channel system. By applying an adaptive management approach, the City will continue to analyze and evaluate the appropriateness of the prioritization.

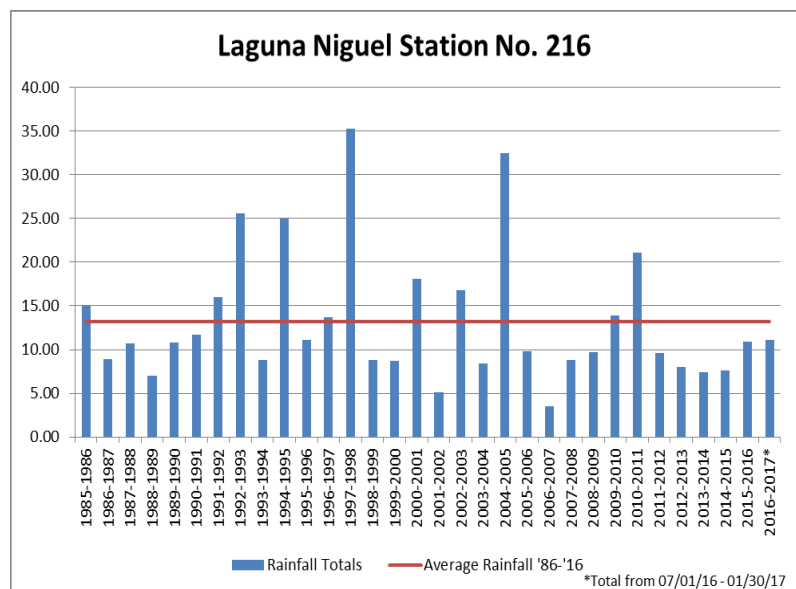
1.5 DAMP/LIP COVERAGE

This LIP is applicable to the area of the City of Rancho Santa Margarita within the jurisdiction of the San Diego Regional Board. The non-topographic boundary between Orange County and adjoining counties could result in certain Permittees being subjected to flows originating from or discharging to areas that are subject to separate NPDES municipal stormwater permits issued by the Regional Boards. The common drainage issues with Orange, Riverside and San Bernardino counties are being addressed through joint participation in integrated monitoring and research and program development initiatives.

1.6 DESCRIPTION OF DRAINAGE AREA AND CLIMATE

1.6.1 Geography and Climate

Orange County's climate has hot, dry summers and mild winters. Nearly all the annual precipitation falls in only a few storm events between October and April. During times of drought, it is not unusual for years to pass between major rainfalls. It is also common for successive storms of varying durations and intensities to compound their effects, with the heavy rainfall of the second or third storm creating the most severe flood conditions. On average, Orange County only receives 12 to 13 inches of rain per year.



1.6.2 Watersheds

A watershed is an area of land where water drains through a series of creeks, rivers and bays into a common body of water often termed "receiving water." The City of Rancho Santa Margarita is located within the San Juan Creek watershed.

Figure 1.1 Regional Map – City of Rancho Santa Margarita



1.6.3 Environmentally Sensitive Areas (ESAs)/Impaired Waters

Environmentally Sensitive Areas (ESAs)

ESAs are defined by the San Diego Regional Board as those areas that include, but are not limited to:

- All CWA Section 303(d) impaired waters;
- Areas designated as Areas of Special Biological Significance by the SWRCB in the Water Quality Control Plan for the San Diego Basin Plan;
- Water bodies designated with the RARE Beneficial Use category by the SWRCB in the Basin Plan (RARE);
- Areas designated as preserves or their equivalent under the Natural Communities Conservation Planning Program (NCCP); and
- Any other ESAs identified by the City.

The ESAs identified in the City are listed in **Table 1.1**.

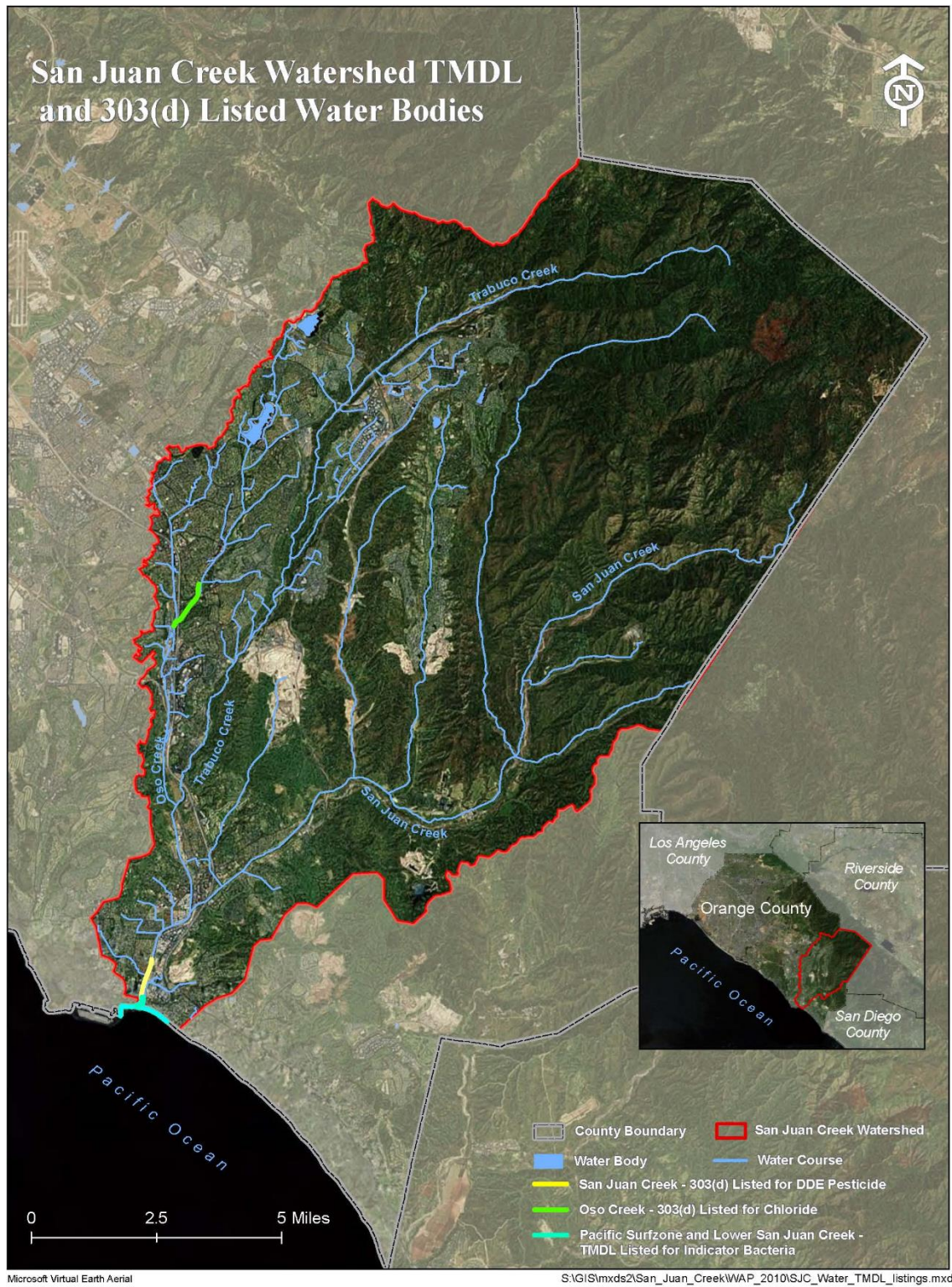
CWA Section 303(d) Water Quality Limited Segments of Receiving Waters

Under Section 303(d) of the CWA, states are required to develop lists of water quality limited segments of receiving waters (impaired waters). These impaired waters do not meet water quality standards or support designated water uses. The 2010 303(d) list of water quality limited segments is provided in **Table 1.1**.

Table 1.1
Watersheds, ESAs, 303(d) Pollutants and TMDL status for Waterbodies in
City of Rancho Santa Margarita

Regional Board Watershed Management Area (WMA)	Hydrologic Unit	ESA	303(d) Pollutant/ Stressor*	Source	TMDL Priority	Size Affected
San Juan Creek	90120000	San Juan Creek	Indicator Bacteria	Point Source/ Nonpoint Source	Low	1 mile
San Juan Creek	90120000	San Juan Creek	Phosphorus	Urban Runoff/Storm Sewers/Unknown Nonpoint/Point Source	Low	1 mile
San Juan Creek	90120000	San Juan Creek	Toxicity	Unknown Nonpoint Source/Unknown Point Source Urban Runoff/Storm Sewers/	Low	1 mile
San Juan Creek	90120000	San Juan Creek	Selenium	Urban Runoff/Storm Sewers/Unknown Nonpoint/Point Source	Low	1 mile
San Juan Creek	90120000	San Juan Creek	Total Nitrogen as N	Unknown Nonpoint/ Point Source/Urban Runoff/Storm Sewers	Low	1 mile
San Juan Creek	90120000	San Juan Creek	DDE	Source Unknown	Low	1 mile
San Juan Creek Mouth	90120000	San Juan Creek	Indicator Bacteria	Point Source/Nonpoint Source	High	6.3 Acres

Figure 1.2 San Juan Creek Watershed TMDL and 303(d) Listed Water Bodies



1.7 PROGRAM ASSESSMENT AND MODIFICATION

The Program Effectiveness Assessment is the foundation for the Annual Progress Report that is submitted each year to the Regional Boards. This report presents an evaluation of this LIP, which is used to determine where modifications within the program may be necessary. It also ensures that an adaptive management process is applied to each of the program components and is used as an effective management tool (See **Section 3.0**).

2.0 PROGRAM MANAGEMENT

2.1 INTRODUCTION

Program management activities conducted by the City of Rancho Santa Margarita to implement the LIP involve the following activities:

- Coordination with the Principal Permittee and other Permittees on program development through the DAMP; common program implementation (such as monitoring, public education and watershed programs); fiscal resources for shared budgets under the Implementation Agreement; and overall program direction.
- Coordination with the Principal Permittee and other Permittees on program development through the WQIP.
- Coordination with internal City departments to implement the LIP.
- Fiscal analysis in preparing, approving and tracking shared cost budgets prepared by the Principal Permittee and individual cost budgets prepared by the City.
- Data management and compliance reporting based on common practices specified in the DAMP and WQIP.

This section addresses these issues.

2.2 MAJOR MANAGEMENT ACTIVITIES

Implementation of the LIP and related DAMP programs and WQIP strategies is overseen by the Public Works Department, which coordinates the development, implementation and administration of the stormwater program for the City overall. In this capacity the Public Works Department is the lead department responsible for LIP, DAMP and WQIP development, implementation, compliance, fiscal analysis, and reporting.

In addition to managing internal implementation, the Public Works Department also participates with the County of Orange, Orange County Flood Control District, and other Orange County cities in the Program.

2.2.1 Management Framework

Management of the Program is performed through a committee structure with responsibilities and chairing assigned selectively to the Principal Permittee and the Permittees. These committees are as follows:

- City Manager's Water Quality Committee: provides budget and overall program review and governance direction; comprised of several city managers and is attended by County staff.
- City Engineer's Technical Advisory Committee (TAC): serves in a program advisory role to the Permittees and implements policy previously established by the permittees. The TAC is comprised of a city engineer, or selected representative, from

one city in each of the County supervisorial districts and a representative from the County of Orange.

- Technical Advisory Committee/Planning Advisory Committee (TAC/PAC) serves in a program advisory role to the Permittees and implements policy previously established by the permittees pertaining to land development. The TAC/PAC is comprised of a city engineer, or selected representative, and a planning director or selected representative, from one city in each of the County supervisorial districts and a representative from the County of Orange.
- General Permittee Committee: provides a countywide forum to update designated representatives from each Permittee on program development.
- WQIP Committee: provides a watershed management area forum to engage Permittees in WQIP development, implementation, assessment and adaptive management.
- Sub-Committees/Task Forces/ Advisory Groups:
 - Inspection Sub-Committee
 - Legal/Regulatory Authority Task Force
 - Local Implementation Plan/Program Effectiveness Assessment (LIP/PEA) Sub-Committee
 - Public Education Sub-Committee
 - Trash and Debris Task Force
 - Trash provisions Sub-Committee
 - ~~Water Quality Ordinance Authorized Inspectors Sub-Committee~~
- ~~Other Committees including Aliso Creek/San Juan Creek Watershed TMDL Committee and South Orange County Watershed Management Area Group~~

The City participates in these committees through the representatives shown in **Table 2.1**.

Table 2.1
City of Rancho Santa Margarita Participation in Countywide Program

Committee/Task Force	City Department/Division
City Manager Water Quality Committee	City Manager's Office
TAC	Public Works
TAC/PAC	Public Works
General Permittee Committee	Public Works
WQIP Committee	Public Works
<u>Inspection Sub-Committee</u>	<u>Public Works</u>
Legal/Regulatory Authority Task Force	City Attorney's Office, Public Works
LIP/PEA Sub-Committee	Public Works
Public Education Sub-Committee	Public Works
Authorized Inspectors Sub-Committee	Public Works

Table 2.1
City of Rancho Santa Margarita Participation in Countywide Program

Committee/Task Force	City Department/Division
Trash and Debris Task Force	Public Works
<u>Trash Provisions Sub-Committee</u>	<u>Public Works</u>

The responsibilities of the City departments for the internal coordination of LIP activities are shown in **Table 2.2**.

Table 2.2
City of Rancho Santa Margarita Internal Implementation of the LIP

Program Element	Department	Activity	Responsibility Under the Order/2003 DAMP
Section 2-Program Management	Public Works	Serves as City LIP manager	Prepares annual compliance reports
			Reviews shared budgets and prepared internal City budgets
			Coordinates with Principal Permittee and other Permittees for development and implementation of countywide program
			Coordinates/ensures implementation of LIP by City departments; administers program
			Responds to phone, e-mail, and other input to the City on water quality issues and dispatches appropriate personnel; records responses
			Follows up on problems with City compliance
Section 3-Plan Development	Public Works	Oversees development of new DAMP/WQIP programs	Coordinates between City departments and the Principal Permittee in the development of new programs and BMP effectiveness studies
Section 4-Legal Authority	City Attorney	Certification of adequate legal authority	Reviews legal authority/modifications of ordinances/legal certification
Section 5-Municipal Activities	Public Works	Manages storm drain inventory/atlas	Updates or provides Geographic Information System (GIS) with updates to storm drain atlas
	Public Works	Operates and maintains storm drains and flood control facilities	Implements applicable model BMPs, <u>including BMPs to comply with the Trash Provisions, and</u> reports actions taken to LIP Management
			Reports to LIP Manager with changes in flood control maintenance program and facilities
	Public Works	Operates and maintains corporate/municipal yards	Implements applicable model BMPs, reports actions taken to LIP Management
			Reports to LIP Manager with changes in corporate/municipal yards
	Public Works	Maintains catch basin stenciling program	Implements stenciling program, reports actions taken to LIP Management
			Reports to LIP Manager with changes in stenciling program

Table 2.2
City of Rancho Santa Margarita Internal Implementation of the LIP

Program Element	Department	Activity	Responsibility Under the Order/2003 DAMP
	Orange County Fire Authority	Generates emergency and non-emergency fire fighting discharges	Implements applicable model BMPs, reports actions taken to LIP Management
	Orange County Fire Authority	Operates and maintains fire stations	Implements applicable model BMPs, reports actions taken to LIP Management
			Reports to LIP Manager with changes in fire facilities operated
	Community Services	Operates parks, community centers, and recreational facilities	Implements applicable model BMPs, reports actions taken to LIP Management operated
			Reports to LIP Manager with changes in parks/facilities
	Police Services	Operates and maintains police facilities	Implements applicable model BMPs, reports actions taken to LIP Management
			Updates LIP Manager with changes in police facilities operated
	Public Works	Operates and maintains parking lots	Implements applicable model BMPs, reports actions taken to LIP Management
	Public Works	Maintains City facilities	Implements applicable model BMPs, reports actions taken to LIP Management
			Updates LIP Management with changes to City-owned facilities
	Public Works	Manages and maintains City vehicle programs	Implements applicable model BMPs, reports actions taken to LIP Management
			Updates LIP Management with changes to City vehicle programs
	Public Works	Manages and implements street sweeping	Implements applicable model BMPs, reports actions taken to LIP Management
			Updates LIP Management with changes to street sweeping
	Public Works	Manages and implements IPM Policy	Implements IPM Policy, reports actions taken to LIP Management
			Updates LIP Management with changes to pesticide and fertilizer programs for conformance with IPM Policy

Table 2.2
City of Rancho Santa Margarita Internal Implementation of the LIP

Program Element	Department	Activity	Responsibility Under the Order/2003 DAMP
	Public Works	Manages and implements landscape maintenance programs	Implements applicable model BMPs, reports actions taken to LIP Management
			Updates LIP Management with changes to landscape maintenance programs
	Public Works	Manages and implements waste recycling and litter control programs	Implements applicable model BMPs, reports actions taken to LIP Management
			Updates LIP Management with changes to waste recycling and litter control programs
Section 6-Public Education	Public Works	Manages education/ outreach program	Attends public meetings
			Provides training and guidance materials to private developers, public, and City staff
			Disseminates information in the City
			Develops City versions of countywide education materials as appropriate
			Participates in one or more City events per year
	Development Services, Public Works, Library, Community Services	Distribution of public education materials	Provides information to public at City counters
Section 7-New Development	Development Services	Manages General Plan	Reviews the General Plan for water quality protection
	Development Services	Manages environmental planning review	Implements use of CEQA checklist to review water quality issues on proposed projects
			Reviews development for water quality issues
	Development Services	Processes building permits	Advises applicants of water quality requirements
			Verifies plan compliance with water quality requirements
			Coordinates with Public Works for project tracking and inspection of water quality requirements
	Public Works	Processes grading permits	Advises applicants of water quality requirements

Table 2.2
City of Rancho Santa Margarita Internal Implementation of the LIP

Program Element	Department	Activity	Responsibility Under the Order/2003 DAMP
			Verifies plan compliance with water quality requirements
	Development Services, Public Works	Interacts with public	Provides information to permit applicants on water quality requirements
	Public Works	Manages public works projects	Verifies plan compliance with water quality requirements in public works projects
			Conducts project tracking and inspection of water quality requirements in public works projects
Section 8-Construction	Public Works	Processes grading permits	Advises applicants of water quality requirements
			Verifies plan and NOI compliance with water quality requirements, reports actions taken to LIP Management
	Public Works	Manages oversight of construction inspection inventory, prioritization and inspection program	Inventories, prioritizes and maps construction sites
			Implement inspections, requires corrective actions to be taken, reports actions taken to LIP Management
	Public Works	Manages Public works projects and Capital Improvement Project (CIP) projects	Verifies plan compliance with water quality requirements in public works projects and CIPs
			Conducts project tracking and inspection of water quality requirements in public works projects and CIPs, reports actions taken to LIP Management
Section 9-Existing Development	Community Services	Manages oversight of the commercial, industrial, residential inspection program	Inventories, prioritizes and maps facilities
			Implement inspections, require corrective actions to be taken, report actions taken to LIP management
	Public Works	Interacts with businesses and the public	Provides information to industrial and commercial businesses and the public
Section 10-ID/IC	Public Works, Code Enforcement	Operates field activities	Reports dumped materials and/or undocumented connections

Table 2.2
City of Rancho Santa Margarita Internal Implementation of the LIP

Program Element	Department	Activity	Responsibility Under the Order/2003 DAMP
	Public Works	Manages education/ outreach program	Distributes public education materials to encourage the reporting of problems
	Public Works	Implements construction site inspections	Reports violations of and/or enforce the water quality ordinance
	Public Works	Implements the existing development inspections	Report violations of and/or enforces the water quality ordinance
	Public Works	Processes notifications/ response requests for water pollution problems	Detects and eliminates illegal discharges and illicit connections
	Orange County Fire Authority	Responds to water pollution complaints	Responds to water pollution complaints in a timely manner and enforces all applicable ordinances
	Police Services	Responds to water pollution complaints	Responds to water pollution complaints in a timely manner and enforces all applicable ordinances
	Public Works, Development Services	Responds to water pollution complaints, assesses site, makes notifications, oversees clean-up operations and enforces water quality ordinance	Responds to water pollution complaints in a timely manner and enforces all applicable ordinances
	Public Works	Manages water quality data received from countywide program	Initiates source investigations through ID/IC program for problems identified through the water quality monitoring program
	City Attorney's Office	Assists with the enforcement of violations of applicable ordinances	Enforces against violators of stormwater-related ordinances

2.2.2 Agreement for Program Implementation

An Implementation Agreement among the 36 Permittees defines the roles, responsibilities, and cost-sharing formulas governing the program. The City executed the updated cooperative agreement on June 20, 2002.

2.2.3 NPDES Permit Responsibilities

The responsibilities of the County of Orange as the Principal Permittee and Permittees as a whole are defined within the Implementation Agreement, the NPDES Permits, or as otherwise identified within separate funding agreements.

The County of Orange as Principal Permittee is responsible for:

1. Serving as liaison between the Copermittees in the Watershed Management Area and the San Diego Water Board on general permit issues, and when necessary and appropriate, representing the Permittees in the Watershed Management Area before the San Diego Water Board;
2. Facilitating the development of the WQIP in accordance with the requirements of Provision B of the Fifth Term Permit;
3. Coordinating the submittal of the deliverables required by Provisions F.1, F.2, F.3.a, and F.3.b of the Fifth Term Permit; and
4. Coordinating and developing, with the other Principal Watershed Permittees, the requirements of Provisions F.3.c, F.4, and F.5.b of the Fifth Term Permit.

The Principal Permittee is not responsible for ensuring that the other Permittees within the Watershed Management Area are in compliance with the requirements of this Order.

2.2.4 NPDES Reporting Requirements

(1) **Permittees:** The City completes a Jurisdictional Runoff Management Program Annual Report Form (**Exhibit 2.1**) covering implementation of its jurisdictional activities from July 1 to June 30, during the annual reporting period. Each Annual Report verifies and documents compliance with the Fifth Term Permit and are due annually on January 31.

~~The reporting period for these annual reports must be the previous fiscal year. For example, the report submitted September 30, 2017, must cover the reporting period July 1, 2016, to June 30, 2017.~~

(2) **Principal Permittee:** The Principal Permittee is responsible for preparing the Water Quality Improvement Plan Annual Report, which is due annually on January 31. This report will include:

1. The receiving water and MS4 outfall discharge monitoring;
2. The progress of the special studies and the findings, interpretations and conclusions of a special study, or each phase of a special study, upon its completion;
3. The findings, interpretations and conclusions from the assessments required pursuant to Provision D.4;
4. The progress of implementing the WQIP, including but not limited to, the following:
 - The progress toward achieving the interim and final numeric goals for the highest water quality priorities for the Watershed Management Area;
 - The water quality improvement strategies that were implemented and/or no longer implemented by each of the Permittees during the reporting period and previous reporting periods;
 - The water quality improvement strategies planned for implementation during the next reporting period;
 - Proposed modifications to the water quality improvement strategies, the public comments received and the supporting rationale for the proposed modifications;

- Previous modifications or updates incorporated into the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document and implemented by the Copermittees in the Watershed Management Area; and
- Proposed modifications or updates to the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document.

2.2.5 Fiscal Analysis

The stormwater program funding needs are principally driven by:

- The Fifth Term Permit, including the baseline requirements of Provision E and the WQIP requirements of Provision B.
- The Bacteria TMDL which is incorporated into the Fifth Term Permit and which is addressed in the WQIP.

The activities necessary to comply with these requirements are described in this LIP. Examples include, but are limited to, street sweeping, storm drain cleaning, development processing and inspections of facilities used for commerce and business. The City uses the reporting format shown in **Tables 2.3, 2.4 and 2.5** to report on costs (capital, operations and maintenance) and funding sources for these activities.

Table 2.3
Fiscal Analysis for City Capital Costs

City of Rancho Santa Margarita		CAPITAL COSTS	
Fiscal Analysis Summary		(Land, Large Equipment, and Structures)	
DAMP Program Elements		Current FY Costs	Projected FY Costs
SUPPORTIVE OF PROGRAM ADMINISTRATION (DAMP Section 2.0)		This information will be collected annually	This information will be collected annually
MUNICIPAL ACTIVITIES (DAMP Section 5.0)	Litter Control		
	Recycling		
	Drainage Facility Maintenance		
	Catch-Basin Stenciling		
	Street Sweeping		
	Environmental Performance		
	Public Property & Street Chemical Spill Response		
Pesticide & Fertilizer Management			
PUBLIC INFORMATION (DAMP Section 6.0)	Nonpoint Source Pollution Awareness		
	Household Hazardous Waste Collection		
REQUIRING NEW DEVELOPMENT BMPS (Supportive of Planning, etc.)			
REQUIRING CONSTRUCTION BMPS (Supportive of Plan Check & Inspection)			
ILLICIT CONNECTION/ DISCHARGE ID & ELIMINATION (DAMP Section 10.0)	Facility Inspection		
	Other Efforts to Identify & Eliminate Illicit Connections		
BMPS INCORPORATED INTO PUBLIC WORKS CAPITAL PROJECTS			
TOTALS			

Table 2.3
Fiscal Analysis for City Capital Costs

<u>City of Rancho Santa Margarita</u>	<u>CAPITAL COSTS</u>
<u>Fiscal Analysis Summary</u>	<u>(land, large equipment, and structures)</u>

SECTION 2, PROGRAM MANAGEMENT

<u>DAMP Program Elements</u>	<u>Current FY Costs</u>	<u>Projected FY Costs</u>
<u>Public Projects – BMPs</u>	<u>This information will be collected annually</u>	<u>This information will be collected annually</u>
<u>Construction BMPs for Public Construction Projects</u>		
<u>Other Capital Projects/Major Equipment Purchases</u>		
<u>TOTALS</u>		

Table 2.4
Fiscal Analysis for City Operations and Maintenance Costs

City of Rancho Santa Margarita		OPERATIONS AND MAINTENANCE	
Fiscal Analysis Summary			
DAMP Program Elements		Current FY Costs	Projected FY Costs
SUPPORTIVE OF PROGRAM ADMINISTRATION (DAMP Section 2.0)		This information will be collected annually	This information will be collected annually
MUNICIPAL ACTIVITIES (DAMP Section 5.0)	Litter Control		
	Recycling		
	Drainage Facility Maintenance		
	Catch Basin Stenciling		
	Street Sweeping		
	Environmental Performance		
	Public Property & Street Chemical Spill Response		
	Pesticide & Fertilizer Management		
PUBLIC INFORMATION (DAMP Section 6.0)	Nonpoint Source Pollution Awareness		
	Household Hazardous Waste Collection		
REQUIRING NEW DEVELOPMENT BMPS (Supportive of Planning, etc.)			
REQUIRING CONSTRUCTION BMPS (Supportive of Plan Check & Inspection)			
ILLICIT CONNECTION/ DISCHARGE ID & ELIMINATION (DAMP Sec. 10.0)	Facility Inspection		
	Other Efforts to Identify & Eliminate Illicit Connections		
BMPS INCORPORATED INTO PUBLIC WORKS CAPITAL PROJECTS			
TOTALS			

Table 2.5
Fiscal Analysis for City Funding Sources

City of Rancho Santa Margarita	FUNDING SOURCES	
Fiscal Analysis Summary		
DAMP FUNDING SOURCES	FUNDING PERCENTAGES	
	Current FISCAL YEAR	Next FISCAL YEAR
GENERAL FUND	This information will be collected annually	This information will be collected annually
UTILITY TAX/CHARGES		
SEPARATE UTILITY BILLING ITEM		
GAS TAX		
SPECIAL DISTRICT FUND		
OTHERS (Specify)		
Sanitation Fee		
Benefit assessment		
Fleet Maintenance Fund		
Community Services District		
Water Fund		
Sewer & Storm Drain Maintenance Fee		
Grants		
TOTALS (must add up to 100%)		

2.2.6 Program Representation

The Principal Permittee represents the Permittees on the California Stormwater Quality Association (CASQA), the Stormwater Monitoring Coalition, Southern California Coastal Water Research Project (SCCWRP), and other stormwater forums.

EXHIBIT 2.1

Jurisdictional Runoff Management Program Annual Report Form



**JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM
FY 2015-16**

I. COPERMITTEE INFORMATION	
Copermittee Name: City of Rancho Santa Margarita	
Copermittee Primary Contact Name: Joe Ames	
Copermittee Primary Contact Information:	
Address: 22112 El Paseo	
City: Rancho Santa Margarita	County: Orange
State: CA	Zip: 92688
Telephone: 949-635-1800 x6503	Fax:
Email: james@cityofrsm.org	
II. LEGAL AUTHORITY	
Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001, as amended by Order No. R9-2015-0001?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATES	
Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Regional Water Board?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES <input type="checkbox"/> NO <input type="checkbox"/>
IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM	
Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001, as amended by Order No. R9-2015-0001?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Number of non-storm water discharges reported by the public	15
Number of non-storm water discharges detected by Copermittee staff or contractors (and other agencies)	75
Number of non-storm water discharges investigated by the Copermittee	90
Number of sources of non-storm water discharges identified	90
Number of non-storm water discharges eliminated	90
Number of sources of illicit discharges or connections identified	0
Number of illicit discharges or connections eliminated	0
Number of enforcement actions issued	90
Number of escalated enforcement actions issued	1
V. DEVELOPMENT PLANNING PROGRAM	
Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001, as amended by Order No. R9-2015-0001?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
If YES to the quest above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse? <i>The BMP Design Manual is to be submitted with the Water Quality Implementation Plan.</i>	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
Number of proposed development projects in review (as of June 30, 2016)	4
Number of Priority Development Projects in review (as of June 30, 2016)	3
Number of Priority Development Projects approved (for FY 15-16)	0
Number of approved Priority Development Projects exempt from any BMP requirements (for FY 15-16)	0
Number of approved Priority Development Projects allowed alternative compliance (for FY 15-16)	0
Number of Priority Development Projects granted occupancy (for FY 15-16)	0
Number of completed Priority Development projects in inventory	43
Number of high priority Priority Development Project structural BMP inspections	43
Number of Priority Development Project structural BMP violations	18
Number of enforcement actions issued	18
Number of escalated enforcement actions issued	0

**JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM
FY 2015-2016**

VI. CONSTRUCTION				
Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001, as amended by Order No. R9-2015-0001?				YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Number of construction sites in inventory				325
Number of active construction sites in inventory (as of June 30, 2016)				116
Number of inactive construction sites in inventory				0
Number of construction sites closed/completed during reporting period (inventory of sites minus active sites)				209
Number of construction site inspections				1340
Number of construction site violations (# of sites that were not in compliance during an inspection)				22
Number of enforcement actions issued				22
Number of escalated enforcement actions issued				0
VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM				
Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001, as amended by Order No. R9-2015-0001?				YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory	67	507	3	55
Number of existing development inspections	67	170	3	11
Number of follow-up inspections	67	87	0	0
Number of violations	3	87	0	0
Number of enforcement actions issued	3	87	0	0
Number of escalated enforcement actions issued	0	0	0	0
VIII. PUBLIC EDUCATION AND PARTICIPATION				
Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001, as amended by Order No. R9-2015-0001?				YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001, as amended by Order No. R9-2015-0001?				YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
IX. FISCAL ANALYSIS				
Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001, as amended by Order No. R9-2015-0001?				YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
X. CERTIFICATION				

I [☐ Principal Executive Officer ☐ Ranking Elected Official ☒ Duly Authorized Representative] certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	10/31/2016 Date
Joe Ames Print Name	Interim Stormwater Program Manager Title
949-635-1800 x6503 Telephone Number	james@cityofrsm.org Email

3.0 PLAN IMPROVEMENT AND WATERSHED PLANNING

3.1 INTRODUCTION

This Section describes the approach being taken by the City in developing and updating the Local Implementation Plan (LIP) to maintain a responsive compliance program. Program updates are informed by an adaptive management process focused on addressing Highest Priority Water Quality Conditions (HPWQC)~~high-priority water quality issues~~ by revising, adding or deleting BMPs and activities in response to performance assessment and research. This feedback loop forms the framework for revision and improvement of the Program and its documentation.

3.2 PLAN DEVELOPMENT

3.2.1 Approach to Plan Development and Improvement

The Principal Permittee, in conjunction with the City and the other Copermittees, have developed a comprehensive framework for stormwater management, described in the Drainage Area Management Plan (DAMP) and Water Quality Improvement Plan (WQIP), which are updated as appropriate in conjunction with the Report of Waste Discharge and each new Municipal Permit's findings and requirements. There is now a programmatic countywide approach for urban stormwater management on two levels:

- Implementing a baseline set of source control BMPs and activities that are considered proven and cost-effective, and are recommended for inclusion or reference in the Copermittees' LIPs at the *local jurisdictional MS4 level*. The LIP primarily addresses non-structural and pollution prevention controls applicable to on-site or in the MS4, as well as localized structural BMPs, as required by Provision E of the Fifth Term Permit and as further determined appropriate by the City.
- A framework for collective action at the *multi-jurisdictional watershed level*, focusing on solving the ~~h~~H~~i~~i~~g~~h~~e~~s~~t~~h~~e~~r~~p~~p~~r~~i~~o~~r~~i~~t~~y~~~~w~~W~~a~~ter~~q~~Qality~~i~~usses~~a~~nd~~c~~Conditions ~~(HPWQC)~~ and documenting issues and progress through the WQIP reporting compiled by the Principal/Lead Permittee with input by the Copermittees.

3.2.2 Methodology for Examining Retrofit Opportunities

~~[Reserved]~~The Fifth Term Permit requires the City to develop an approach to identify potential retrofit and stream, channel, or habitat projects for existing development. Section 9.7 describes the City's approach to identifying and implementing retrofit opportunities.

3.2.3 BMP Selection and Effectiveness Assessment

The Reports of Waste Discharge, the region-wide Annual Unified Reports, the ~~Watershed Reports, and the~~ City's Annual LIP PEA Reports, JRMP Annual Reports, and WQIP Annual Reports provide a history of program and BMP activities implemented and progress in meeting water quality standards. The City's current baseline BMPs to reduce, eliminate or mitigate pollutant impacts are summarized in **Sections 5.0 through 10.0**. Planned ~~Inter-jurisdictional and jurisdictional~~ watershed BMP efforts and jurisdictional BMP efforts are summarized in **Exhibit**

3.1.

New or modified BMPs may be considered on a localized basis or for broader scale implementation. In order to assure that resources for pollution prevention and removal BMPs are strategically expended, the City typically evaluates any potential new structural or preventive BMP technologies or practices on a limited scale, or consults evaluations conducted by others, before considering broader-scale implementation. Implementation is pursued in a prioritized manner on a schedule consistent with available resources. After pilot and/or broader implementation, local effectiveness is assessed to determine if further adjustments or modifications are needed to the BMP implementation or program priorities. These iterative efforts are discussed and reported in the Annual Jurisdictional Work Plan progress updates submitted with the WQIP Annual Report.

BMP effectiveness assessment may be characterized via direct or indirect evidence at one or more of the six CASQA outcome levels described in **Section 3.3.3**. The BMP selection and effectiveness assessment process may include, but is not limited to, input from the following factors and information sources, as available and applicable:

- A review of technical literature (such as the ASCE/EPA databases)
- A review of existing control programs
- Demonstration or research projects by City or other entities
- Input from vendors, consulting firms, other municipalities, or other agencies
- Water quality and flow data and modeling
- User and operational/maintenance staff feedback
- Opinion surveys
- Beneficial use assessment
- Cost and cost/benefit
- Technical feasibility
- Acceptability by the community
- Ease or difficulty of implementation
- Maintenance requirements
- Pollutant prevention/removal performance
- Multiple resource benefits or impacts

The program evaluation framework is based on the California Stormwater Quality Association (CASQA, 2015¹) method, which presents a hierarchy of potential outcomes at six levels:

- Outcome Level 6: Receiving Water Conditions
- Outcome Level 5: MS4 Contributions
- Outcome Level 4: Source Conditions
- Outcome Level 3: Target Audience Actions
- Outcome Level 2: Barriers & Bridges to Action
- Outcome Level 1: Stormwater Program Activities

The WQIP frames the assessment measures being used by the Copermittees in Sections B.4 and B.5. The assessments may be adapted or modified over the Permit term to improve their usefulness. Assessment findings are reported annually. Any modifications to the program or to

¹A Strategic Approach To Planning For And Assessing The Effectiveness Of Stormwater Programs, CASQA, 2015

programmatic assessment methods are also reported annually, with corresponding revisions made to the LIP as appropriate.

3.2.4 Plan Revision

Annual progress updates to the LIP are submitted with the WQIP Annual Report. Program assessment and iterative BMP findings, as well as any modifications to the program or to programmatic assessment methods, are reported along with any corresponding revisions made to the LIP as appropriate. The LIP is intended to be a dynamic document plan that is evaluated on at least an annual basis by the City or as directed by the Regional Board.

3.3 FUNDING OF STRUCTURAL CONTROLS

~~{ Reserved}~~ Expenditures of structural controls include jurisdictional, watershed, and regional WMA activities. Implementation of these structural controls may be funded through the City's:

- General funds
- In-lieu fees, when private development projects are unable to provide sufficient structural controls on site and determined in conformance with the approved Water Quality Management Plan/Technical Guidance Document.

Additionally, the City can apply to secure funding for structural controls through the following grant and loan programs:

Grant Funding Programs:

- OC Go (Measure M) Environmental Cleanup Program
- Proposition 1 – Stormwater Grant Program and IRWM
- Proposition 68 – Parks and Water Bond
- Metropolitan Water District of Southern California Future Supply Action Funding Program (Through partnership with member agencies)

Financial Assistance (Loan) Funding Programs:

- Clean Water State Revolving Fund (CWSRF)
- Drinking Water State Revolving Fund (DWSRF) (Through partnership with local water agencies)

3.4 EMPLOYEE TRAINING AND OUTREACH

For an effective stormwater program to be efficiently implemented, its staff must have sufficient knowledge, experience, and skills. The City will provide or require educational activities and training for its direct employees as described in subsequent sections for each baseline program. The Principal Permittee will coordinate, develop and present a number of different training modules in accordance with the *Orange County Stormwater Program Training Program Framework: Core Competencies*. The City will support this effort by requiring the appropriate employees attend training sessions and conduct applicable train-the-trainer sessions, if necessary.

EXHIBIT 3.1

Summary of Water Quality Improvement Plan Strategies



STRATEGY		HIGH PRIORITY WATER QUALITY CONDITIONS (HPWQC) TARGETED	TARGET POLLUTANTS	GEOGRAPHIC EXTENT OF IMPLEMENTATION	LOCATION IN LIP OR WQIP
DAMP/LIP STRATEGIES					
Municipal Activities	Trash and Debris Control	<ul style="list-style-type: none"> • Pathogen Health Risk • Unnatural Water Balance/Flow Regime 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Bacteria/Pathogens • Non-stormwater discharges • Nutrients • Trash • Pesticides • Turbidity • Toxicity <u>Other Pollutants</u> <ul style="list-style-type: none"> • Metals • Oil & Grease • Sediment 	Citywide	LIP Section 5
	Drainage Facility Maintenance—MS4 Inspections/Cleaning				
	Street Sweeping				
	Structural BMP Maintenance at Municipal Projects				
	Pesticide & Fertilizer Management				
	Municipal Staff Training and Education				
Public Education	Nonpoint Source Pollution Awareness	<ul style="list-style-type: none"> • Pathogen Health Risk • Unnatural Water Balance/Flow Regime • Channel Erosion/Geomorphic Impacts 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Bacteria/Pathogens • Non-stormwater discharges • Nutrients • Trash • Pesticides • Turbidity • Toxicity <u>Other Pollutants</u> <ul style="list-style-type: none"> • Metals • Oil & Grease • Sediment 	Citywide	LIP Section 6
	Household Hazardous Waste Collection				
New Development/ Significant Redevelopment	Water Quality Management Plan Review & Post-Construction BMP Inspection	<ul style="list-style-type: none"> • Pathogen Health Risk • Unnatural Water Balance/Flow Regime • Channel Erosion/Geomorphic Impacts 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Bacteria/Pathogens • Non-stormwater discharges • Nutrients • Trash • Pesticides • Turbidity • Toxicity <u>Other Pollutants</u> <ul style="list-style-type: none"> • Metals • Oil & Grease • Sediment 	Citywide	LIP Section 7

STRATEGY		HIGH PRIORITY WATER QUALITY CONDITIONS (HPWQC) TARGETED	TARGET POLLUTANTS	GEOGRAPHIC EXTENT OF IMPLEMENTATION	LOCATION IN LIP OR WQIP
Construction	Construction BMPs—Plan Check & Inspection	<ul style="list-style-type: none"> • Pathogen Health Risk • Unnatural Water Balance/ Flow Regime • Channel Erosion/Geomorphic Impacts 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Bacteria/Pathogens • Non-stormwater discharges • Nutrients • Trash • Turbidity <u>Other Pollutants</u> <ul style="list-style-type: none"> • Metals • Oil & Grease • Sediment 	Citywide	LIP Section 8
Existing Development	Industrial Facility Inspections	<ul style="list-style-type: none"> • Unnatural Water Balance/ Flow Regime 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Non-stormwater discharges • Nutrients • Trash • Toxicity <u>Other Pollutants</u> <ul style="list-style-type: none"> • Metals • Oil & Grease 	Industrial Facilities within the City	LIP Section 9
	Commercial/Food Facility Inspections	<ul style="list-style-type: none"> • Pathogen Health Risk • Unnatural Water Balance/ Flow Regime 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Bacteria/Pathogens • Non-stormwater discharges • Nutrients • Trash • Pesticides • Toxicity <u>Other Pollutants</u> <ul style="list-style-type: none"> • Metals • Oil & Grease 	Commercial/Food Facilities within the City	LIP Section 9
	Mobile Business Program	<ul style="list-style-type: none"> • Unnatural Water Balance/ Flow Regime 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Non-stormwater discharges • Nutrients • Toxicity <u>Other Pollutants</u> <ul style="list-style-type: none"> • Metals • Oil & Grease 	Citywide	LIP Section 9
	Residential/HOA Inspections	<ul style="list-style-type: none"> • Pathogen Health Risk • Unnatural Water Balance/Flow Regime 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Bacteria/Pathogens • Non-stormwater discharges • Nutrients • Trash • Pesticides • Turbidity • Toxicity <u>Other Pollutants</u> <ul style="list-style-type: none"> • Metals • Oil & Grease • Sediment 	City Residential Management Areas	LIP Section 9

STRATEGY		HIGH PRIORITY WATER QUALITY CONDITIONS (HPWQC) TARGETED	TARGET POLLUTANTS	GEOGRAPHIC EXTENT OF IMPLEMENTATION	LOCATION IN LIP OR WQIP
Illicit Discharges/Illicit Connections	Illicit Connection Inspections	<ul style="list-style-type: none"> • Pathogen Health Risk • Unnatural Water Balance/ Flow Regime 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Bacteria/Pathogens • Non-stormwater discharges • Nutrients • Trash • Pesticides • Turbidity • Toxicity <u>Other Pollutants</u> <ul style="list-style-type: none"> • Metals • Oil & Grease • Sediment 	Citywide	LIP Section 10
	Illegal Discharge Investigations, Spill Response				

STRATEGY		HIGH PRIORITY WATER QUALITY CONDITIONS (HPWQC) TARGETED	TARGET POLLUTANTS	GEOGRAPHIC EXTENT OF IMPLEMENTATION	LOCATION IN LIP OR WQIP
WQIP STRATEGIES					
Regional WQIP Strategies	<u>Control Activities for Pathogen Health Risk</u> <ul style="list-style-type: none"> Comprehensive Human Waste Source Reduction Program 	<ul style="list-style-type: none"> Pathogen Health Risk 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> Bacteria/Pathogens Non-stormwater discharges Nutrients 	South Orange County Watershed Management Area	WQIP Section B.3
	<u>Control Activities for Unnatural Water Balance</u> <ul style="list-style-type: none"> Expanded transitional monitoring observations Detailed flow monitoring at priority outfalls High-resolution imagery analysis Flow regime characterization Outfall prioritization Outfall capture feasibility studies Incentives for low water use landscaping and/or irrigation source controls 	<ul style="list-style-type: none"> Unnatural Water Balance/ Flow Regime 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> Bacteria/Pathogens Non-stormwater discharges Nutrients Trash Pesticides Turbidity Toxicity <u>Other Pollutants</u> <ul style="list-style-type: none"> Metals Oil & Grease Sediment 	South Orange County Watershed Management Area	WQIP Section B.3
	<u>Control Activities for Channel Erosion</u> <ul style="list-style-type: none"> Restoration Alternatives and Feasibility Studies Finalize Conceptual Geomorphically-referenced basis of design (GRBoD) Guidelines Programmatic Permitting Framework for Geomorphically-Referenced Basis of Design Projects LiDAR Data Acquisition and Analysis Coordination with upland controls proposed for Pathogen Health Risk and Water Balance HPWQCs Aliso Creek Mainstem Ecosystem Restoration Project Watershed Management Area Analysis Coarse Sediment Supply Analysis 	<ul style="list-style-type: none"> Channel Erosion/Geomorphic Impacts 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> Bacteria/Pathogens Nutrients Turbidity Toxicity <u>Other Pollutants</u> <ul style="list-style-type: none"> Sediment 	South Orange County Watershed Management Area	WQIP Section B.3

STRATEGY		HIGH PRIORITY WATER QUALITY CONDITIONS (HPWQC) TARGETED	TARGET POLLUTANTS	GEOGRAPHIC EXTENT OF IMPLEMENTATION	LOCATION IN LIP OR WQIP
Jurisdictional Non-structural WQIP Strategies	Proposed Unauthorized Encampment Waste Management Program	• Pathogen Health Risk	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Bacteria/Pathogens • Trash 	Targeted Areas When Observed	LIP Section 5
	Proposed Recreational Vehicle Waste Disposal Education Program	• Pathogen Health Risk	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Bacteria/Pathogens 	Citywide- Residential RV Permit Parking Applicants	LIP Section 6
	Permitted discharge and water impoundment inventories	• Unnatural Water Balance/ Flow Regime	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Non-stormwater discharges 	Citywide	LIP Section 10
Jurisdictional Structural WQIP Strategies	Citywide Catch Basin Inlet Debris Screens	• Pathogen Health Risk	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Bacteria/Pathogens • Trash <u>Other Pollutants</u> <ul style="list-style-type: none"> • Nutrients • Sediment 	Citywide	LIP Section 5
	Water District “Smart Landscape” Rebate Programs	<ul style="list-style-type: none"> • Pathogen Health Risk • Unnatural Water Balance/Flow Regime 	<u>WQIP Priority Pollutants</u> <ul style="list-style-type: none"> • Bacteria/Pathogens • Non-stormwater discharges • Nutrients <u>Other Pollutants</u> <ul style="list-style-type: none"> • Sediment 	Citywide, as programs/funding exist	LIP Section 3

4.0 LEGAL AUTHORITY

4.1 INTRODUCTION

The City of Rancho Santa Margarita establishes, maintains and enforces adequate legal authority within its jurisdiction to control pollutant discharges into and from its storm drain system. Municipal Code, Chapter 5.10, is the City's Stormwater and Urban Runoff Pollution Controls Ordinance (Water Quality Ordinance), which is the underpinning of the City's water quality/ pollution prevention program. The updated ordinance was adopted on November 10, 2010. The most current and up-to-date version of the Ordinance and the entire Rancho Santa Margarita Municipal Code is available online at https://www.municode.com/library/ca/rancho_santa_margarita/codes/code_of_ordinances.

4.2 REGULATORY REQUIREMENTS

The Fifth Term Permit, Directive E.1, requires the City to establish, maintain and enforce adequate legal authority to control pollutant discharges into and from its MS4 through ordinance, statute, permit, contract or similar means.

4.3 AUTHORITY TO CONTROL POLLUTANT DISCHARGES

The City's Water Quality Ordinance is the principal legal foundation of the City's water quality/ pollution prevention program. This legal authority enables the City to:

- Control the contribution of pollutants in discharges of runoff associated with industrial and construction sites;
- Prohibit all identified illicit discharges not otherwise allowed;
- Prohibit and eliminate illicit connections to the MS4;
- Control the discharge of spills, dumping or disposal of materials other than storm water into its MS4;
- Require compliance with conditions in City's ordinance, permits, contracts or orders;
- Utilize enforcement mechanisms to require compliance with stormwater ordinances, permits, contracts or orders;
- Control the contribution of pollutants from one portion of the MS4 to another portion of the MS4 through interagency agreements among other MS4 owners;
- Carry out all inspections, surveillance and monitoring necessary to determine compliance and noncompliance with local ordinance and permits and with this Order, including the prohibition on illicit discharges to the MS4;
- Require the use of BMPs to prevent or reduce the discharge of pollutants into the MS4s from stormwater to the maximum extent practicable (MEP); and
- Require documentation on the effectiveness of BMPs implemented to reduce the discharge of stormwater pollutants to the MS4 to the Maximum Extent Practicable (MEP).

SECTION 4, LEGAL AUTHORITY

4.3.1 Other City of Rancho Santa Margarita Pollution Prevention Codes/Ordinances

In addition to the City's water quality ordinance, other sections of the City's municipal code also address water quality protection and pollution prevention and contribute to a comprehensive water quality/pollution prevention program. These complementary codes are noted in **Table 4.1**.

Table 4.1:
City of Rancho Santa Margarita Pollution Prevention Related Codes

Ordinance No. 09-06	Water-Efficient Landscape Ordinance for new and redevelopment projects
Ordinance No. 06-01	Diversion requirements for construction and demolition projects
Ordinance No. 10-10	Grading and Excavating Ordinance

Water & Sewer Agency Pollution Prevention Ordinances/Programs

In addition to City ordinances, there are independent water and sewer agencies that govern residents and businesses. These agencies enforce regulations and implement programs that contribute to the overall effectiveness of the City's water quality/pollution prevention program. The City closely coordinates with these agencies on these programs. These water and sewer agency programs are listed below in **Table 4.2**.

Table 4.2
Independent Water/Sewer Agency Pollution Prevention Related Ordinances /Programs

Agency	Name of Ordinance/Program	Date Adopted or Effective	Website	Water Quality / Pollution Prevention Issue Addressed
Santa Margarita Water District	Water Conservation Ordinance 2014-10-03	10/17/2014	www.smwd.com	<ul style="list-style-type: none">• Irrigation runoff control• Washwater control
Santa Margarita Water District	Resolution 08-06-02	06/2008	www.smwd.com	Sewer spill prevention
Trabuco Canyon Water District	Water Conservation Ordinance 2008-18	12/17/2008	www.tcwd.com	<ul style="list-style-type: none">• Irrigation runoff control• Washwater control
Trabuco Canyon Water District	Waste Discharge Pretreatment and Source Control Ordinance 2012-19	1/18/2012	www.tcwd.com	Sewer spill prevention

Roles & Responsibilities Beyond City Jurisdiction

Although the City has a robust regulatory and enforceable framework in place, there are agencies, industries and programs that may have either complimentary and/or conflicting

authority that may extend beyond the authority of the City. The City believes that collaboration with the following agencies, industries and programs will be necessary for a comprehensive and effective water quality program. The City is not responsible for discharges regulated under separate NPDES permits or where the City has no authority. The following list includes some agencies and programs that are beyond City authority that may affect receiving water quality:

- Pesticides used in the state are registered by the Department of Pesticide Regulation (DPR).*
- Air contaminants, including fugitive dust, are regulated by the Air Quality Management District (AQMD).
- Leaking Underground Storage Tanks (LUST), Landfills, regulations on water reuse, Restaurant Inspections, Ocean Water Protection—Beach Closures & Warnings Monitoring Program (per AB411), Used Oil Recycling, etc., are overseen by the Orange County Health Care Agency.
- Hazardous Waste Inventory and Emergency Planning is regulated by the Orange County Fire Authority as the Administering Agency (AA).
- Hazardous Waste Transport, Treatment, Storage & Disposal are regulated by the Department of Toxic Substances Control (DTSC).
- Caltrans is regulated by State and Regional Board under Order 2012-0011-DWQ.
- Construction projects impacting one acre or greater are regulated by the General Construction Permit under Order 2009-0009-DWQ, which is administered by the State Resources Control Board.
- Industrial sites are regulated under the Industrial Permit under Order 2014-0057-DWQ, which is administered by the State Resources Control Board.
- Discharges from utility vaults and underground structures are regulated under Order 2014-0174-DWQ which is administered by the State Resources Control Board.
- Reclaimed water use is regulated under a separate permit (Order 97-52) administered by the SDRWCB.
- Hydrostatic Test & Potable Water will be regulated under Tentative Order R9-2009-0094, upon adoption. This order will be regulated by SDRWQCB.
- The Serra sewer treatment outfall is regulated by SDRWQCB under Order R9-2009-0094.
- Phase II MS4s, such as the Saddleback Valley Unified School District is regulated by State and SDRWQCB under Order 2013-0001-DWQ.
- On-site disposal systems (OSDS), agricultural & nursery discharges, animal operations and aerially discharged wastes over land are each regulated under one of eleven (11) conditional “waivers” administered by SDRWQCB.

*In California, DPR, SWRCB and RWQCB have mandates and authorities bearing on pesticides and water quality. In order to promote cooperation to protect water quality from the adverse

effects of pesticides, DPR and the SWRCB signed a Management Agency Agreement (MAA). The MAA, and its companion document, "The California Pesticide Management Plan for Water Quality," strive to coordinate interaction, facilitate communication, promote problem solving, and ultimately assure the protection of water quality. The City looks forward to seeing the outcomes of this MAA coordination and implementation, as pesticides have been noted as a pollutant of concern in water bodies within Orange County.

4.4 ENFORCEMENT

The City's Water Quality Ordinance includes adequate legal authority, to the extent permitted by California and Federal law and subject to the limitations on municipal action under the constitutions of California and the United States, to enter, inspect and gather evidence (pictures, videos, samples, documents, etc.) from industrial, construction and commercial establishments. Sanctions are in place to allow the City to progressively and decisively take enforcement actions against any violators of its Water Quality Ordinance. The City intends to use Enforcement Response Plan (previously, Enforcement Consistency Guide for Water Quality Ordinance Implementation (**DAMP Exhibit 4.I**)) and follow the guidelines and procedures included therein.

The detection, elimination and enforcement activities undertaken by the City are described further in **DAMP Section 10.0**. Authorized Inspector(s) (AI) are assigned to investigate compliance with and detect incidences of violations of the City's Water Quality Ordinance. In addition to prohibiting unpermitted discharges, the Water Quality Ordinance also provides the legal authority for requiring BMPs in new development and significant redevelopment found in **DAMP Section 7.0**.

The City of Rancho Santa Margarita has key departments and staff responsible for overseeing, implementing, and enforcing City ordinances. These departments and staff members are identified in **Table A-4.3**.

4.5 ASSESSMENT

The City has concluded that the City's ordinances grant the City the adequate legal authority necessary to implement and enforce the requirements of the permit and a Statement of Legal Authority (**Exhibit 4.2**) signed by legal counsel, was completed to certify that the City of Rancho Santa Margarita has the legal authority to implement and enforce the requirements in 40 CFR 122.26(d)(2)(i)(A-F).

Table 4.3
City of Rancho Santa Margarita
Water Quality Related Department Functions

Function	City Department	Description of Department Function	Water Quality Functions Performed by this Department	Ordinances Department Enforces
Public Works	Public Works/Engineering/ Environmental/Solid Waste	Design and construction of all the City's Public Works Projects and New Development and Redevelopment Projects	<ul style="list-style-type: none"> • Administers and enforces the City's Grading Ordinance No. 10-10 • With assistance from the Development Services Department and through contracts with the County of Orange, administers and enforces the Water Quality Control Ordinance No. 10-07 • With assistance from the Development Services Department, administers other City land development, clearing, and grading ordinances and plans and related state and local laws • Issues grading and construction permits for development projects and imposes conditions on such permits • Conducts inspections of City projects and of private projects and activities that require a permit under a Public Works-administered program • With assistance from the Development Services Department, provides training and guidance materials to private developers and City employees and managers • Designs and constructs certain City projects • Reviews proposed designs for certain City projects • Maintains certain City projects • Cleans City streets and highways and related culverts • Contracts for maintenance, which may include pest management • Cleans and maintains the City MS4 • Coordinates with other City departments to develop and implement City stormwater programs • Administers various City facilities • Participates in committees per Table 2-1 • Administers and enforces the City's Water Quality Efficient Landscape Ordinance No. 09-06 	<ul style="list-style-type: none"> • Water Quality Ordinance • Grading Ordinance • Water Efficient Landscape Ordinance
With assistant of the Development	Development/Planning/ Enforcement/Building and Safety		<ul style="list-style-type: none"> • With Public Works, administers and enforces the Grading Ordinance No. 10-10 	<ul style="list-style-type: none"> • Water Quality Ordinance

Table 4.3
City of Rancho Santa Margarita
Water Quality Related Department Functions

Function	City Department	Description of Department Function	Water Quality Functions Performed by this Department	Ordinances Department Enforces
Services Department			<ul style="list-style-type: none"> Evaluates the potential environmental impacts of proposed projects, for CEQA and other purposes, and provides recommendations to lead agencies and to the City Council concerning potential project impacts and means to mitigate those impacts With Public Works and contractually with Orange County Public Works, administers and enforces the Water Quality OrdinanceAdministers other City land development, clearing, grading, and resource protection ordinances and plans and related State laws, including but not limited to General Plans, the Zoning Ordinance, the Subdivision Ordinance, and the Uniform Building Code Inspects, evaluates and issues notices of violation for infractions of the ordinances above Develops and implements City procedures in relation to CEQA Evaluates the potential environmental impacts of proposed projects, for CEQA and other purposes, and provides recommendations to lead agencies, to the Planning Department, and to the City Council concerning potential project impacts and means to mitigate those impacts Conducts inspections of private projects and activities that require a permit under a Planning Department-administered program With Public Works and contractually with Orange County Public Works, provides training and guidance materials to private developers and City employees and managers Reviews proposed designs for certain City projects Participates in committees (i.e., Authorized Inspector Committees) 	<ul style="list-style-type: none"> Grading Ordinance Water Efficient Landscape Ordinance
City Clerk	City Clerk		<ul style="list-style-type: none"> The City Clerk is responsible for administering the agenda of City Council meetings and is responsible for posting notices for public hearings including public hearings required by CEQA. 	
City Attorney	City Attorney		<ul style="list-style-type: none"> Advises the City Council, City Manager and City departments on legal aspects of urban runoff-related matters 	

Table 4.3
City of Rancho Santa Margarita
Water Quality Related Department Functions

Function	City Department	Description of Department Function	Water Quality Functions Performed by this Department	Ordinances Department Enforces
			<ul style="list-style-type: none"> Assists in liaison with the County, RWQCB and staff, and in liaison with other jurisdictions Assists City Departments in developing programs and ordinances Supports administrative enforcement by City departments Serves as attorney for the City in some civil enforcement actions related to urban runoff Participates in Legal Regulatory Committee 	
City Manager	City Manager		<ul style="list-style-type: none"> Coordinates and directs the urban-runoff-related efforts of City departments Advises the City Council on the policy and economic aspects of urban runoff-related matters Participates in City Manager's Committee 	

NOTES: All ordinance references are to ordinances of the County of Orange or to ordinances of the Orange County Flood Control District. The following is a list of acronyms used in this table:

BMP	Best Management Practice	MS4	Municipal Separate Stormwater Sewer System
CEQA	California Environmental Quality Act	NPDES	National Pollutant Discharge Elimination System
CIWMP	Countywide Integrated Waste Management Plan	OCCO	Orange County Codified Ordinances or County Code
CUPA	Certified Unified Program Agency	OCP	OC Planning
HCA	County of Orange Health Care Agency	OCPW	OC Public Works
HHWCC	Household Hazardous Waste Collection Center	RWQCB	Regional Water Quality Control Board
OCWR	OC Waste & Recycling		

EXHIBIT 4.1

Enforcement Response Plan



CITY OF RANCHO SANTA MARGARITA

STORM WATER MANAGEMENT AND URBAN RUNOFF

ENFORCEMENT RESPONSE PLAN

I. INTRODUCTION

The City of Rancho Santa Margarita (City) controls pollutant discharges into and from its storm drain system within its jurisdiction through enforcement of its Water Quality Ordinance, Municipal Code, Chapter 5.10, its Grading Ordinance, Municipal Code, Chapter 10.12 and certain other complimentary Municipal Code provisions identified in Section 4 of the City's Jurisdictional Urban Runoff Plan / Local Implementation Plan (LIP) (referred to collectively herein as the City's Ordinances).

Unless otherwise defined in this ERP, all capitalized terms used in this ERP are defined in the Water Quality Ordinance or the LIP.

This Enforcement Response Plan (ERP) works in conjunction with the City's Ordinances as part of the City's efforts to effectively administer the storm water quality control programs described in the Drainage Area Management Plan (DAMP), the LIP, and the South Orange County Water Quality Improvement Plan (WQIP), and is intended to be consistent with these programmatic documents.

This ERP describes the applicable approaches and options the City takes to investigate and enforce violations of the City's Ordinances in order to achieve compliance with the requirements of the NPDES Permit with respect to Illicit Discharge Detection and Elimination, Development Planning, Construction Management, and Existing Development. It is intended to provide guidance to Authorized Inspectors, Enforcing Attorneys, and other City personnel responsible for implementing the Water Quality Ordinance and the City's storm water quality control programs in order to assist them to take appropriate, adequate, consistent, and timely enforcement actions for the protection of the environment and public health, safety and welfare.

This ERP was developed in support of the City's Ordinances, and is not intended to support the enforcement of requirements under the State General Industrial and General Construction Permit Programs, which are subject to enforcement by other state and regional authorities.

II. OVERVIEW OF ENFORCEMENT OPTIONS AND APPROACHES TO RESPONDING TO NONCOMPLIANCE

The goals of the City's enforcement program include the following:

- To educate the regulated community.
- To achieve compliance with the laws and regulations within the regulated community.

- To return violators to compliance in a timely manner and eliminate any threats due to non-compliance.
- To initiate and conclude enforcement activities in a timely manner.
- To provide consistency in responding to violations.

In selecting enforcement options, the City strives to ensure that violations of a similar nature are subjected to similar-types of enforcement remedies. Nonetheless, a more severe enforcement option may be selected when a violator has either a history of noncompliance or has failed to take good faith actions to eliminate continuing violations or to meet a previously imposed compliance schedule. Authorized Inspectors should review enforcement options with the Enforcing Attorney to insure that evidence is collected and delivered in a timely fashion.

The City typically employs a tiered, escalating enforcement system. However, the City reserves the right to use whatever tools it deems most appropriate for a given situation, as dictated by the specifics of each case. The use of a progressively more severe enforcement option is referred to in this ERP as “Escalated Enforcement.” Whether a particular method of enforcement constitutes “Escalated Enforcement” is specified below.

A. Criteria for Determining Appropriate Response to Noncompliance

The enforcement approach taken by the City in response to a specific incident of noncompliance is determined on a case-by-case basis and depends on a variety of factors, including the severity of the violation and the knowledge or intent, level of cooperation, and compliance history of the responsible party.

1. Severity of the Violation

Violations are evaluated against the severity of the noncompliance and the potential or actual threat to public health or the environment created by the noncompliance. The severity of a violation is generally the most important factor in determining the appropriate level of enforcement response. The severity of a violation will depend on a number of factors, including the duration and frequency of the event, the type and amount of the pollutants discharged, and the impact on public health and the environment. Violations that do not pose an immediate or significant threat to public health or the environment, are isolated or infrequent, and/or are short in duration will typically be addressed initially through lower level enforcement actions, such as Verbal Warnings, Notices of Violation, or Administrative Compliance Orders. However, higher level Escalated Enforcement responses will be utilized for violations that pose an immediate and significant threat to human health or the environment or which are continuous, frequent, and/or of a long duration.

2. Knowledge or Intent of the Responsible Party

The responsible party’s knowledge of a violation or regulations being violated are also taken into account when evaluating the appropriate enforcement approach to take. Where a violation is not severe and has occurred unknowingly, the initial enforcement response will typically consist of an Education Letter, Verbal Warning, or Notice of Non-Compliance. However,

negligent or willful noncompliance will warrant higher level administrative or civil Escalated Enforcement action or Criminal Enforcement.

3. Level of Cooperation

A responsible party's willingness to cooperate and to undertake good faith efforts to maintain compliance or eliminate noncompliance may also be considered when determining the appropriate enforcement response. "Good faith" means that the responsible party has an honest intention to remedy its noncompliance, coupled with actions that give support to this intention. While a responsible party's good faith and willingness to cooperate may be taken into account in determining the appropriate type of enforcement response, it does not eliminate the need for enforcement action, and should not be used to mitigate an enforcement response to such an extent as to permit actual or threatened harm to public health or the environment.

4. Compliance History

When evaluating the level of enforcement action to be taken for a violation, the City reviews and considers the compliance history of the responsible party. If a pattern of recurring violations is observed, or if a responsible party has failed to correct violations noted in a prior enforcement action, the City will use Escalated Enforcement.

B. Initial Methods of Achieving Voluntary Compliance

1. Education Letters

In certain limited circumstances, the City will issue an Educational Letter advising a property owner, business, or resident of their legal obligations prior to, or in lieu of, pursuing administrative, civil, or criminal enforcement. An Educational Letter provides information regarding the requirements of City's Ordinances and the steps that need to be taken to comply with them. An Educational Letter may be appropriate under the following circumstances:

- Where an Authorized Inspector receives a complaint or information concerning noncompliance that the Authorized inspector believes to be valid, but the Authorized Inspector does not have sufficient evidence to substantiate that a violation of the City's Ordinances has occurred.
- Where a violation has been caused by a contractor hired by a property owner, business, or resident without the knowledge or consent of the property owner, business, or resident, and the City may pursue enforcement against the contractor.

In these circumstances, the Authorized Inspector will document that the Educational Letter has been provided, and this documentation can be used as evidence to support enforcement action in the event of continued or future similar violations at the same site.

2. Verbal Warnings

A Verbal Warning is often the initial method used by the City to request corrective action and enforce compliance with the City's Ordinances. A Verbal Warning may be utilized where there

is no history of noncompliance and the violation or noncompliance is relatively minor and can be quickly and easily corrected. In such cases, a Verbal Warning may be sufficient to achieve immediate correction of a violation. Where an Authorized Inspector issues a Verbal Warning, he/she will document the violation and the name and position of the person(s) notified in the inspection file. A specific time frame for correcting the problem and a follow-up inspection date will also be documented by the Authorized Inspector.

C. Administrative Enforcement Responses

1. Notice of Noncompliance

After a verbal warning, the Notice of Noncompliance is the least severe administrative enforcement response utilized by the City for violations of the Water Quality Ordinance. A Notice of Noncompliance constitutes a basic written request that a contractor, facility operator, property owner, or resident rectify a condition causing or threatening to cause noncompliance with the City's Ordinances. A Notice of Violation is the appropriate enforcement tool in the following circumstances:

- The violation or threat is insignificant and short in duration.
- The violation or threat is an isolated incident.
- The violation or threat does not affect and will not harm human health or the environment.
- The responsible party is cooperative and has indicated a willingness to readily correct the violation.
- The violation occurred unknowingly.
- A prior Verbal Warning was given, but the deficiency that was noted in a prior Verbal Warning has not been corrected within the specified timeframe or by the next inspection.

A Notice of Noncompliance (a) identifies the provision(s) of the City's Ordinances and/or relevant permit that has been violated, (b) describes the violation/deficiency to be corrected and corrective action(s) required, (c) includes a compliance date by which the violation must be corrected, (d) sets a date for a follow-up inspection (if applicable), and (e) states that continued noncompliance may result in additional enforcement actions.

A responsible party may appeal a Notice of Violation and request an administrative hearing before a hearing officer in accordance with the procedures set forth in the Water Quality Ordinance.

Generally, a Notice of Noncompliance will be given to a responsible party prior to the use of other progressively severe enforcement options. However, a Notice of Noncompliance will not be the first enforcement method used if egregious or unusual circumstances indicate that a stronger enforcement tool is needed.

2. Administrative Compliance Order

An Administrative Compliance Order is a progressively more severe enforcement response than a Notice of Noncompliance. The Administrative Compliance Order is an appropriate enforcement tool in the following circumstances:

- The violation or threat is not significant and short in duration.
- The violation or threat is infrequent.
- The violation does not pose an immediate threat to human health or the environment.
- An actual condition of noncompliance exists, but the condition cannot be remedied within a relatively short period of time.
- The responsible party has indicated willingness to come into compliance by meeting milestones established in a reasonable schedule.
- The violation is not willful.
- A prior Verbal Warning and/or Notice of Noncompliance has been insufficient to achieve compliance.

An Administrative Compliance Order may include the following terms and requirements:

- Specific steps and time schedules for compliance as reasonably necessary to eliminate an existing prohibited discharge or prevent the imminent threat of a prohibited discharge;
- Specific steps and time schedules for compliance as reasonably necessary to discontinue any illicit connection;
- Specific requirements for containment, cleanup, removal, storage, installation of overhead covering, or proper disposal of any pollutant having the potential to contact stormwater runoff; and
- Any other terms or requirements reasonable calculated to prevent imminent threat of or continuing violations, including, but not limited to, requirements for implementation of, and compliance with, appropriate BMPs.

A responsible party may appeal an Administrative Compliance Order and request an administrative hearing before a hearing officer in accordance with the procedures set forth in the Water Quality Ordinance.

An Administrative Compliance Order may constitute Escalated Enforcement in those instances where a previously issued Verbal Warning or Notice of Noncompliance has failed to achieve compliance.

3. Cease and Desist Order

A Cease and Desist Order may be issued to obtain immediate compliance with the Water Quality Ordinance and may order immediate cessation of any Illegal Discharge, Illicit Connection, or other violation; immediate containment or diversion of any impermissible flow of water off the property; and/or immediate cleanup of any area affected by a violation. The Cease and Desist order may also be appropriately issued as a first step in ordering the removal of nuisance conditions that threaten to cause an unauthorized discharge of Pollutants if exposed to rain or surface water runoff. The Cease and Desist Order is an appropriate enforcement tool in the following circumstances:

- The violation or threat is immediate in nature and may require an emergency spill response or immediate nuisance abatement if left unattended.
- The violation or threat exhibits a potential situation that may harm human health or the environment.
- The Authorized Inspector's contacts with the responsible party indicate that further authority of the City may need to be demonstrated before remedial action is forthcoming.
- The Authorized Inspector's prior enforcement actions have not obtained a favorable response.

A person issued a Cease and Desist Order is entitled to an administrative hearing before a hearing officer within 5 business days in accordance with the procedures set forth in the Water Quality Ordinance.

A Cease and Desist Order constitutes Escalated Enforcement in those instances where a previously issued Notice of Noncompliance and/or Administrative Compliance Order has failed to achieve compliance.

4. Administrative Nuisance Abatement

In instances where Escalated Enforcement actions fail to achieve compliance and there is a continuing threat to water quality, the City may itself enter the property, abate the condition(s) causing the violation, and restore the area. Before pursuing Administrative Nuisance Abatement, the City will notify the property owner and/or occupant and seek their consent. Where consent is not given or cannot be obtained, the City generally must obtain an inspection / abatement warrant from a court in accordance with State law before entering private property. However, where a nuisance condition on private property constitutes imminent danger to public safety or the environment, the Water Quality Ordinance authorizes the City to undertake Emergency Abatement of the condition without prior consent or a judicial warrant if necessary to protect the public safety and environment. Administrative Abatement by Authorized Inspectors and other City staff should be undertaken in consultation with, and with the assistance of, the Enforcing Attorney. A person subject to an Emergency Abatement action is entitled to an administrative hearing before a hearing officer within 5 business days in

accordance with the procedures set forth in the Water Quality Ordinance. The City may recover its costs for responding to a public nuisance and impose nuisance abatement liens for such costs against the property from which the nuisance emanated in accordance with State law.

Administrative Nuisance Abatement constitutes Escalated Enforcement.

5. Invoice For Costs

The Water Quality Ordinance authorizes an Authorized Inspector to deliver an Invoice for Costs to any responsible party for the actual costs incurred by the City in issuing and enforcing any Notice of Noncompliance, Administrative Compliance Order, Cease and Desist Order, or Administrative Abatement order. A responsible party may appeal an Invoice for Costs and request an administrative hearing before a hearing officer in accordance with the procedures set forth in the Water Quality Ordinance. If the responsible party fails to either pay or successfully appeal the Invoice for Costs, then the Enforcing Attorney may institute collection proceedings in accordance with State law.

Delivery of an Invoice for Costs does not constitute Escalated Enforcement.

6. Stop Work Orders

A Stop Work Order is an Escalated Enforcement tool for active land development projects. A Stop Work Order is a written order prohibiting further construction or site development activity until compliance has been achieved. The Stop Work Order is an appropriate enforcement tool in any of the following circumstances:

- If prior written notices or orders have failed to result in compliance or correction of identified violations.
- If the developer/contractor has not complied with the requirements of their building and/or grading permit.
- If an observed violation poses a significant threat to water quality (such as a failure of BMPs resulting in a significant release of sediment or other pollutants off site).

A Stop Work Order will be issued by the inspector or the appropriate official. Stop work orders prohibit further construction activity until the problem is resolved and provide a time frame for correcting the problem.

The Stop Work Order will describe the violation and specify what corrective action must be taken. A copy of the Stop Work Order will be given to the contractor's project supervisor and placed in the active inspection file. For a private construction project, a copy of the Stop Work Order will also be sent to the owner/developer. To restart work once a Stop Work Order has been issued, the contractor's project supervisor must request the City's inspector to re-inspect the project and verify that the deficiencies have been satisfactorily corrected. If the City inspector is satisfied with the corrections, the inspector may sign off on that phase of the project, and work may proceed.

A Stop Work Order constitutes Escalated Enforcement.

7. Permit Revocation or Denial

Violations of the City's Ordinances may be grounds for the suspension or revocation of City issued permits, licenses or other approvals after notice and an opportunity for hearing. For instance, in severe cases of non-compliance, or significant discharges relating to development and/or construction activities, the City revoke grading and/or building permits or other approvals for a development project that a contractor/developer is working under for the project or deny future permits on the project. The responsible party would then have to re-apply for permits and meet any requirements that the City may place on the project. Suspension or revocation of permits or other approvals must be conducted in accordance with the procedures described in the City's Municipal Code. City Staff should consult with the Enforcing Attorney before proceeding with the suspension, revocation or denial of a permit or development approval.

Suspension or revocation of a permit constitutes Escalated Enforcement.

8. Enforcement of Contracts

If a contractor is performing work for the City, then the City may use the provisions within the contract for enforcement of non-compliance. Such contract provisions may allow the City to withhold payment(s), require bonds, apply monetary penalties, order work stopped (without time penalties), or terminate the contract if the contractor performing the work does not comply with all appropriate permits, laws, regulations and ordinances.

Enforcement of Contracts constitutes Escalated Enforcement.

9. Administrative Citations

The City's authorized enforcement staff may issue administrative citations imposing administrative fines for specified violations of the City's Ordinances in accordance with Chapter 1.03 of the City's Municipal Code. The fine amount for an initial violation will be relatively small for a first offense, but repeated violations of the same type will result in escalated fines, up to a maximum of \$1,000 per day. When an Administrative Citation is issued, the responsible party may request a hearing to contest the determination that a violation has occurred in accordance with Chapter 1.03.020 of the City's Municipal Code.

D. Criminal Enforcement

In addition to the administrative enforcement actions described above, the Enforcing Attorney is authorized to file criminal actions to enforce the City's Ordinances. Criminal prosecution is generally the last step taken to stop a condition of noncompliance; however, in some limited cases, criminal enforcement may be appropriate as a first step in enforcement if the facts indicate that the violation is severe, willful and egregious. Criminal prosecution will be appropriate if information or events indicate that noncompliance is (i) willful, (ii) fails to comply with the best management practices imposed on a New Development or Significant Redevelopment project, (iii) continues after notice of non-compliance is received, or (iv) is a

direct attempt to conceal a violation of the City's Ordinances. Criminal prosecution may also be utilized for egregious violations which are the result of negligent rather than willful conduct.

Circumstances indicating that criminal, rather than administrative, enforcement measures should be considered include the following:

- There is strong evidence that the responsible party has willfully violated the City's Ordinances and/or has intentionally disregarded legal requirements.
- There is a significant threat of environmental harm as a result of the violation.
- There is actual sustained environmental harm as a result of the violation.
- The discharge or event of noncompliance is continuing or has been long in duration.
- No immediate remedy for the violation is available.
- There have been numerous previous violations by the same responsible party.

Where it is determined that the available facts warrant criminal enforcement in a particular case, additional evidence will often need to be collected to support a criminal prosecution, and the City may need to obtain a criminal inspection warrant from a court. City staff should consult with the Enforcing Attorney early in the process to ensure proper procedures are followed. Where criminal enforcement is indicated, authorized City personnel may cause issuance of a criminal citation to the offending party pursuant to Penal Code §853.5, §853.6, and §853.9. The citation shall include: (i) the name and address of the violator; (ii) the provisions of the City's Ordinances violated; and (iii) the time and place of required appearance before a magistrate. The responsible party must sign the citation thereby promising to appear. If the cited party refuses to sign the citation, the enforcement official may cause the arrest of the discharger with the assistance of law enforcement personnel, or may refer the matter to the Enforcing Attorney for issuance of a warrant for arrest.

At the discretion of the Enforcing Attorney, criminal violations of the City's Ordinances may be charged as either misdemeanors or infractions. Factors that the Enforcing Attorney may use in determining whether the misdemeanor is more appropriately treated as an infraction, rather than a misdemeanor, may include:

- The duration of the violation or threatened violation.
- The compliance history of the person, business or entity.
- The effort made to comply with an established compliance schedule.
- The existence of prior enforcement actions.
- The actual harm to human health or the environment from the violation.

Criminal Enforcement constitutes Escalated Enforcement.

E. Civil Judicial Enforcement

In addition to the administrative and criminal enforcement options discussed above, the City may also pursue civil judicial enforcement of violations where appropriate.

1. Civil Injunction/Nuisance Abatement Action

Violations of the City's Ordinances that constitute a threat to the public health, safety and welfare are deemed a public nuisance, and the Enforcing Attorney may file a civil judicial action seeking preliminary or permanent injunctive relief to enjoin and/or abate a nuisance or other threatened or continuing noncompliance. Such an action may be appropriate where a continuing or emergency nuisance exists, and administrative and/or criminal enforcement options are insufficient to remedy the nuisance condition. In any such action, the City may seek recovery of its actual enforcement and abatement costs.

A Civil Injunction / Nuisance Abatement Action constitutes Escalated Enforcement.

2. Civil Damages Action

Pursuant to the Water Quality Ordinance, the City may bring an action for civil damages against a responsible party to recover (i) enforcement costs incurred by the City; (ii) costs incurred by the City in mitigating harm to the environment or reducing the threat to human health; (iii) damages for irreparable harm to the environment; and/or (iv) damages resulting from any trespass or nuisance occurring on public land or to the Stormwater Drainage System as a result of a violation of the Water Quality Ordinance.

III. Illicit Discharge Detection and Elimination Enforcement Component

This Section of the ERP describes the City's approaches to investigating, responding to, and enforcing noncompliance with the City's Ordinances related to Illegal Discharges and Illicit Connections.

A. Overview

The City's Water Quality Ordinance expressly prohibits Illegal Discharges and Illicit Connections (ID/ICs), and the City implements a comprehensive program for actively detecting, responding to, investigating and eliminating ID/ICs in an efficient and timely manner (ID/IC Program). The City's ID/IC Program is described in more detail in LIP Section A-10.

An Illicit Connection is an undocumented and/or unpermitted physical connection from a facility to the Stormwater Drainage System. Illicit Connections are often associated with Illegal Discharges. Constructed (i.e., man-made) Illicit Connections include pipelines, conduits, inlets or outlets, connected impervious areas, channels or swales. Practical examples of constructed Illicit Connections include: (i) pipes that discharge onto adjacent property or into a water runoff area; (ii) facilities constructed adjacent to construction areas that allow dewatering runoff to flow to the storm water drainage system; or (iii) storm drain inlets that drain from outside wash areas directly into the Stormwater Drainage System.

An Illegal Discharge (or “Prohibited Discharge”) is any discharge to the Stormwater Drainage System that is not composed entirely of stormwater and that is not covered by an NPDES permit. An Illegal Discharge refers to the disposal of non-stormwater materials such as paint or waste oil into the storm drain or the discharge of waste streams containing pollutants to the storm drain. Illegal Discharges typically are generated from poorly managed on-site operations, illegal dumping, contaminated stormwater discharges, and/or sewage or other materials spills.

Various site operations may produce Illegal Discharges, including releases of (i) process waters such as boiler blow down, rinse water, or chlorinated pool discharges; (ii) waste materials such as manufactured floatable materials, animal wastes from kennels or riding stables, or vehicle fluids (oils, coolants, etc.); and (iii) sand/gravel, cement, fertilizers, or pesticides from raw materials unloading and storage areas. Practical examples of problematic site operations include: (i) pressurized washing and steam cleaning areas; (ii) auto repair shops where operations occur out of doors in unprotected areas and no provision is made for preventing contamination from leaving the site; (iii) non-retail fueling areas where vehicle washing also occurs and runoff flows to storm drain areas; (iv) manufacturing storage yards for concrete materials where materials are uncovered and wash off flows directly to the storm drain; (v) construction locations where debris, materials, and silt flows off the construction site; and (vi) trauma scene clean-up.

Illegal dumping activities include intentional dumping of: (i) household wastes such as home, garden or yard debris, trash or rubbish, or household hazardous wastes; (ii) commercial wastes such as landscape debris or soil, trash or rubbish, or hazardous wastes in drums or canisters; and (iii) animal or agricultural wastes such as manure, stock wastes, fruit and vegetable materials and animal carcasses. Practical Examples of illegal dumping activities could include: (i) home/yard debris dumped near a curb inlet to the stormwater drainage system; (ii) trash, drums or discarded materials left on creek or wash area banks; (iii) used oil dumped on the ground or into storm drains; and (iv) paint waste dumped on the ground or into storm drains.

Stormwater pollution can also occur as rain water is contaminated running off of impervious surfaces. Though the runoff is due to storm events, Illegal Discharges can occur from the following:

- Construction work on an exposed site where soils are being tracked onto the street and washed down the gutter.
- Construction or work on an exposed site where materials, such as sand, are migrating into the street gutter area either through non-concentrated exposure to water, such as sprinkler systems, or by actual contact with other runoff water.
- Petroleum contained soils in equipment servicing areas, which are exposed to gutter areas through tracking.
- Uncovered areas of stockpiled construction demolition materials.
- Outside storage of unsealed paint and solvent containers.

- Exposed truck loading docks with uncovered materials.
- Equipment storage yards without runoff controls.

Sewage spills may be the result of an accidental or irregular discharges of sewage from a sanitary sewer system or from private property tributary to a public sewerage system. Pursuant to the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Resources Control Board, Order No. 2006-0003) and San Diego Regional Board Order No. R9-2007-0005, Santa Margarita Water District and Trabuco Canyon Water District are responsible for responding to, containing, and cleaning up sewage spills/incidents originating from their wastewater and sanitary systems, including systems that collect and convey wastewater to publicly owned treatment facilities. It is those agencies' standard operating policy to respond to all sewage spills/incidents from private systems as well. Each agency has implemented an overflow emergency response plan that is used during sewage spills/incidents.

In addition, the City's Plumbing and Building Codes and Ordinances require that private sewer laterals and septic systems be designed and operated in accordance with industry standards and require the proper maintenance of these facilities in order to minimize possible spills, breakages, and failures. The City enforces these requirements if a sewage spill from private property or another private source is, or cannot be, effectively remedied by the owner or other responsible party. The City may also issue enforcement actions pursuant to this ERP to any party responsible for a prohibited discharge into the City's MS4.

B. Investigating and Responding to Noncompliance

The City may become aware of potential Illegal Discharges or Illicit Connections through field observations, facility or construction site inspections, Water Quality Monitoring Program results, or complaints. The protocols the City follows for investigating, documenting, and responding to Illegal Discharges and Illicit Connections are described in more detail in Section A-10 of the LIP.

If a complaint or information is received that indicates a potential ID/IC, an Authorized Inspector will conduct a field investigation. If evidence of an actual or threatened ID/IC is found as a result of an inspection, every effort is made to identify the responsible party and resolve the situation quickly.

Any Illicit Connection identified by the City during routine inspections is investigated. Appropriate actions are then taken to either approve undocumented connections by permit procedure or to pursue removal of those connections that are determined to be Illicit Connections and not permissible. If evidence of an Illegal Discharge is detected and the source does not appear to be evident, a source investigation may be conducted to determine if the discharge is being conveyed through an Illicit Connection.

Parties found to be responsible for an Illegal Discharge are required to clean up and remove Pollutants to the maximum extent practicable. Where a responsible party is cooperative and responds in a timely manner, lower level enforcement actions may be sufficient to ensure

compliance. The failure of a responsible party to cooperate and/or perform required clean-up will result in immediate Escalated Enforcement action.

Sewage spills and spills of other types of harmful Pollutants may require immediate remedial action. In cases where a spill presents an immediate threat to the Stormwater Drainage System or to human health or the environment, and the City knows who the responsible party is, the City will direct the responsible party to immediately contain and commence clean-up of the spill. For all sewer spills, the City will contact the sewer district having jurisdiction to respond for clean-up. For spills other than sewer spills, where the City is unable to identify the responsible party, or the responsible party is able to effectively respond to contain and clean-up the spill immediately, the City will contact OC Public Works to respond under the Water Implementation Agreement to secure resources to ensure the spill is contained and mitigated, and will conduct a source investigation to identify the responsible party.

C. Enforcement Response Approaches

The nature of the City's enforcement response approach for ID/ICs is determined on a case-by-case basis and is based on factors such as severity of the violation or threat to human health or the environment, site-specific circumstances, and past compliance history. If the situation is determined to pose an immediate risk to public health or the environment, higher level Escalated Enforcement responses may be used immediately and, if needed, the City will respond itself to ensure the threat is eliminated in a timely and efficient manner.

If a non-sewage spill, illegal dumping, or other Illegal Discharge is determined to pose a threat to human or environmental health, the City will report this information to the Regional Board by phone or e-mail within 24 hours of the discovery followed by a written report within 5 days, as required by the NPDES Permit. Either Santa Margarita Water District or Trabuco Canyon Water District will report all sewage spills to the Orange County Health Care Agency in accordance with California Health and Safety Code Section 5411.5, and reports all sewage spills of 1,000 gallons or more from a public sewer system to the State Office of Emergency Services pursuant to California Water Code Section 13271 and the 23 CCR § 2250.

The City seeks to abate actual Illegal Discharges and hazardous materials spills as soon as reasonably possible. As required by the NPDES Permit, the City seeks to resolve all incidents of observed non-compliance within at least 30 calendar days, or prior to the next rain event, whichever is sooner. In cases where more than 30 days are required to resolve a violation and achieve compliance, the reasons why additional time is needed is documented and kept on file. If Escalated Enforcement is not used when compliance is not achieved within the required compliance period, the rationale for why Escalated Enforcement actions were not used will also be documented.

The following table provides a general overview of the City's enforcement response approach for ID/ICs. The descriptions in the Table as to when specific enforcement responses are used and appropriate timeframes for compliance are intended to be illustrative in nature and to provide general guidance to City enforcement staff, and are not intended to be exclusive or exhaustive. The City reserves the right to use whatever tools deemed most appropriate for a

given situation, as dictated by the specifics of each case, and taking into account the factors described in Section II.A of this ERP.

Illicit Discharge Detection and Elimination Enforcement Approach

Enforcement Action	Use	Time Schedule to Achieve Compliance
Education Letter	<ul style="list-style-type: none"> • If suspect noncompliance, but lack sufficient evidence to substantiate it. • Use for business/resident where violation is by contractor and there is no history of noncompliance by business/resident. 	Goal is to correct the situation and behavior.
Verbal Warning	<ul style="list-style-type: none"> • Use for threatened Illegal Discharges from poorly managed on-site operations, illegal dumping, contaminated water runoff, or spilled materials where there is no history of noncompliance and the violation is relatively minor and can be quickly and easily corrected. 	Goal is to correct the violation immediately, if possible. If not, the compliance timeframe should be short and will depend on the nature of the potential threat to water quality. At a minimum, violation should be corrected within 30 calendar days or before the follow-up inspection or next predicted rain event, whichever is sooner.
Notice of Noncompliance	<ul style="list-style-type: none"> • Use where a prior Verbal Warning was given, but the deficiency that was noted in a prior Verbal Warning has not been corrected within the specified timeframe or by the next inspection. • Use for threatened Illegal Discharges from Illicit Connections, poorly managed on-site operations, illegal dumping, contaminated water runoff, or spilled materials where the threat level is insignificant, there is no environmental harm, and the responsible party is cooperative and has already corrected, or is willing to readily correct, the condition causing the violation. • Use to order correction of conditions causing or contributing to an actual Illegal Discharge that has already ceased where the discharge occurred unknowingly, was an isolated incident, and was short in duration; the threat level is insignificant; there was no environmental harm; and the responsible party is cooperative and has shown a good faith effort to correct the condition causing the violation and to come into compliance. 	<p>Require immediate containment of spilled materials or Illegal Discharges, with a goal of completion of correction/cleanup within 24 hours.</p> <p>Conditions causing or contributing to an actual or threatened Illegal Discharge should be corrected within 30 calendar days or before the follow-up inspection or next predicted rain event, whichever is sooner. If more than 30 days is required to achieve compliance, then a written rationale must be documented and kept on file.</p>

Enforcement Action	Use	Time Schedule to Achieve Compliance
Administrative Compliance Order	<ul style="list-style-type: none"> • Use where a prior Verbal Warning and/or Notice of Noncompliance has been insufficient to achieve compliance. • Use for threatened Illegal Discharges from Illicit Connections, poorly managed on-site operations, illegal dumping, contaminated water runoff, or spilled materials where the violations are not willful, the threat level is not significant, there is no immediate threat of environmental harm, and the responsible party has shown a good faith willingness to correct the condition causing the violation. • Use to order correction of conditions causing or contributing to an actual Illegal Discharge that has already ceased where there is no immediate threat to human health or the environment; the discharge was not willful, was not significant, and was infrequent or short in duration; the conditions causing or contributing to the Illegal Discharge cannot be remedied within a relatively short period of time; and the responsible party has indicated willingness to come into compliance by meeting milestones established in a reasonable schedule. 	<p>Require immediate containment of spilled materials or Illegal Discharges, with a goal of completion of correction/cleanup within 24 hours.</p> <p>Conditions causing or contributing to an actual or threatened Illegal Discharge should be corrected within 30 calendar days or before the follow-up inspection or next predicted rain event, whichever is sooner. If more than 30 days is required to achieve compliance, then a written rationale must be documented and kept on file.</p>
Cease and Desist Order	<ul style="list-style-type: none"> • Use to order immediate cessation of an Illegal Discharge or Illicit Connection. • Use to order immediate containment or diversion of any impermissible flow of water off of a site that poses a significant and/or immediate threat to water quality. • Use to order immediate cleanup of an area affected by an Illegal Discharge, sewage or materials spill, illegal dumping, or other violation. • Use to order immediate removal of nuisance conditions on property that threaten to cause an Illegal Discharge of Pollutants if exposed to rain or surface water runoff. • Use where lower level enforcement actions have not resulted in compliance and/or available information indicates that further authority of the City may need to be demonstrated before remedial action is forthcoming. • Use for recurring violations. 	<p>Generally, immediate.</p> <p>Where used other than to order immediate cessation of an actual or threatened ID/IC, the time schedule for compliance will vary based on the severity of the violation and will be determined on a case-by-case basis. In these circumstances, noncompliance should be corrected within 30 calendar days or before follow-up inspection or next predicted rain event, whichever is sooner. If more than 30 days is required to achieve compliance, then a written rationale must be documented and kept on file.</p>

Enforcement Action	Use	Time Schedule to Achieve Compliance
Nuisance Abatement / Spill Response	<ul style="list-style-type: none"> • Use for sewage or hazardous materials spills where there is a significant and immediate threat to human health or the environment. • Use where the responsible party has continually failed to comply with a previously issued compliance schedule. 	Goal is immediate containment of spilled materials or Illegal Discharges, with a goal of completion of correction/cleanup within 24 hours.
Administrative Citation	<ul style="list-style-type: none"> • May be used in addition to an Administrative Compliance Order or Cease and Desist Order where monetary sanctions will deter future violations. • May be used in lieu of an Administrative Compliance Order or Cease and Desist Order where a compliance schedule is unnecessary and will help deter future violations. • Use where an actual Illegal Discharge occurred, but ceased prior to other enforcement action. • Use where a prior Verbal Warning, Notice of Noncompliance, and/or Administrative Compliance Order has been insufficient to achieve compliance. • Use for recurring violations. 	<p>Time schedule for compliance will vary based on the severity of the violation and will be determined on a case-by-case basis.</p> <p>Conditions causing or contributing to an actual or threatened Illegal Discharge should be corrected within 30 calendar days or before the follow-up inspection or next predicted rain event, whichever is sooner. If more than 30 days is required to achieve compliance, then a written rationale must be documented and kept on file.</p>
Enforcement of Contracts	<ul style="list-style-type: none"> • Use to address actual or threatened Illegal Discharges or Illicit Connections caused by City contractors. 	Time schedule for compliance will be determined on a case-by-case basis.
Stop Work Order	<ul style="list-style-type: none"> • Use to order immediate cessation of construction or development activities where prior written notices or orders have failed to result in compliance or correction of identified violations. • Use to order immediate cessation of construction or development activities where a developer/contractor has not complied with the requirements of its building and/or grading permit. • Use to order immediate cessation of construction or development activities where if an observed violation at the site poses a significant threat to water quality (such as a failure of BMPs resulting in a significant release of sediment or other pollutants off site). 	Effective immediately, all work, except work to remedy non-compliant situation, must cease.
Permit Revocation / Denial	<ul style="list-style-type: none"> • Use in severe cases of non-compliance or significant Illegal Discharges relating to development and/or construction activities. 	NA
Civil Action	<ul style="list-style-type: none"> • Use for violations that cause significant harm. • Use when response to administrative enforcement actions is inadequate or the responsible party fails to respond. 	Time schedule for compliance will vary based on the severity of the violation and will be determined on a case-by-case basis.

Enforcement Action	Use	Time Schedule to Achieve Compliance
Criminal Action	<ul style="list-style-type: none"> • Use in cases where the actual or threatened environmental harm from the violation is significant and there is strong evidence of willfulness or intentional disregard for legal requirements. • Use in cases where an Illegal Discharge, Illicit Connection, or related violation is frequent, ongoing, or long in duration and the responsible party has failed to respond to administrative enforcement actions. • Use where there is a history of repeated prior violations by the same responsible party. • Use where there has been a direct attempt to conceal an Illegal Discharge, Illicit Connection, or related violation. 	Consult with Enforcing Attorney
Referrals	<ul style="list-style-type: none"> • Sites that fail to obtain state industrial or construction permits. • Sites that fail to comply with City enforcement actions. • Sites that discharge waste or hazardous wastes to receiving waters. 	NA

IV. Development Planning Enforcement Component

This Section of the ERP describes the City's approaches to investigating, responding to, and enforcing noncompliance with permanent BMP implementation, operation and maintenance obligations associated with New Development and Significant Redevelopment.

A. Overview

The Water Quality Ordinance requires all New Development and Significant Redevelopment to be undertaken in accordance with the DAMP, the LIP, the City's New Development / Significant Redevelopment Program. In conjunction with the New Development / Significant Redevelopment Program, the City has established design standards for new development and significant redevelopment projects that require installation and implementation of permanent (post-construction) BMPs, including Low Impact Development (LID) techniques, hydromodification controls, source controls and treatment controls, to address the quality and quantity of stormwater runoff. These required BMPs are described in project-specific Water Quality Management Plans (Project WQMPs) and Non-Priority Project Water Quality Checklists (WQCs), which may be recorded, and which describe long-term BMP operation and maintenance requirements and identify the persons or entities responsible for funding and implementing ongoing BMP operation and maintenance. The New Development / Significant Redevelopment Program is more fully described in Section A-7 of the LIP.

This Development Planning Enforcement Component describes the enforcement response approaches the City takes to ensure that required permanent BMPs are properly installed and implemented during construction and thereafter appropriately operated and maintained.

B. Investigating and Responding to Noncompliance

The City verifies required permanent BMPs are included in project designs through its development review and plan check process. All permanent structural BMPs must be shown on the grading and/or building plans, and building and/or grading permits will not be issued to allow construction to begin before all plans have been approved. In addition, Project WQMPs and WQCs must be approved by City before grading or building permits will be issued.

During a project's construction phase, City inspectors confirm that required structural BMPs are being constructed per plan during their routine inspections. If structural BMP construction or installation varies from approved plans, the City requires in-field corrections be made, or for the project engineer to confirm that revisions continue to comply with project requirements. Any proposed revisions must be approved by applicable City planning or engineering staff. Prior to grading or building permit close-out and/or the issuance of a certificate of use or a certificate of occupancy, the City will verify that all required permanent structural BMPs have been constructed and installed in conformance with approved plans and specifications and that, if applicable, and Operations and Maintenance (O&M) Plan for all structural BMPs has been prepared and approved by the City.

Once a development project has been completed, ongoing operation and maintenance of post-construction BMPs is verified through inspections or through review of submitted maintenance verification certifications. Where operation or maintenance deficiencies are discovered, they are documented and the responsible party is directed to take necessary corrective actions. Minor deficiencies and corrective actions may warrant resolution through Education Letters or documented Verbal Warnings, and if the responsible party performs all necessary corrective actions promptly, the case is closed and the resolution is documented. Where determined appropriate, the City will issue a Notice of Violation or Administrative Compliance Order setting forth required corrective actions as its initial enforcement response. Responsible parties are required to perform corrective actions and demonstrate that all necessary operations and maintenance activities have been completed through re-inspection and/or submittal of appropriate documentation. Where initial enforcement actions fail to result in corrective action, the City will pursue Escalated Enforcement until compliance is achieved. The City's enforcement response approach for the Development Planning and Enforcement Component is described more fully below.

C. Enforcement Response Approaches

The nature of the City's enforcement response approach to operating and maintenance deficiencies for permanent BMPs is determined on a case-by-case basis and is based on factors such as severity of the violation, site-specific circumstances, and past compliance history. If the situation is determined to pose an immediate risk to public health or the environment, higher level Escalated Enforcement responses may be used initially, and the City will report this

information to the Regional Board by phone or e-mail within 24 hours of the discovery followed by a written report within 5 days, as required by the NPDES Permit.

As required by the NPDES Permit, the City seeks to resolve incidents of observed non-compliance within 30 calendar days, or prior to the next rain event, whichever is sooner. In cases where more than 30 days are required to resolve a violation and achieve compliance, the reasons why additional time is needed is documented and kept on file. If Escalated Enforcement is not used when compliance is not achieved within the required compliance period, the rationale for why Escalated Enforcement actions were not used will also be documented.

The following table provides a general overview of the City's enforcement response approach when it discovers that permanent BMPs are not being operated and maintained as required. The enforcement response approaches described in Section III (Illicit Discharge Detection and Elimination Enforcement Component) and Section VI (Existing Development Enforcement Component) of this ERP may also apply. The descriptions in the Table as to when specific enforcement responses are used and appropriate timeframes for compliance are intended to be illustrative in nature and to provide general guidance to City enforcement staff, and are not intended to be exclusive or exhaustive. The City reserves the right to use whatever tools deemed most appropriate for a given situation, as dictated by the specifics of each case, and taking into account the factors described in Section II.A of this ERP.

Development Planning Enforcement Approach

Enforcement Action	Use	Time Schedule to Achieve Compliance
Education Letter	<ul style="list-style-type: none">• If suspect noncompliance, but lack sufficient evidence to substantiate it.• May use to advise responsible party of legal obligations where O&M deficiencies are minor and easily correctable and there have been no previous violations.• May be used for first-time administrative violations, such as failure to submit a timely compliance certification.	Goal is to educate responsible party and remedy O&M deficiency. Noncompliance should be corrected within 30 calendar days or before next inspection or predicted rain event, whichever is sooner.
Verbal Warning	<ul style="list-style-type: none">• Use to advise responsible party of legal obligations where O&M deficiencies are minor and easily correctable, there is no threat to water quality, there is no history of prior noncompliance, and the responsible party is cooperative and has indicated a willingness to immediately correct the problem.	Noncompliance should be corrected immediately, if possible, but at least within 30 calendar days or before follow-up inspection or next predicted rain event, whichever is sooner.

Enforcement Action	Use	Time Schedule to Achieve Compliance
Notice of Noncompliance	<ul style="list-style-type: none"> • Use where a prior Verbal Warning was given, but the deficiency that was noted in a prior Verbal Warning has not been corrected within the specified timeframe or by the next inspection. • Use for recurring administrative violation. • Use where the severity of the BMP O&M deficiency calls for an enforcement action stronger than a Verbal Warning, but the violation was unknowing and the responsible party is cooperative and has shown a good faith effort to immediately correct the observed O&M deficiency. 	Noncompliance should be corrected within 30 calendar days or before follow-up inspection or next predicted rain event, whichever is sooner. If more than 30 days is required to achieve compliance, then a written rationale must be documented and kept on file.
Administrative Compliance Order	<ul style="list-style-type: none"> • Use where a prior Verbal Warning and/or Notice of Noncompliance has been insufficient to achieve compliance. • Use for recurring, but not significant, violations involving BMP O&M deficiencies. • Use for BMP O&M deficiencies that are not willful and pose no immediate threat to human health or the environment, but which cannot be remedied within a relatively short period of time. • Use to order implementation of a required BMP. • Use to order repair or replacement of a structural BMP or control device that is defective or has been removed. 	Noncompliance should be corrected within 30 calendar days or before follow-up inspection or next predicted rain event, whichever is sooner. If more than 30 days is required to achieve compliance, then a written rationale must be documented and kept on file.
Cease and Desist Order	<ul style="list-style-type: none"> • Use where BMP O&M deficiencies pose an immediate threat of a significant Illegal Discharge. • Use where lower level enforcement actions have not resulted in compliance and/or available information indicates that further authority of the City may need to be demonstrated before remedial action is forthcoming. • Use for significant recurring violations of BMP O&M requirements. 	Immediate compliance should be required where there is an imminent threat of a significant Illegal Discharge. Otherwise, the time schedule for compliance will vary based on the severity of the violation and will be determined on a case-by-case basis. Where possible, noncompliance should be corrected within 30 calendar days or before follow-up inspection or next predicted rain event, whichever is sooner. If more than 30 days is required to achieve compliance, then a written rationale must be documented and kept on file.
Nuisance Abatement	<ul style="list-style-type: none"> • Use where the responsible party has continually failed to comply with a previously issued compliance schedule. 	Time schedule for compliance will vary based on the severity of the violation and will be determined on a case-by-case basis.

Enforcement Action	Use	Time Schedule to Achieve Compliance
Administrative Citation	<ul style="list-style-type: none"> • May be used in addition to an Administrative Compliance Order or Cease and Desist Order where monetary sanctions will deter future violations. • May be used in lieu of an Administrative Compliance Order or Cease and Desist Order where a compliance schedule is unnecessary and will help deter future violations. • Use where a prior Verbal Warning, Notice of Noncompliance, and/or Administrative Compliance Order has been insufficient to achieve compliance. • Use for recurring violations. 	<p>Time schedule for compliance will vary based on the severity of the violation and will be determined on a case-by-case basis.</p> <p>Generally, noncompliance should be corrected within 30 calendar days or before the follow-up inspection or next predicted rain event, whichever is sooner. If more than 30 days is required to achieve compliance, then a written rationale must be documented and kept on file.</p>
Civil Action	<ul style="list-style-type: none"> • Use when response to administrative enforcement actions is inadequate or the responsible party fails to respond. • Use to obtain a civil injunction requiring restoration or replacement of a required structural BMP that has been improperly removed or is no longer operational. 	Time schedule for compliance will vary based on the severity of the violation and will be determined on a case-by-case basis.
Criminal Action	<ul style="list-style-type: none"> • Use in cases where there is strong evidence of willfulness or intentional disregard for legal requirements, the responsible party has failed to respond to administrative enforcement actions, there is a history of repeated prior violations by the same responsible party, and/or there has been a direct attempt to conceal a violation. 	Consult with Enforcing Attorney
Referrals	<ul style="list-style-type: none"> • Sites that fail to obtain state industrial or construction permits. • Sites that fail to comply with City enforcement actions. • Sites that discharge waste or hazardous wastes to receiving waters. 	NA

V. Construction Management Enforcement Component

This Section of the ERP describes the City's approaches to investigating, responding to, and enforcing noncompliance with the City's Ordinances at public and private construction sites within the City.

A. Overview

All construction projects in the City, regardless of size, are required to implement BMPs to prevent Illegal Discharges of Pollutants into the Stormwater Drainage System or watercourses. The City has established a minimum set of BMPs and other measures to be implemented at all construction sites year round. All private and public works construction projects are required,

at a minimum, to implement and be protected by an effective combination of erosion and sediment controls and waste and materials management BMPs. In addition, the City requires enhanced or additional BMPs should the project site pose an exceptional threat to water quality. The City's Construction Program and the City departments and staff responsible for overseeing, implementing, and enforcing it, are described in Section A-8 of the LIP.

Construction sites that are subject to the Construction General Permit are required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). Before issuing a grading or building permit, the City will require proof of Construction General Permit coverage. Private construction projects not covered by the General Permit, but covered under a grading permit, are required to develop Erosion and Sediment Control Plans (ESCPs) that show proposed locations of the erosion and sediment control BMPs that will be implemented during the construction project.

B. Investigating and Responding to Noncompliance

The City performs inspections of construction sites to verify that appropriate BMPs and other requirements for water quality protection are being implemented and maintained, that they appropriately comply with the City's Ordinances and the Construction General Permit, and that they continue to protect water quality. Construction sites are inspected, according to the established priority, until construction activity is complete. Threats to water quality are assessed by the City's Authorized Inspectors for construction site runoff that will not be reasonably controlled by the BMPs in place or if a failure of BMPs is resulting in the release of sediments or other Pollutants. Violations observed are documented by the inspectors, and appropriate enforcement actions are taken.

If a significant and/or immediate threat to water quality is observed by an Authorized Inspector, action is taken to require the developer/contractor to immediately cease the discharge and appropriate enforcement action is taken. The City's enforcement response approaches to violations at constructions sites are also described further in the following Section.

Although the City does not enforce the Construction General Permit, violations of the City's Ordinances or project permit conditions and plans may also be considered a violation of the General Construction Permit for sites subject to those requirements. When a construction site is subject to the General Construction Permit, City staff may also collaborate with Regional Board staff on enforcement actions.

C. Enforcement Response Approaches

The City's enforcement response approach to construction sites differs based on whether it is a private construction project or a City public works construction project. In either case, however, violations determined to pose an immediate risk to public health or the environment will warrant the use of Escalated Enforcement responses. The following Table outlines the range and progression of enforcement actions that may be taken by the City with respect to both private construction projects and public works construction projects.

Enforcement Actions for Violations at Construction Sites

PRIVATE CONSTRUCTION PROJECTS	↓ ENFORCEMENT PROGRESSION	PUBLIC WORKS CONSTRUCTION PROJECTS
Verbal Warning		Verbal Warning
Written Warning <ul style="list-style-type: none"> ♣ Notice of Non-Compliance ♣ Administrative Compliance Order ♣ Administrative Citations or Fines ♣ Cease and Desist Order 		Written Warning <ul style="list-style-type: none"> ♣ Notice of Non-Compliance
Stop Work Order		Enforcement of Contract <ul style="list-style-type: none"> ♣ Stop Work Order ♣ Withholding of Payment ♣ Bond ♣ Fines ♣ Revocation of Contract
Revocation of Permit(s) and/or Denial of Future Permits		
Civil and Criminal Court Actions		Civil and Criminal Court Actions


As required by the NPDES Permit, the City's NPDES Coordinator will notify the Regional Water Board in writing within five (5) calendar days of issuing Escalated Enforcement to a construction site that poses a significant threat to water quality as a result of violations or other non-compliance. Written notification may be provided to the appropriate Regional Water Board staff member by email. The City's NPDES Coordinator will also notify the Regional Board of any persons required to obtain coverage under the Construction General Permit and failing to do so, within five (5) calendar days from the time the City becomes aware of the circumstances. Written notification may be provided electronically by email to RB9_Nonfilers@waterboards.ca.gov.

The City seeks to resolve violations at both private and public works construction sites as quickly as possible, including prior to rain events where feasible. As required by the NPDES Permit, the City seeks to resolve incidents of observed non-compliance within 30 calendar days, or prior to the next rain event, whichever is sooner. In cases where more than 30 days are required to resolve a violation and achieve compliance, the reasons why additional time is needed is documented and kept on file. If Escalated Enforcement is not used when compliance is not achieved within the required compliance period, the rationale for why Escalated Enforcement actions were not used will also be documented.


A general overview of the City's enforcement response approach to violations at private construction sites and public works construction sites is set forth below. For violations at construction sites resulting in actual or threatened Illegal Discharges, refer to the enforcement response approaches described in Section III (Illicit Discharge Detection and Elimination Enforcement Component of this ERP. The overview below is intended to be illustrative in nature and to provide general guidance to City enforcement staff, and is not intended to be exclusive or exhaustive. The City reserves the right to use whatever tools deemed most appropriate for a given situation, as dictated by the specifics of each case, and taking into account the factors described in Section II.A of this ERP.

The nature of the City's enforcement response approach to violations at construction sites is determined on a case-by-case basis and is based on factors such as severity of the violation, site-specific circumstances, and the contractor's past compliance history. If the situation is determined to pose an immediate risk to water quality, higher level Escalated Enforcement responses may be used initially. The following charts depict the range of enforcement options available for violations at private and public works construction sites, respectively, and are intended to provide guidance to Authorized Inspectors in determining what enforcement response is appropriate for a given violation.

Enforcement of Noncompliance for Private Construction Projects

ENFORCEMENT OPTIONS	ACTIONS			CRIMINAL ACTIONS
	NOTICE OF NON- COMPLIANCE	ADMINISTRATIVE COMPLIANCE ORDER / ADMINISTRATIVE CITATION	CEASE & DESIST STOP WORK ORDER REVOCATION OF PERMIT(S)	INFRACTIONS AND MISDEMEANORS
COMPLIANCE STRATEGY				
Threat Level	Insignificant	No: Significant	May be Significant	Significant
Environmental Harm	None	No: Immediate	Potential/Immediate	Actual Immediate
Event Duration	Short	Short	Long/Continuous	Long/Continuous
Event Frequency	Isolated	Infrequent	Frequent/Ongoing	Frequent/Ongoing
Cooperation	Readily Complies	Working to Comply	Uncooperative/ Slow to Comply	Non-Responsive
Intent	Unknowingly	No: Willful	Possibly Willful	Willful

Enforcement of Noncompliance for Public Works Construction Projects

ENFORCEMENT OPTIONS	ACTIONS			CRIMINAL ACTIONS
	NOTICE OF NON- COMPLIANCE	CONTRACT REMEDIES		INFRACTIONS AND MISDEMEANORS
COMPLIANCE STRATEGY				
Threat Level	Insignificant	No: Significant	May be Significant	Significant
Environmental Harm	None	No: Immediate	Potential/Immediate	Actual Immediate
Event Duration	Short	Short	Long/Continuous	Long/Continuous
Event Frequency	Isolated	Infrequent	Frequent/Ongoing	Frequent/Ongoing
Cooperation	Readily Complies	Working to Comply	Uncooperative/ Slow to Comply	Non-Responsive
Intent	Unknowingly	No: Willful	Possibly Willful	Willful

- Verbal Warnings (both private and public works construction projects)

For insignificant violations that do not pose an immediate threat to water quality, the initial method of requesting corrective action and enforcing compliance will typically be a Verbal Warning from the Authorized Inspector to the contractor. Verbal warnings are often sufficient to achieve correction of the violation, often while the Authorized Inspector is present at the construction site. The Authorized Inspector will notify the developer/contractor's project

supervisor of the violation, and document the violation and the notification to the contractor's project supervisor in the inspection file. A specific time frame for correcting the problem and a follow-up inspection date will be documented by the inspector.

- Written Warnings (both private and public works construction projects)

If a deficiency that was noted in a prior Verbal Warning is not corrected by the next inspection, or the severity of the violation is such that a Verbal Warning is not strong enough, a written warning will be issued. A written warning will describe the deficiency that is to be corrected, suggested corrective action(s), and the specific time frame for correction and a date for a follow-up inspection. A copy of the written warning will be provided to the contractor's project supervisor and another copy will be provided to the owner/developer. A copy will be placed in the active inspection file. Once the violation has been corrected to the satisfaction of the inspector, the inspector will document compliance in the inspection file.

For private construction projects, written warnings may range from a Notice of Violation, Administrative Compliance Order, Administrative Citation, or Cease and Desist Order – depending on the severity of the of the violation or threat to water quality and the responsiveness and compliance history of the contractor. For public works construction projects, a Notice of Violation serves as the only form of written warning given.

- Contract Enforcement Mechanisms (public works construction projects only)

If a contractor is performing construction of a public works project on behalf of the City, then the City will use the provisions within the contract for enforcement of non-compliance where verbal or written warnings prove insufficient. Such contract provisions may allow the City to withhold payment(s), require bonds, apply monetary penalties, order work stopped (without time penalties), or terminate the contract if the contractor performing the work does not comply with all appropriate permits, laws, regulations and ordinances.

- Stop Work Orders (private construction projects only)

If a written warning has not been addressed by the next inspection, or if the developer/contractor has not complied with their permit requirements, or if a significant threat to water quality is observed (such as a failure of BMPs resulting in a significant release of sediment or other pollutants off site), a Stop Work Order will be issued by the inspector or the appropriate official. Stop Work Orders prohibit further construction activity until the problem is resolved and provide a time frame for correcting the problem. The Stop Work Order will describe the infraction and specify what corrective action must be taken. A copy of the Stop Work Order will be given to the contractor's project supervisor and placed in the active inspection file. For a private construction project, a copy of the Stop Work Order will also be sent to the owner/developer. To restart work once a Stop Work Order has been issued, the contractor's project supervisor must request the inspector to re-inspect the project and verify that the deficiencies have been satisfactorily corrected. If the inspector is satisfied with the corrections, the inspector may sign off on that phase of the project, and work may proceed.

- Revocation of Permit(s) and/or Denial of Future Permits (private construction projects only)

In severe cases of non-compliance or significant discharges at private construction sites, it may be necessary to revoke the grading and/or building permit that a developer/contractor is working under. The developer/contractor would then have to re-apply for permits and meet any requirements that the City may place on the project. Revocation of building or grading permits must be conducted in accordance with the process described in the City's Municipal Code. City Staff should consult with the Enforcing Attorney before proceeding with revocation of permits.

- Civil and Criminal Court Actions

In cases of severe and repeated noncompliance, Civil and/or Criminal court actions may be appropriate. Whether to pursue Civil or Criminal enforcement remedies will be determined in consultation with the Enforcing Attorney.

VI. Existing Development Enforcement Component

This Section of the ERP describes the City's approaches to investigating, responding to, and enforcing noncompliance with the City's Ordinances with respect to existing municipal, commercial and industrial, and residential development.

A. Overview

As required by the NPDES Permit, the City has implemented an Existing Development Management Program pursuant to which it inventories and tracks existing municipal, industrial, commercial, and residential development in the City; requires the implementation, operation, and maintenance of pollution prevention BMPs for activities associated with municipal, industrial, commercial, and residential activities; and periodically inspects inventoried existing development to ensure and enforce proper BMP implementation and compliance with the City's Ordinances. The City's Existing Development Management Program, is divided into separate Municipal, Industrial/Commercial, and Residential Programs. The Existing Development Management Program overlaps with the City's ID/IC and New Development/Significant Redevelopment Programs, and the problematic activities, types of violations, and enforcement response approaches described in Section III (Illicit Discharge Detection and Elimination Enforcement Component) and Section IV (Development Planning Enforcement Component) of this ERP also generally apply to existing development. In addition, summaries of applicable pollution prevention BMPs municipal facilities, industrial and commercial facilities, residential activities, and homeowners' associations / common interest developments can be found in in Sections A-5 and A-9 of the LIP.

B. Investigating and Responding to Noncompliance

1. Municipal Facilities and Areas

The City inspects and implements appropriate BMPs for Municipal facilities and areas in accordance with the requirements of the NPDES Permit. During routine municipal facility

inspections, City or contract staff will assess facility areas and activities to ensure all are maintained in accordance with City regulations, ordinances and BMP requirements. If BMPs are found to be deficient or otherwise ineffective, the responsible party or department will be provided corrective actions. If the responsible City staff member or department does not perform the necessary corrective actions in response to the direction of their immediate supervisor, escalated enforcement will be taken by involving higher ranking representatives within the responsible department, who may enact internal disciplinary procedures, until the deficiencies are resolved.

If the City determines that specific areas of a leased City facility require additional BMPs, the City often can require the implementation of BMPs in addition to the required minimum BMPs for the specific area/activity. If a leased City facility continues to be out of compliance, the City may choose to discontinue the lease and remove the tenant from the site.

2. Industrial and Commercial Development

a. Fixed Facilities

The City inspects commercial and industrial facilities to determine if they are in compliance with City's Ordinances, to review BMP implementation, to assess BMP effectiveness and to verify inventory information used for facility prioritization. Such inspections include review of: (i) material and waste handling and storage practices; (ii) pollution control BMP implementation and maintenance; and (iii) evidence of past or present unauthorized, non-stormwater discharges. The City will generally conduct one of two types of inspections, compliance inspections and follow-up inspections.

Initial compliance inspections are announced and focus on current facility operations and activities, BMPs currently in use, the effectiveness of those BMPs, and verifying inventory spreadsheet information. All re-occurring compliance inspections cover the same information as an initial compliance inspection, but will typically be unannounced in order to verify compliance and that BMPs are being effectively implemented.

For those facilities deemed to be non-compliant, the City will perform compliance inspections once a month until said facilities are shown to be compliant, and then once every four months for a full calendar year after the facility achieves compliance. Generally, these inspections will focus primarily on areas where a facility was deemed to be non-compliant and may be either announced or unannounced, depending on which course of action the Authorized Inspector deems will be most conducive to continued facility compliance.

Appropriate enforcement actions are taken against industrial and commercial facility owners and operators determined to be out of compliance. The Authorized Inspector will document each observed violation. Depending on the severity of the violation, enforcement actions can range from a verbal warning to civil or criminal court actions with monetary fines. Illegal Discharges and Illicit Connections from industrial and commercial facilities are investigated and responded to as described in Section III of this ERP. If an Authorized Inspector observes a significant and/or immediate threat to water quality, enforcement action will be taken to require the facility owner/operator to immediately cease and correct the discharge or activity

and the City will coordinate notification of the appropriate agencies. Conditions that would warrant such action may include observations of runoff from an industrial site that are not reasonably controlled by protective measures or observation of a failure in BMPs resulting in an actual or threatened discharge of Pollutants to the Stormwater Drainage System or a water body. Escalated Enforcement measures will be implemented as needed to achieve compliance. The City may also require industrial/commercial facilities to implement monitoring programs where warranted.

b. Mobile Businesses

Stormwater violations associated with mobile car wash and surface cleaner businesses include Illegal Discharges and failure to properly implement specific activity-based BMPs required of such businesses. The City may become aware of violations associated with mobile cleaning businesses from complaints, field observations, or inspections. Where violations are observed, they are documented and appropriate enforcement actions are taken against mobile business owners and operators. Depending on the severity of the violation, enforcement actions can range from a verbal warning to civil or criminal court actions with monetary fines. If an Authorized Inspector observes a significant and/or immediate threat to water quality, enforcement action will be taken to require the mobile business owner and/or operator to immediately cease the discharge and/or implement the required BMPs. Illegal Discharges associated with mobile businesses are investigated and responded to as described in Section III of this ERP

3. Residential Development

Enforcement actions may be initiated by the City as a response to hotline reports and complaints, or by observations by City representatives. All enforcement actions will be documented

Enforcement of BMPs in common interest developments will be conducted using the following mechanisms: public reporting hotline, analysis of dry weather/illicit discharge monitoring results, and municipal employee observations.

The City may become aware of potential violations associated with activities on residential property through public reporting or complaints or through field observations of City personnel or contractors during residential area inspections, during scheduled dry weather water quality monitoring, and or during routine City activities such as Stormwater Drainage System inspections and maintenance. Additional, focused investigations of areas upstream of outfalls where Pollutants are identified during monitoring activities and complaint response investigations provide additional information sources. The combination of public reporting, direct observations, targeted investigations, and in-field monitoring provide effective oversight of residential areas and activities.

During investigations of incidents discovered through these mechanisms, the City will continue to use the opportunity to address any other issues of concern and provide education and outreach to residential property owners, occupants, and managers as appropriate to notify and urge them to observe designated BMPs for the high threat activities. When residential BMP

deficiencies are observed, follow-up inspections will be performed and violations investigated within a reasonable timeframe.

Illegal Discharges and Illicit Connections from residential properties are investigated and responded to as described in Section III of this ERP. Other violations of the City's Ordinances will also be investigated and documented, and, depending on the nature and severity of the violation, the enforcement may consist of any of the enforcement measures described in this ERP.

C. Enforcement Response Approaches

The nature of the City's enforcement response approach to violations associated with Existing Development is determined on a case-by-case basis and is based the nature of the violation and on factors such as severity of the violation or threat to human health or the environment, site-specific circumstances, and past compliance history. Except as otherwise described in Subsection B, above, the City's enforcement response approaches to violations associated with Existing Development will be the same as the City's enforcement response approaches described Section III (Illicit Discharge Detection and Elimination Enforcement Component) and Section IV (Development Planning Enforcement Component) of this ERP. As described in other components of this ERP, if a particular violation is determined to pose an immediate risk to public health or the environment, higher level Escalated Enforcement responses may be used immediately and, if needed, the City will respond itself to ensure the threat is eliminated in a timely and efficient manner.

As required by the NPDES Permit, the City seeks to resolve incidents of observed non-compliance within 30 calendar days, or prior to the next rain event, whichever is sooner. In cases where more than 30 days are required to resolve a violation and achieve compliance, the reasons why additional time is needed is documented and kept on file. If Escalated Enforcement is not used when compliance is not achieved within the required compliance period, the rationale for why Escalated Enforcement actions were not used will also be documented.

When a site is subject to the Industrial General Permit, the City may collaborate with Regional Board staff on enforcement actions. In addition, as required by the NPDES Permit, the City's NPDES Coordinator will notify the Regional Board of any persons required to obtain coverage under the Industrial General Permit and failing to do so, within five (5) calendar days from the time the City becomes aware of the circumstances. Written notification may be provided electronically by email to RB9_Nonfilers@waterboards.ca.gov.

EXHIBIT 4.2

Statement of Legal Authority





January 28, 2019

VIA FIRST CLASS MAIL

David Gibson, Executive Officer
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108-2700

Re: Legal Authority to Implement and Enforce the Requirements of
40 CFR 122.26(d)(2)(i)(A-F) and RWQCB Order R9-2013-0001,
as amended by Order Nos. R9-2015-001 and R9-2015-0100

Dear Mr. Gibson

The City of Rancho Santa Margarita ("City"), by and through its City Attorney, submits this statement in its capacity as a Co-Permittee under RWQCB Order R9-2013-0001, as amended by Order No. R9-2015-0001 and Order No. R9-2015-0100, ("Order") in accordance with Section E.1 of that Order. As you are aware, the City and a number of Co-Permittees have sought review of certain portions of the Order, a review which is currently pending and the outcome of which may alter terms and conditions of the Order. Consequently, this statement is not nor should it be construed as a waiver of any rights the City may have to bring or maintain a legal challenge to the Order or any enforcement action by the Board against the City pursuant to the Order or to raise any factual or legal issues as part of any such challenge. The City hereby reserves any and all such rights.

I. Legal Authority Statement

Provision E.1.a requires that each permittee must "establish, maintain, and enforce adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 through statute, ordinance, permit, contract, order, or similar means." Provision E.1.b goes on to require that each permittee submit, with the first Water Quality Improvement Plan Annual report, "a statement certified by its Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative that the permittee has taken the necessary steps to obtain and maintain full legal authority within its jurisdiction to implement and enforce each of the requirements contained in the Order."

Pursuant to Provision E.1.a and E.1.b, the undersigned City Attorney for the City of Rancho Santa Margarita hereby states that the City has adequate legal authority to comply with the legal requirements imposed upon the City under the Order, consistent with the requirements set forth in Title 40, sections 122.26(d)(2)(i)(A-F), of the Code of Federal Regulations, to the extent permitted by State and Federal law, and subject to the limitations on municipal action

under the California and United States Constitutions. Subject to these limitations, the County's legal authority authorizes it to:

- Prohibit and eliminate all illicit discharges and illicit connections to its Municipal Separate Storm Sewer System ("MS4");
- Control the contribution of pollutants in discharges of runoff associated with industrial and construction activity to its MS4 and control the quality of runoff from industrial and construction sites, including industrial and construction sites which have coverage under the statewide General Permit for Discharges of Storm Water Associated with Industrial Activities (Industrial General Permit) or General Permit for Discharges of Storm Water Associated with Construction Activities (Construction General Permit), as well as to those sites which do not;
- Control the discharge of spills, dumping, or disposal of materials other than storm water into its MS4;
- Control through interagency agreements among co-permittees the contribution of pollutants from one portion of the MS4 to another portion of the MS4;
- Control, by coordinating and cooperating with other owners of the MS4 such as Caltrans, the U.S. federal government, or sovereign Native American Tribes through interagency agreements, where possible, the contribution of pollutants from their portion of the MS4 to the portion of the MS4 within the City's jurisdiction;
- Require compliance with conditions in its statutes, ordinances, permits, contracts, orders, or similar means to hold dischargers to its MS4 accountable for their contributions of pollutants and flows;
- Require the use of Best Management Practices ("BMPs") to prevent or reduce the discharge of pollutants in storm water from its MS4 to the Maximum Extent Practicable ("MEP");
- Require documentation on the effectiveness of BMPs implemented to prevent or reduce the discharge of pollutants in storm water from its MS4 to the MEP;
- Utilize enforcement mechanisms to require compliance with its statutes, ordinances, permits, contracts, orders, or similar means; and
- Carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with its statutes, ordinances, permits, contracts, orders, or similar means and with the requirements of the Order, including the prohibition of illicit discharges and connections to its MS4;

- Enter, monitor, inspect, take measurements, review and copy records, and require regular reports from industrial facilities, including construction sites, discharging into its MS4.

The Co-Permittees, including the City, have agreed that the County of Orange ("County") is to serve as the Principal Watershed Co-Permittee under this Order. This statement assumes that the County also has adequate legal authority to comply with the requirements imposed on it as the Principal Watershed Co-Permittee by the Order, to the extent permitted by California and federal law, and that the Principal Watershed Co-Permittee will exercise its legal authority as appropriate to comply with the Order.

II. Components of Legal Authority and Implementation

Through its adopted water quality-related ordinances, available administrative and legal procedures, organizational structure, and inter-agency agreements, the City has sufficient legal authority to implement and enforce the requirements imposed by the Order, to the extent permitted by California and Federal Law and subject to the limitations on municipal action under the California and the United States Constitutions.

A. City Laws and Ordinances Related to Water Quality and Urban Runoff

The table below identifies various laws and ordinances duly enacted by the City related to the regulation of urban runoff to control and prohibit discharges of pollutants into and from the MS4, and which provide the primary source of legal authority to comply with the requirements in the Order:

<i>Description</i>	<i>Citation</i>
Water Quality Control Provisions of the General Plan	General Plan, Land Use Element
Water Quality Control Ordinance	Municipal Code, Chapter 5.10 (Ordinance No. 10-07; Ordinance No. 18-02)
Grading and Excavation Code	Municipal Code, Chapter 10.12 (Ordinance No. 10-10)
Building and Fire Codes	Municipal Code, Chapters 10.01-10.07 (Ordinance Nos. 16-06 and 16-07)
Solid Waste Ordinance (including diversion requirements for construction and demolition projects and prohibitions on littering)	Municipal Code, Chapter 5.06 (Ordinance No. 06-01)

Water Efficient Landscape Ordinance and associated Guidelines for Implementation of Water Efficient Landscape Ordinance	Municipal Code, Section 9.05.120 (Ordinance Nos. 09-06 and 16-02)
Planning and Zoning Code	Municipal Code, Title 9
Animal Control, Welfare, and Licensing Requirements (including prohibitions on the accumulation of animal feces and requirements for immediate removal of animal feces deposited on public property)	Municipal Code, Chapter 5.12 (Ordinance No. 16-09)

i. Power to Enforce Ordinances

The City has the authority under the Constitution and statutes of the State of California to enact and enforce its laws and ordinances. These laws and ordinances have been duly enacted. These laws and ordinances contain specific enforcement provisions such as the suspension and revocation of permits and stop work order provisions in the Building Code and/or are enforceable under the generally applicable enforcement provisions of the City of Rancho Santa Margarita Municipal Code, sections 1.03.020, et. seq. (violations, penalties), section 1.03.050 (public nuisance; cost recovery), section 1.03.060 (civil actions), and chapter 1.05 (administrative citations).

ii. Implementation

Some of these laws and ordinances are implemented through permit programs and some are implemented as regulatory programs. Under each ordinance, one or more City departments or department directors are authorized and directed in each law or ordinance to take the actions contemplated by the ordinance, *e.g.*, to consider evidence and make findings, to issue or deny permits, to impose conditions on projects, to inspect, and to take enforcement action.

The City Water Quality Control Ordinance is the principle City ordinance addressing runoff. This ordinance is regulatory, and applies to all development and redevelopment projects and to all new and existing facilities in the City's jurisdiction, whether or not a City permit or approval is required. The Water Quality Control Ordinance contains discharge prohibitions and BMP requirements, and also authorizes the City to require the submission of stormwater pollution prevention plans / water quality management plans.

Other City ordinances require compliance with the Water Quality Control Ordinance as a condition for issuance of a City permit. For example, compliance with the Water Quality Control Ordinance is a condition of the City's issuance of a grading permit. In addition, the Public Works and Planning Departments require proof of compliance with the Water Quality

Control Ordinance before discretionary approvals are given or recommended. City departments may also impose specific conditions of approval consistent with the Water Quality Control Ordinance.

In addition to City laws and ordinances, the state California Environmental Quality Act (“CEQA”), which applies to discretionary project approvals by the City, provides a means to implement and/or require compliance with City ordinances. CEQA requires the evaluation of the environmental impacts of a project before approval, and the imposition of all feasible mitigation measures where such impacts are analyzed to be potentially significant or significant. Compliance with CEQA would include the identification and study of potential impacts of the proposed project on water quality, including urban runoff, and the CEQA process allows the City the ability to impose mitigation measures and/or conditions of project approval to comply with standards and requirements in the City’s runoff-related ordinances.

B. Administrative and Legal Procedures

In addition to the above authority, the City has in place the following legal and administrative procedures to assist in enforcing the various water quality related ordinances:

Administrative Remedies

- Written Notices of Non-Compliance/Notices of Violation
- Administrative Compliance Orders
- Cease and Desist Orders
- Stop work orders (for work requiring a City permit)
- Cost Recovery
- Permit revocation or withdrawal
- Administrative Citations / Fines
- Enforcement of Contracts

Nuisance Remedies

- Public nuisance under State law
- City nuisance abatement procedures

Criminal Remedies

- Infraction citations / prosecution
- Misdemeanor citations / prosecution
- Restitution

Equitable Remedies

- Injunctive relief under State law
- Declaratory relief under State law

Other Civil Remedies

- Federal law remedies, *e.g.* CWA and RCRA Citizen Suits

C. City Organization and Structure

Attached is a table listing the City departments involved with the regulation of runoff along with a brief description of each department's water quality control related functions, roles, and responsibilities.


D. Ability to Enter into Inter-Agency Agreements

The City's legal authority includes the power to enter into agreements with other public agencies for stormwater management and control of urban runoff. For example, the City is a signatory to a multi-party agreement that sets forth and assigns, amongst the County and other Co-Permittees in the County, responsibilities to comply with NPDES municipal stormwater permit requirements. The agreement covers financial responsibilities, water quality monitoring, inspections and legal authority requirements, all of which collectively function to control the contribution of pollutants from one portion of the MS4 to another.

Please do not hesitate to contact the undersigned should you have any questions or need any additional information.

Very truly yours,

WOODRUFF, SPRADLIN & SMART
A Professional Corporation


GREGORY E. SIMONIAN
City Attorney,
City of Rancho Santa Margarita

Enclosures

cc: Jennifer M. Cervantez, City Manager
Brendan Dugan, P.E., Public Works Director/City Engineer
Hazel McIntosh, Stormwater/Solid Waste Program Manager

City of Rancho Santa Margarita
Water Quality Related Department Functions

Function	City Department	Description of Department Function	Water Quality Functions Performed by this Department	Ordinances Department Enforces
Public Works	Public Works/Engineering/ Environmental/Solid Waste	Design and construction of all the City's Public Works Projects and New Development and Redevelopment Projects	<ul style="list-style-type: none"> Administers and enforces the City's Grading Ordinance No. 10-10 With assistance from the Development Services Department and through contracts with the County of Orange, administers and enforces the Water Quality Control Ordinance (Ord No. 10-07 and Ord No. 18-02) With assistance from the Development Services Department, administers other City land development, clearing, and grading ordinances and plans and related state and local laws Issues grading and construction permits for development projects and imposes conditions on such permits Conducts inspections of City projects and of private projects and activities that require a permit under a Public Works-administered program With assistance from the Development Services Department, provides training and guidance materials to private developers and City employees and managers Designs and constructs certain City projects Reviews proposed designs for certain City projects Maintains certain City projects Cleans City streets and highways and related culverts Contracts for maintenance, which may include pest management Cleans and maintains the City MS4 Coordinates with other City departments to develop and implement City stormwater programs Administers various City facilities Participates in committees Administers and enforces the City's Water Efficient Landscape Ordinance (Ord No. 09-06 and Ord. No. 16-02) 	<ul style="list-style-type: none"> Water Quality Ordinance Grading Ordinance Water Efficient Landscape Ordinance Subdivision Ordinance Solid Waste Ordinance

City of Rancho Santa Margarita
Water Quality Related Department Functions

Function	City Department	Description of Department Function	Water Quality Functions Performed by this Department	Ordinances Department Enforces
Development Services Department	Development/Planning/Enforcement/Building and Safety		<ul style="list-style-type: none"> • With Public Works, administers and enforces the Grading Ordinance No. 10-10 • Evaluates the potential environmental impacts of proposed projects, for CEQA and other purposes, and provides recommendations to lead agencies and to the City Council concerning potential project impacts and means to mitigate those impacts • With Public Works and contractually with Orange County Public Works, administers and enforces the Water Quality Ordinance, administers other City land development, clearing, grading, and resource protection ordinances and plans and related State laws, including but not limited to General Plans, the Zoning Ordinance, the Subdivision Ordinance, and the Uniform Building Code • Inspects, evaluates and issues notices of violation for infractions of the ordinances above • Develops and implements City procedures in relation to CEQA • Evaluates the potential environmental impacts of proposed projects, for CEQA and other purposes, and provides recommendations to lead agencies, to the Planning Department, and to the City Council concerning potential project impacts and means to mitigate those impacts • Conducts inspections of private projects and activities that require a permit under a Planning Department-administered program • With Public Works and contractually with Orange County Public Works, provides training and guidance materials to private developers and City employees and managers • Reviews proposed designs for certain City projects • Participates in committees (i.e., Authorized Inspector Committees) 	<ul style="list-style-type: none"> • Water Quality Ordinance • Grading Ordinance • Water Efficient Landscape Ordinance • Building Code • Planning and Zoning Code
City Clerk	City Clerk		<ul style="list-style-type: none"> • The City Clerk is responsible for administering the agenda of City Council meetings and is responsible for posting notices for public hearings including public hearings required by CEQA. 	

City of Rancho Santa Margarita
Water Quality Related Department Functions

Function	City Department	Description of Department Function	Water Quality Functions Performed by this Department	Ordinances Department Enforces
City Attorney	City Attorney		<ul style="list-style-type: none"> Advises the City Council, City Manager and City departments on legal aspects of urban runoff-related matters Assists in liaison with the County, RWQCB and staff, and in liaison with other jurisdictions Assists City Departments in developing programs and ordinances Supports administrative enforcement by City departments Serves as attorney for the City in some civil enforcement actions related to urban runoff Participates in Legal Regulatory Committee 	
City Manager	City Manager		<ul style="list-style-type: none"> Coordinates and directs the urban-runoff-related efforts of City departments Advises the City Council on the policy and economic aspects of urban runoff-related matters Participates in City Manager's Committee 	

NOTES: All ordinance references are to ordinances of the County of Orange or to ordinances of the Orange County Flood Control District. The following is a list of acronyms used in this table:

BMP	Best Management Practice	MS4	Municipal Separate Stormwater Sewer System
CEQA	California Environmental Quality Act	NPDES	National Pollutant Discharge Elimination System
CIWMP	Countywide Integrated Waste Management Plan	OCCO	Orange County Codified Ordinances or County Code
CUPA	Certified Unified Program Agency	OCP	OC Planning
HCA	County of Orange Health Care Agency	OCPW	OC Public Works
HHWCC	Household Hazardous Waste Collection Center	RWQCB	Regional Water Quality Control Board
OCWR	OC Waste & Recycling		

5.0 MUNICIPAL ACTIVITIES COMPONENT

5.1 INTRODUCTION

Municipal facilities within the City include public parks, administration buildings, fire stations, community facilities, sports fields and a number of other City-owned properties. The City also conducts activities and operations to maintain the urban infrastructure such as street and sidewalk repair, storm drain system cleaning and maintenance and graffiti removal. Stormwater BMPs and programs associated with these facilities and activities are described below. Integrating water quality protection into routine municipal programs will support both the principal requirements of the Fifth Term Permit and effectively address two of the HPWQCs identified in the WQIP—specifically, unnatural water balance in dry weather and pathogen health risk.

5.1.1 Program Overview

The program management model for overseeing, implementing, and enforcing the municipal activities stormwater program element is identified in **Figure A-5.1**.

The below list provides contact information for and describes the role of the various City departments that own, operate, or maintain municipal areas and activities. For each department, the contact information for the employee who has the primary responsibility and oversight for ensuring that the program has been implemented has been included.

Public Works Department

Drainage and Flood Control

Title: Public Works Superintendent
Telephone: 949/635-1800 x 6102
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Responsible for the operation and maintenance of drainage and flood control facilities throughout the municipality. Activities conducted within the flood control facilities may include the use of pesticides or herbicides, flushing, sediment removal, vegetation and debris removal and a variety of structural repairs.

Park Maintenance

Title: Public Works Superintendent
Telephone: 949/635-1800 x 6102
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Responsible for the operation and maintenance of landscaping of public parks, including parking lots, buildings and recreational facilities.

SECTION 5, MUNICIPAL ACTIVITIES

IPM Pesticide and Fertilizer Maintenance

Title: Public Works Superintendent
Telephone: 949/635-1800 x 6102
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Responsible for implementation of the Integrated Pest Management (IPM) Policy.

Solid Waste

Title: Solid Waste Manager
Telephone: 949/635-1800 x 6503
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Responsible for waste management of facilities.

Street Sweeping

Title: Public Works Superintendent
Telephone: 949/635-1800 x 6102
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Responsible for street sweeping on all public streets and parking lots.

Street and Median Maintenance

Title: Public Works Superintendent
Telephone: 949/635-1800 x 6102
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Responsible for minor repairs on streets, maintenance of medians and rights-of-way adjacent to streets, signage and catch basin stenciling. Maintenance activities include application of pesticides and herbicides to control vegetation.

General Services Division

Title: Public Works Superintendent
Telephone: 949/635-1800 x 6102
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Responsible for operation and maintenance of the municipal administrative and operation facilities (i.e., Civic Center) and the municipal automotive fleet.

SECTION 5, MUNICIPAL ACTIVITIES

Engineering Division

Title: Assistant City Engineer
Telephone: 949/635-1800 x 6507
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Responsible for the administration of public improvement projects.

Parking Lots/Enforcement

Title: Public Works Superintendent
Telephone: 949/635-1800 x 6102
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Responsible for the operation of public parking lots.

Fleet Management

Title: Public Works Superintendent
Telephone: 949/635-1800 x 6102
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Responsible for the maintenance, repair and cleaning of all municipal vehicles.

Water & Wastewater Utilities – Santa Margarita Water District

Title: Chief Engineer
Telephone: 949-459-6400
Address: 26111 Antonio Parkway, Las Flores, CA 92688

Responsible for implementing control measures to minimize infiltration of seepage from sanitary sewers to municipal storm drain systems through the operation and maintenance of all District wastewater facilities. Also responsible for the operation and maintenance of all District water facilities.

Water & Wastewater Utilities – Trabuco Canyon Water District

Title: General Manager
Telephone: 949-858-0277
Address: 32003 Dove Canyon Drive, Trabuco Canyon, CA 92679

Responsible for implementing control measures to minimize infiltration of seepage from sanitary sewers to municipal storm drain systems through the operation and maintenance of all District wastewater facilities. Also responsible for the operation and maintenance of all District water facilities.

Other Departments:

Fire Department

Contact Name: Orange County Fire Authority – Station 45
Title: Fire
Telephone: 949-858-8801
Address: 30131 Aventura, Rancho Santa Margarita, CA 92688

SECTION 5, MUNICIPAL ACTIVITIES

Operates and maintains fire stations throughout the municipality and conducts training exercises and responds to hazardous material spills.

Parks and Recreation Services Department

Title: Community Services Supervisor
Telephone: 949/635-1800 x 260
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Manages the Bell Tower Regional Community Center.

Police Department

Contact Name: Luke South
Title: Lieutenant, Orange County Sheriff's Department
Telephone: 949/635-1800 x 6808
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Operates the police station.

5.1.2 Program Commitments

The major program commitments and the subsections in which they are described in detail include:

- Maintain/update inventories of Municipal Areas and Activities that exist within the jurisdiction (5.2.1).
- Prioritize fixed facilities, for the purposes of determining the frequency of inspections (high sites inspected annually) (5.2.2).
- Maintain all Municipal Areas and Activities in accordance with Model Maintenance Procedures and as determined by inspections (5.2.3).
- Enforce the maintenance requirements through internal procedures and external contract language (5.2.4).
- Implement an Integrated Pest Management policy (5.3).
- Educate and train municipal staff (5.4).

SECTION 5, MUNICIPAL ACTIVITIES

5.1.3 Regulatory Requirements

The Model Municipal Activities Program and the Model Integrated Pest Management, Pesticide and Fertilizer Guidelines were developed in order to fulfill the municipal activity commitments and requirements of Section E.5 of the San Diego Regional Water Quality Control Board Municipal NPDES Stormwater Permit, Order No. R9-2013-0001 as amended by Order Nos. R9-2015-0001 and R9-2015-0100.

5.2 MODEL MUNICIPAL ACTIVITIES PROGRAM DETAILS

5.2.1 Municipal Inventories

An inventory of all Municipal Areas and Activities sites has been compiled and is updated prior to the start of the wet season (October 1). Based on this inventory and inspection records, City of Rancho Santa Margarita annually evaluates the maintenance frequency for cleaning of MS4 facilities, including catch basins.

The City's comprehensive municipal program inventories are included in **Exhibit 5.1** to this LIP.

5.2.2 Prioritization

Municipal facilities are prioritized based on the potential for a facility or area to discharge polluted non-stormwater and reflect the priorities set forth in the WQIP.

5.2.3 Model Maintenance Procedures

Staff perform operations at municipal areas and perform municipal activities according to the pollution prevention methods in its municipal program. These methods include designation and implementation of minimum BMPs for all municipal areas and activities and are area-/activity-specific. For those municipal areas or activities tributary to a Clean Water Act 303(d) impaired water body segment in which the area or activity generates pollutants for which the water body segment is impaired, enhanced measures will be designated. Similarly, additional controls will be designated for municipal areas and activities within or directly adjacent to or discharging directly to coastal lagoons, the ocean, or other receiving waters within environmentally sensitive areas.

The City implements procedures to assess potential water quality impacts to receiving water bodies.

Model maintenance procedures relevant to the City's Municipal Areas and Activities; facilities and field programs are included in **Exhibit 5.2**.

The City coordinates with the local sewage collection/treatment agency to ensure swift response to and containment of sewage spills. In addition, the City participates in the Countywide Area Spill Control (CASC) Program.

SECTION 5, MUNICIPAL ACTIVITIES

5.2.4 Municipal Inspection and Requirements

Inspections of municipal areas and activities are performed to verify that the maintenance procedures are being implemented, are appropriate for that municipal area and/or activity and are protective of water quality.

Inspections are based upon the priority of the area and/or activity and their threat to water quality as indicated in the site list included in **Exhibit 5.A**. Inspection frequency also reflects the priorities set forth in the South Orange County WQIP. Inspection frequency is consistent, whether a facility or program is operated and maintained by municipal staff, contracted staff, or lessors.

5.2.4.1 Inspection Frequencies

The frequency of municipal facility and program inspections is shown in **Table 5.1** below:

Table 5.1
Inspection Frequencies

Municipal Area/Activity	Inspection Frequency
Roads, Streets, Highways and Parking Facilities	Annually
Flood Management Projects and Flood Control Devices	Annually
Areas/activities tributary to a 303(d) impaired water body segment or where an activity generates pollutants for which the water body segment is impaired	Annually
Areas and activities within or adjacent to or discharging directly to coastal lagoons, the ocean or other receiving waters within environmentally sensitive areas	Annually
Municipal Airfields	Annually
Parks and Recreation Facilities	Annually
Special event venues following special events	Annually
Power washing activities	Annually
Other municipal areas and activities that the City determines may contribute a significant pollutant load to the MS4	Annually

SECTION 5, MUNICIPAL ACTIVITIES

Municipal Facilities	Inspection Frequency
Active or closed municipal landfills	Annually
Publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewage collection systems	Annually
Solid waste transfer facilities	Annually
Land application sites	Annually
Corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles	Annually
Household hazardous waste collection facilities	Annually
MS4 and MS4 Facilities	Inspection Frequency
MS4 Facilities	Annually Before the Wet Season, with Additional Inspections as Needed During the Wet Season (see specific indications below)

Subsequent to two full years of inspections, any facility determined to require an inspection frequency less than annually will be inspected as needed, at least every other year.

*Other municipal activities will be inspected as needed and in response to water quality data, valid complaints and findings from municipal or contract staff.

5.2.4.2 Inspection Documentation Procedures

The inspection forms used during inspection consist of the following:

- General Inspection Forms. This primary form provides for a general characterization of the municipal area/activity being inspected, including the type of area or activity, the reason for inspection, and activities that may take place. A general cover sheet inspection form is required for all inspections.
- Activity Specific Inspection Forms. These secondary forms provide a series of questions about specific activities taking place at a municipal area or for a municipal activity, as well as a list of suggested corrective action plans that can be implemented should a problem be found.

Inspection forms for each municipal area or activity in the City are included in **Exhibit 5.D**.

5.2.4.3 Enforcement Procedures

To ensure compliance, the City will implement enforcement procedures as described in Enforcement Response Plan (**Exhibit 4.1**).

5.2.4.4 Municipal Retrofitting

The City examines opportunities to retrofit existing MS4 conveyance systems, parks and other recreational areas, where feasible. Countywide analysis of retrofitting opportunities is described in **DAMP Section 5.2.4.4**.

The City will evaluate existing flood control devices, identify devices causing or contributing to a condition of pollution, identify measures to reduce or eliminate the structure's effect on pollution, and evaluate the feasibility of retrofitting the structural flood control device.

5.3 MODEL INTEGRATED PEST MANAGEMENT, PESTICIDES AND FERTILIZER GUIDELINES

The City has adopted an Integrated Pest Management (IPM) policy consistent with **DAMP Section 5.3**. The City's IPM policy is included in **Exhibit 5-5**.

The City will implement BMPs in accordance with the aforementioned IPM policy and that encourage the use of native vegetation, set schedules for irrigation and chemical application and for the collection and proper disposal of unused pesticides, herbicides and fertilizers.

5.4 TRAINING AND EDUCATION

For an effective stormwater program to be efficiently implemented, its staff must have sufficient knowledge, experience, and skills. The Principal Permittee will coordinate, develop and present a number of different training modules in accordance with the *The Orange County Stormwater Program Training Program Framework: Core Competencies*. The City will support this effort by requiring the appropriate employees to attend training sessions, and conduct applicable train-the-trainer sessions, if necessary.

EXHIBIT 5.1

Municipal Areas and Activities Inventory



Exhibit 5.1
City of Rancho Santa Margarita
Municipal Areas and Activities Inventory

Facility Name	Street Address	Is Property Managed By City or Leased?	Facility Size (Acres)	Watershed	Latitude (Y)	Longitude (X)	Facility within or adjacent to, or discharge directly to an ESA?	Building Maintenance and Repair	Parking Lot Maintenance	Landscape Maintenance	Waste Handling and Disposal	Fixed Facility Threat to Water Quality	Potential to Discharge to 303 (d) Waterbody
CITY HALL	22112 EL PASEO	City	1.1	San Juan Creek	33.64159	-117.59434	Yes	Chemicals	Sed., O&G	Sed., Pest.	Org, Bact.	High	Yes
CITY HALL PARKING LOT	22112 EL PASEO	City	0.6	San Juan Creek	33.64248	-117.59472	Yes	Chemicals	Sed., O&G	Sed., Pest.	Org, Bact.	High	Yes
BELL TOWER BLDG	22232 EL PASEO	City	1.1	San Juan Creek	33.641310	-117.59432	Yes	Chemicals	Sed., O&G	Sed., Pest.	Org, Bact.	High	Yes
DOG PARK	24328 ANTONIO PKWY	City	2.1	San Juan Creek	33.610130	-117.61432	Yes	Chemicals	Sed., O&G	Sed., Pest.	Org, Bact.	High	Yes
SKATE PARK	24328 ANTONIO PKWY	City	1.2	San Juan Creek	33.60898	-117.61658	Yes	Chemicals	Sed., O&G	Sed., Pest.	Org, Bact.	High	Yes

EXHIBIT 5.2

Municipal Facility Inspection Form





MUNICIPAL FACILITY INSPECTION FORM
Stormwater Program
City of Rancho Santa Margarita

22112 El Paseo
Rancho Santa Margarita, CA 92688
Phone: 949.635.1800
Fax: 949.635.1667

Inspector Name: _____

Inspection Date: _____ Time: _____

☐ Routine Inspection ☐ Response to Complaint ☐ Follow-up Inspection

Facility Name: _____ Contact Name: _____

Site Address: _____ Phone: _____

PRIORITIZATION VERIFICATION:

Percent of Activities Outdoors and Uncovered: ☐ <25% ☐ 25-50% ☐ 50-75% ☐ >75%

Approximate Impervious Area: ☐ <5,000 sq. ft. ☐ 5,000-100,000 sq. ft. ☐ >100,000 sq. ft.

Amount of Raw Material Kept Indoors or Properly Covered Outdoors: ☐ ALL ☐ SOME ☐ NONE

Watershed: _____

SIC Code: _____

SIC Description: _____

Observed Business Type: _____

Is the facility covered under a stormwater permit? (Check all that apply)

☐ Does not need coverage ☐ No, but may need to refer to Regional Board ☐ Individual NPDES Permit ☐ General Industrial Permit (filed NOI)

SWPPP on site? ☐ Yes ☐ No

Facility's WDID #: _____ Business License #: _____

ACTIVITIES (FACT SHEET)	COMMENTS AND CORRECTIVE ACTIONS REQUIRED
Landscape Maintenance (IC7)	
Outdoor Drainage from Indoor Areas (IC9)	
Outdoor Loading/Unloading of Materials (IC10)	
Outdoor Process Equipment Operations and Maintenance (IC11)	
Outdoor Storage of Raw Materials, Products, and Containers (IC12)	
Parking and Storage Area Maintenance (IC15)	
Spill Prevention and Cleanup (IC17)	
Vehicle and Equipment Fueling (IC18)	
Vehicle and Equipment Maintenance and Repair (IC19)	
Vehicle and Equipment Washing and Steam Cleaning (IC20)	
Waste Handling and Disposal (IC21)	
Other Activities	

☐ ADDITIONAL INFORMATION PROVIDED ON SUPPLEMENTAL PAGE ☐ PHOTOS TAKEN ☐ BMP INFORMATION PROVIDED

CORRECTIVE ACTION ☐ NONE ☐ CORRECT DEFICIENCIES – Fact Sheets _____

FOLLOW UP INSPECTION REQUIRED ☐ NO ☐ YES BY _____

DEFICIENCIES CORRECTED ☐ YES ☐ NO RESULT _____

This report is furnished to the facility representative as a measure to evaluate the implemented BMP's at your facility to prevent stormwater pollution. Your facility may be subject to an enforcement action if the noted deficiencies are not corrected by _____. To request a re-inspection to review the correction of deficiencies noted above, please contact the inspector noted below; otherwise, one will be scheduled prior to the above date.

Facility Representative Signature*: _____ Printed name: _____ Date: _____

Inspector Signature: _____ Date: _____

Distribution: Top – File Copy Bottom – Facility Copy

EXHIBIT 5.3

[Reserved]



EXHIBIT 5.4

Fixed Facility, Field Program, and Drainage Facility Inspection Forms



ENVIRONMENTAL PERFORMANCE REPORT (EPR)
PEA – FY 2008-09

Municipal Facilities and Field Programs	
Reporting Period: 7/1/08 - 6/30/09	
General Facility/Field Program Information (Mandatory)	
Check One	<input checked="" type="checkbox"/> Fixed Facility <input type="checkbox"/> Field Program
Program Name: Canada Vista Park (Skate Park and Dog Park)	
Address (if applicable): 24328 Antonio Parkway, RSM, CA 92688	
Contact person/ title: Harlin Cheatwood, Public Works Superintendant	
Number of Employees: Contract – PV Maintenance and Mission Landscape Service, Inc.	
<input checked="" type="checkbox"/> No Previous or Current Problems Have Been Identified	
Information From Previous Reporting Period: None	
Actionable Issues: None	
Description: N/A	
Completed Data: N/A	
Or Start Date: N/A	Completion Date: N/A
<input type="checkbox"/> If the corrective actions as identified in the previous report have not been completed an explanation and new estimated start and completion dates are provided on a separate sheet.	
Information From Current Reporting Period: 7/01/2008 – 6/30/2009	
How Many Inspections Have Occurred During the Reporting Period: 12	
Dates of Inspection(s): Monthly	
Current Problems/Issues Identified: None	
Actionable Issues: None	
Description: N/A	
Completed Data: N/A	
Or Start Date: N/A	Completion Date: N/A
Report Preparer by: Moy Yahya	
Title: Stormwater Program Manager	Signature: <i>Moy Yahya</i> Date: 7/9/09

ENVIRONMENTAL PERFORMANCE REPORT (EPR)
PEA – FY 2008-09

Municipal Facilities and Field Programs		
Reporting Period: 7/1/08 - 6/30/09		
General Facility/Field Program Information (Mandatory)		
Check One	<input checked="" type="checkbox"/> Fixed Facility	<input type="checkbox"/> Field Program
Program Name: City Hall		
Address (if applicable): 22112 El Paseo, RSM, CA 92688		
Contact person/ title: Harlin Cheatwood, Public Works Superintendant		
Number of Employees: Contract – PV Maintenance		
<input checked="" type="checkbox"/> No Previous or Current Problems Have Been Identified		
Information From Previous Reporting Period: None		
Actionable Issues: None		
Description: N/A		
Completed Data: N/A		
Or Start Date: N/A Completion Date: N/A		
<input type="checkbox"/> If the corrective actions as identified in the previous report have not been completed an explanation and new estimated start and completion dates are provided on a separate sheet.		
Information From Current Reporting Period: 7/01/2008 – 6/30/2009		
How Many Inspections Have Occurred During the Reporting Period: 12		
Dates of Inspection(s): Monthly		
Current Problems/Issues Identified: None		
Actionable Issues: None		
Description: N/A		
Completed Data: N/A		
Or Start Date: N/A Completion Date: N/A		
Report Preparer by: Moy Yahya		
Title: Stormwater Program Manager	Signature: <i>Moy Yahya</i>	Date: 7/9/09

**ENVIRONMENTAL PERFORMANCE REPORT (EPR)
PEA – FY 2008-09**

Municipal Facilities and Field Programs		
Reporting Period: 7/1/08 - 6/30/09		
General Facility/Field Program Information (Mandatory)		
Check One	<input checked="" type="checkbox"/> Fixed Facility	<input type="checkbox"/> Field Program
Program Name: City Hall Parking Lot		
Address (if applicable): 22112 El Paseo, RSM, CA 92688		
Contact person/ title: Harlin Cheatwood, Public Works Superintendant		
Number of Employees: Contract - PV Maintenance and Sunset Sweeping		
<input checked="" type="checkbox"/> No Previous or Current Problems Have Been Identified		
Information From Previous Reporting Period: None		
Actionable Issues: None		
Description: N/A		
Completed Data: N/A		
Or Start Date: N/A	Completion Date: N/A	
<input type="checkbox"/> If the corrective actions as identified in the previous report have not been completed an explanation and new estimated start and completion dates are provided on a separate sheet.		
Information From Current Reporting Period: 7/01/2008 – 6/30/2009		
How Many Inspections Have Occurred During the Reporting Period: 12		
Dates of Inspection(s): Monthly		
Current Problems/Issues Identified: None		
Actionable Issues: None		
Description: N/A		
Completed Data: N/A		
Or Start Date: N/A	Completion Date: N/A	
Report Preparer by: Moy Yahya		
Title: Stormwater Program Manager	Signature: <i>Moy Yahya</i>	Date: 7/9/09

ENVIRONMENTAL PERFORMANCE REPORT (EPR)
PEA – FY 2008-09

Municipal Facilities and Field Programs
Reporting Period: 7/1/08 - 6/30/09
General Facility/Field Program Information (Mandatory)
Check One <input checked="" type="checkbox"/> Fixed Facility <input type="checkbox"/> Field Program
Program Name: Fountain and Sidewalks at the City Hall
Address (if applicable): 22112 El Paseo, RSM, CA 92688
Contact person/ title: Harlin Cheatwood, Public Works Superintendant
Number of Employees: PV Maintenance
<input checked="" type="checkbox"/> No Previous or Current Problems Have Been Identified
Information From Previous Reporting Period: None
Actionable Issues: None Description: N/A Completed Data: N/A Or Start Date: N/A Completion Date: N/A
<input type="checkbox"/> If the corrective actions as identified in the previous report have not been completed an explanation and new estimated start and completion dates are provided on a separate sheet.
Information From Current Reporting Period: 7/01/2008 – 6/30/2009
How Many Inspections Have Occurred During the Reporting Period: 12
Dates of Inspection(s): Monthly
Current Problems/Issues Identified: None
Actionable Issues: None Description: N/A Completed Data: N/A Or Start Date: N/A Completion Date: N/A
Report Preparer by: Moy Yahya
Title: Stormwater Program Manager Signature: <i>Moy Yahya</i> Date: 7/9/09

ENVIRONMENTAL PERFORMANCE REPORT (EPR)
PEA – FY 2008-09

Municipal Facilities and Field Programs		
Reporting Period: 7/1/08 - 6/30/09		
General Facility/Field Program Information (Mandatory)		
Check One	<input checked="" type="checkbox"/> Fixed Facility	<input type="checkbox"/> Field Program
Program Name: Landscape Maintenance at City Hall		
Address (if applicable): 22112 El Paseo, RSM, CA 92688		
Contact person/ title: Harlin Cheatwood, Public Works Superintendant		
Number of Employees: Contract – Mission Landscape Services, Inc.		
<input checked="" type="checkbox"/> No Previous or Current Problems Have Been Identified		
Information From Previous Reporting Period: None		
Actionable Issues: None		
Description: N/A		
Completed Data: N/A		
Or Start Date: N/A Completion Date: N/A		
<input type="checkbox"/> If the corrective actions as identified in the previous report have not been completed an explanation and new estimated start and completion dates are provided on a separate sheet.		
Information From Current Reporting Period: 7/01/2008 – 6/30/2009		
How Many Inspections Have Occurred During the Reporting Period: 12		
Dates of Inspection(s): Monthly		
Current Problems/Issues Identified: None		
Actionable Issues: None		
Description: N/A		
Completed Data: N/A		
Or Start Date: N/A Completion Date: N/A		
Report Preparer by: Moy Yahya		
Title: Stormwater Program Manager	Signature: <i>Moy Yahya</i>	Date: 7/4/09

**ENVIRONMENTAL PERFORMANCE REPORT (EPR)
PEA – FY 2008-09**

Municipal Facilities and Field Programs	
Reporting Period: 7/1/08 - 6/30/09	
General Facility/Field Program Information (Mandatory)	
Check One	<input type="checkbox"/> Fixed Facility <input checked="" type="checkbox"/> Field Program
Program Name: Catch Basin Inspection and Cleaning	
Address (if applicable): Citywide	
Contact person/ title: Moy Yahya, Stormwater Program Manager	
Number of Employees: Contract - PV Maintenance	
<input checked="" type="checkbox"/> No Previous or Current Problems Have Been Identified	
Information From Previous Reporting Period: None	
Actionable Issues: None	
Description: N/A	
Completed Data: N/A	
Or Start Date: N/A	Completion Date: N/A
<input type="checkbox"/> If the corrective actions as identified in the previous report have not been completed an explanation and new estimated start and completion dates are provided on a separate sheet.	
Information From Current Reporting Period: 7/01/2008 – 6/30/2009	
How Many Inspections Have Occurred During the Reporting Period: 756	
Dates of Inspection(s): 9/20/08 to 10/08/08	
Current Problems/Issues Identified: None	
Actionable Issues: None	
Description: N/A	
Completed Data: N/A	
Or Start Date: N/A	Completion Date: N/A
Report Preparer by: Moy Yahya	
Title: Stormwater Program Manager	Signature: <i>Moy Yahya</i> Date: 7-9-09

ENVIRONMENTAL PERFORMANCE REPORT (EPR)
PEA – FY 2008-09

Municipal Facilities and Field Programs	
Reporting Period: 7/1/08 - 6/30/09	
General Facility/Field Program Information (Mandatory)	
Check One	<input type="checkbox"/> Fixed Facility <input checked="" type="checkbox"/> Field Program
Program Name: Street Sweeping and Road Maintenance	
Address (if applicable): Citywide	
Contact person/ title: Harlin Cheatwood, Public Works Superintendant	
Number of Employees: Contract - PV Maintenance and Sunset Sweeping	
<input checked="" type="checkbox"/> No Previous or Current Problems Have Been Identified	
Information From Previous Reporting Period: None	
Actionable Issues: None Description: N/A Completed Data: N/A Or Start Date: N/A Completion Date: N/A	
<input type="checkbox"/> If the corrective actions as identified in the previous report have not been completed an explanation and new estimated start and completion dates are provided on a separate sheet.	
Information From Current Reporting Period: 7/01/2008 – 6/30/2009	
How Many Inspections Have Occurred During the Reporting Period: 24	
Dates of Inspection(s): twice/month	
Current Problems/Issues Identified: None	
Actionable Issues: None Description: N/A Completed Data: N/A Or Start Date: N/A Completion Date: N/A	
Report Preparer by: Moy Yahya	
Title: Stormwater Program Manager	Signature: <i>Moy Yahya</i> Date: 7/9/09

EXHIBIT 5.5

Integrated Pest Management Plan





INTEGRATED PEST MANAGEMENT (IPM) POLICY & IMPLEMENTATION GUIDELINES

FOR THE CITY OF RANCHO SANTA MARGARITA

***GENERAL IPM POLICY:**

For the last 55 years, the trend in pest management has increasingly relied on synthetic chemical pesticides. The result has been not only a tremendous increase in the use of many dangerous chemicals, but also an increase in the number of pests that are resistant to the pesticides or new organisms becoming pests. Additionally, some pesticides used for terrestrial pest management have been found in waterways causing problems in the aquatic environment.

Pest control managers are now moving away from their reliance on pesticides alone toward an integrated approach that combines limited pesticide use with more environmentally friendly pest control techniques. This system is known as integrated pest management (IPM), a strategy that focuses on the long-term prevention of pests or their damage through a combination of techniques, including preventative, cultural, mechanical, environmental, biological, and chemical control tactics (**Figure 1**). The techniques are utilized simultaneously to control pest populations in the most effective manner possible.

Developing a comprehensive Integrated Pest Management (IPM) Program and approach allows us to focus on our primary efforts of pollution prevention. By monitoring and preventing pests as well as minimizing heavy pest infestations we can reduce the need for chemicals and/or multiple applications.

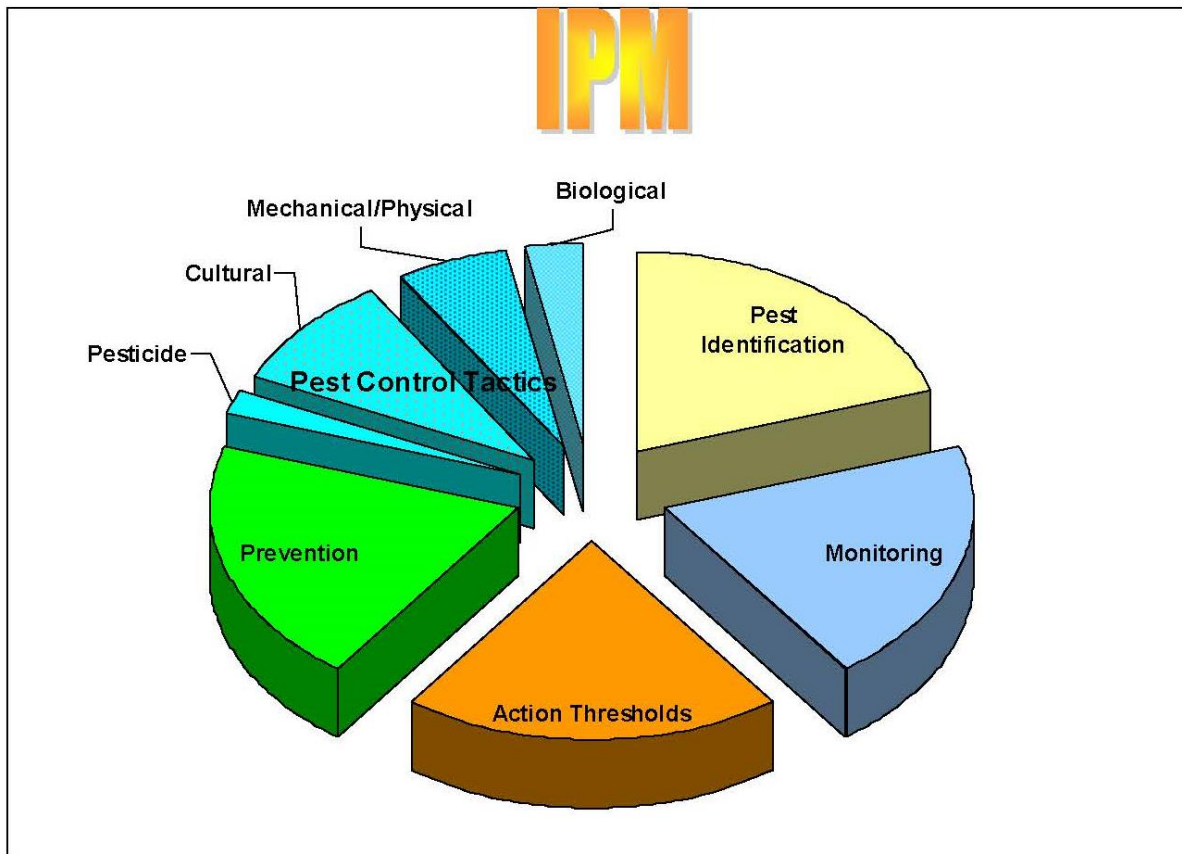
IPM programs utilize monitoring techniques and injury and economic thresholds to determine when to implement control strategies. Treatments are used only used according to established guidelines after monitoring indicates that such treatment is appropriate. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms and the environment.

The use of pesticides is often a measure of last resort. Because of this, the management guidelines for pesticide use are presented in a separate section immediately following the IPM guidelines.

* Original language is contained in Orange County Drainage Area Management Plan, Section 5.5.2 Integrated Pest Management adopted in 2003.

IPM POLICY AND IMPLEMENTATION GUIDELINES
VERSION 4

Figure 1
Components of an Integrated Pest Management Program



Scope of IPM Policy and Implementation Plan

IPM practices are encouraged over the sole use of pesticides as the primary means of pest management (**Table 1**). As a part of the Municipal Activities Program Manual, the public agencies and their contractors should evaluate the non-chemical components of IPM before intensive use of pesticides.

The goal of IPM is not to eliminate all pests, but to keep their populations at tolerable levels. Pesticides may be part of an IPM program, but they should only be used after the pests exceed established thresholds and only applied in the affected area (in the case of disease prevention, some modifications may be allowed). In general, all pest control strategies should be those that are least disruptive to biological control

organisms (natural enemies), least hazardous to humans and the environment (including non-target organisms), and have the best likelihood of long-term effectiveness.

Table 1. Advantages and Disadvantages of a Pesticide-Based Program versus an IPM-Based Pest Control Program

<u>Pesticide Based Pest Control</u>		<u>IPM Based Pest Control</u>	
<u>Advantages</u>	<u>Disadvantages</u>	<u>Advantages</u>	<u>Disadvantages</u>
Quick suppression of pests	Not long-term	Long-term control	It may take longer to see results
	Pest control is reactive	Can be proactive in pest control actions	Must establish thresholds
	Loss of natural controls. Often get outbreaks of other pests	Reduces disruption of natural enemies	
		Pesticides can be used (only used as last resort).	Must have knowledge of pesticides and their effects on other organisms.
Labor is only for spraying	Extra work in cleanup	Staff becomes more knowledgeable of pests and injury symptoms	Labor is required for monitoring and regular scouting Training is required to identify pests and natural enemies.
Not much preparation or follow-up needed	Need a PCA recommendation	Pest management is more organized	Must maintain a record-keeping system.

	<p>Pesticide safety issues for applicators, public, animals</p> <p>More pesticides in environment</p> <p>Contamination of water bodies from runoff</p>	<p>Less exposure to pesticides</p> <p>Safer to the environment</p> <p>Reduces contamination from runoff</p>
--	--	---

IPM POLICY AND IMPLEMENTATION GUIDELINES

City of Rancho Santa Margarita

Pesticides should not be applied until pests are approaching damaging levels. Because this requires early detection of the pests, monitoring on a regular basis is extremely important and should also be used to determine if natural enemies are present and adequately controlling the pest. If possible, a person should be trained and assigned to scout the sites on a regular basis.

Components of an IPM Program

An IPM program is a long-term, multi-faceted system to manage pests (**Figure 1**). Use of pesticides is a short-term solution to pest problems and should be used only when the other components fail to maintain the pests or their damage below an acceptable level. Successful IPM practitioners are knowledgeable about the biology of the plants and pests and successful IPM programs primarily use combinations of cultural practices as well as a combination of physical, mechanical and biological controls.

Pest Identification

It is important to learn to identify all stages of common pests at each site. For example, if you can identify weed seedlings, you can control them before they become larger and more difficult to control and before they flower, disseminating seeds throughout the site. It is also important to be sure that a pest is actually causing the problem. Often damage such as wilting is attributed to root disease but may actually be caused by under watering or wind damage.

Prevention

Good pest prevention practices are critical to any IPM program, and can be very effective in reducing pest incidence. Numerous practices can be used to prevent pest incidence and reduce pest population buildup such as the use of resistant varieties, good sanitary practices and proper plant culture. Examples of prevention include choosing an appropriate location for planting, making sure the root system is able to grow adequately and selecting plants that are compatible with the site's environment.

Monitoring

The basis of IPM is the development and use of a regular monitoring or scouting program. Monitoring involves examining plants and surrounding areas for pests, examining tools such as sticky traps for insect pests and quantitatively or qualitatively measuring the pest population size or injury. This information can be used to determine if pest populations are increasing, decreasing, or staying the same and to determine when to use a control tactic. Weather and other environmental conditions may also play

a factor in whether a pest outbreak may occur so it is important to monitor temperature and soil moisture as well.

It is important to use a systematic approach when monitoring, for example you should examine leaves of a similar age each time you check for pests, rather than looking at the older leaves on some plants and younger ones on others. Randomly looking at a plant and its leaves does not allow you to track changes in pest population or damage over time.

It is important to establish and maintain a record-keeping system to evaluate and improve your IPM program. Records should include information such as date of examination, pests found, size and extent of the infestation, location of the infestation, control options utilized, effectiveness of the control options, labor and material costs.

Injury Levels and Action Thresholds

In order to have a way to determine when a control measure should be taken, injury levels and action thresholds must be set for each pest. An injury level is the level of unacceptable damage. For example, the injury level for a leaf-feeding beetle may be set at 30% of the leaves being damaged. Action thresholds are the set of conditions required to trigger a control action. An example of this would be finding an average of 5 or more beetles on 10 shrubs in a location. Action thresholds are set from previous experience or published recommendations and based on expected injury levels. Injury levels are often set by the public's comments.

Pest Control Tactics

Integrated pest management programs use a variety of pest control tactics in a compatible manner that minimizes adverse effects to the environment. A combination of several control tactics is usually more effective in minimizing pest damage than any single control method. The type of control that an agency selects will likely vary on a case-by-case basis due to the varying site conditions.

The primary pest control tactics to choose from include:

- Cultural
- Mechanical/Physical
- Biological

- Pesticide

Cultural Controls

Cultural controls are modifications of normal plant care activities that reduce or prevent pests. In addition to those methods used in the pest preventions, other cultural control methods include adjusting the frequency and amount of irrigation, fertilization, and mowing height. For example, spider mite infestations are worse on water-stressed plants, over-fertilization may cause succulent growth which then encourages aphids, too low of a mowing height may thin turf and allow weeds to become established.

Mechanical/Physical Controls

Mechanical control tactics involve the use of manual labor and machinery to reduce or eliminate pest problems using methods such as handpicking, physical barriers, or machinery to reduce pest abundance indirectly. Examples include hand-pulling or hoeing and applying mulch to control weeds, using trap boards for snails and slugs, and use of traps for gophers.

The use of physical manipulations that indirectly control or prevent pests by altering temperature, light, and humidity can be effective in controlling pests. Although in outdoor situations these tactics are difficult to use for most pests, they can be effective in controlling birds and mammals if their habitat can be modified such that they do not choose to live or roost in the area. Examples include removing garbage in a timely manner and using netting or wire to prevent bird from roosting.

Biological Controls

Biological control practices use living organisms to reduce pest populations. These organisms are often also referred to as beneficials, natural enemies or biocontrols. They act to keep pest populations low enough to prevent significant economic damage. Biocontrols include pathogens, parasites, predators, competitive species, and antagonistic organisms. Beneficial organisms can occur naturally or can be purchased and released.

The most common organisms used for biological control in landscapes are predators, parasites, pathogens and herbivores.

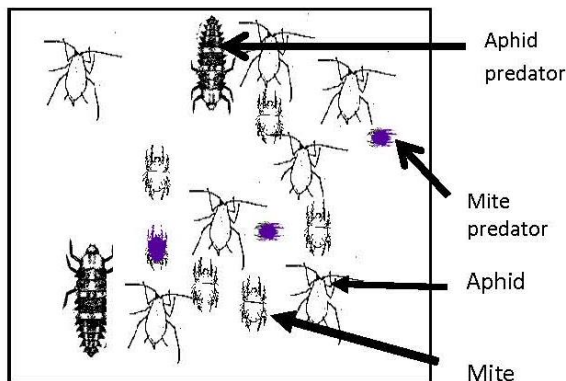
- Predators are organisms that eat their prey (e.g. Ladybugs).
- Parasites spend part or all of their life cycle associated with their host. Common parasites lay their eggs in or on their host and then the eggs hatch, the larvae feed on the host, killing it (e.g. Tiny stingless wasps for aphids and whiteflies).
- Pathogens are microscopic organisms, such as bacteria, viruses, and fungi that cause diseases in pest insects, mites, nematodes, or weeds (e.g. *Bacillus thuringiensis* or BT).
- Herbivores are insects or animals that feed on plants. These are effective for weed control. Biocontrols for weeds eat seeds, leaves, or tunnel into plant stems (e.g. goats and some seed and stem borers).

In order to conserve naturally occurring beneficials, broad-spectrum pesticides should not be used since the use of these types of pesticides may result in secondary pest outbreak due to the mortality of natural enemies that may be keeping other pests under control (**Figure 2**).

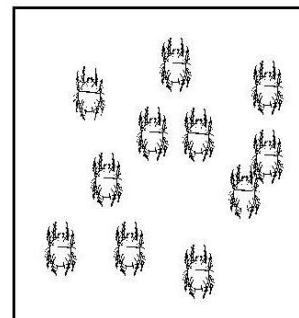
Figure 2

Example of Secondary Pest Outbreak Caused By Use of a Broad Spectrum Insecticide

A. Aphids and mites controlled by predators



B. After a broad spectrum spray for aphids, predators for mites and aphids are also killed, resulting in an outbreak of mites.



Pesticide Controls

Any substance used for defoliating plants, regulating plant growth or preventing, destroying, repelling or mitigating any pest, is a pesticide. Insecticides, miticides, herbicides, fungicides, rodenticides and molluscides are all pesticides. Anything with an EPA or DPR registration number on the label is a non-exempt pesticide.

Pesticides should only be used when other methods fail to provide adequate control of pests and just before pest populations cause unacceptable damage. The overuse of pesticides can cause beneficial organisms to be killed and pest resistance to develop. When pesticides must be used, considerations should be made for how to use them most successfully. Avoid pesticides that are broad-spectrum and relatively persistent since these are the ones that can cause the most environmental damage and increase the likelihood of pesticide resistance. Always choose the most specific but least toxic to non-target organisms method.

In addition, considerations should be given to the proximity to water bodies, irrigation schedules, weather (rain or wind), etc. that are secondary factors that may result in the pesticide being moved off-site into the environment. Consideration should be made of the temporary loss of use of an area (application in a park may result in the area being sectioned off)

IMPLEMENTATION GUIDELINES:

Enter Designated IPM Coordinator or IPM Contact Information in Box Below:

John Doe

City of Bug Beach

555-1234

Personnel responsible for the care and maintenance of facilities under the above-mentioned jurisdiction agree to implement a suite of basic integrated pest management procedures selected from the following five main components of an IPM program:

I) Prevention

II) Pest and Symptom Identification

III) Monitoring for Pests and Problems

IV) Action Thresholds and Guidelines

V) Selection of Appropriate Management Methods (Control Tactics)

The procedures seek to increase the long-term prevention and suppression of pest problems (insects, weeds, diseases, and vertebrates) with the minimum impact on human health, the environment, and non-target organisms. Emphasis is placed on improving cultural practices to prevent problems and utilizing alternative control measures instead of broad spectrum pesticides.

Information on the latest IPM information including management of new pests in the landscape is obtained from local UC Cooperative Extension Advisors, UC IPM Regional Advisor, or the Statewide UC IPM Web Site at www.ipm.ucdavis.edu.

I. PREVENTION

A. Landscape Design Procedures *(a minimum of three must be selected)*

- ☐ Drainage, soil characteristics, water quality and availability are considered during plant selection.
- ☐ Sun exposure, heat, and high temperature conditions are considered during plant selection.
- ☐ Adequate space is allowed for root growth, especially trees.
- ☐ Nursery stock is inspected and rejected if not healthy (injuries, diseased, circling roots/potbound, poor staking and/or pruning).
- ☐ Pest resistant species and cultivars are selected.
- ☐ Plants with similar growth characteristics and irrigation requirements are grouped together.
- ☐ Landscape design matches available irrigation technology to avoid excess water use and to minimize surface runoff.

B. Site Preparation and Planting Procedures *(a minimum of three must be selected)*

- ☐ Assess soil drainage properties and improve compacted soils prior to planting.
- ☐ Conduct a soil analysis to determine chemical and physical properties of the existing soil and then add appropriate amendments such as organic matter.
- ☐ Ensure irrigation is installed as designed in order to avoid poor uniformity once plants are in place.
- ☐ Follow proper planting procedures for particular plant species to avoid planting too deeply or too shallow.
- ☐ Nursery tree stakes are removed at planting and replaced with staking that allows trunk to flex; removing these stakes after 1 to 1.5 years.
- ☐ Utilize a soil probe or other soil moisture measurement device to monitor soil moisture levels in existing root ball and surrounding soil during establishment period.

C. Water Management *(a minimum of three must be selected)*

- ☐ Plants are examined weekly for symptoms of water stress and to assist in determining irrigation scheduling.
- ☐ Monitor soil moisture with a soil probe or soil moisture sensors to assist in scheduling irrigation.
- ☐ Utilize evapotranspiration (ET) data or 'smart' clock technology to schedule irrigation.
- ☐ Cyclic irrigation (short-multiple run times) is employed to minimize surface runoff.
- ☐ Utilize low precipitation sprinklers or low-volume systems to reduce surface runoff.
- ☐ Systems are inspected monthly to check for leaks, broken pipes, and clogged or broken sprinkler heads.
- ☐ Adjust sprinklers to avoid application of water directly to the trunk of trees (can promote disease) or on to concrete surfaces where it can enter storm drains.
- ☐ Establish a hotline or email or other dedicated method where citizens can report leaks and broken sprinkler heads

D. Fertilizing Procedures *(a minimum of three must be selected)*

- ☐ Fertilize only when plants are actively growing to avoid nutrient losses below the root zone.
- ☐ Fertilizer is not applied within 48 hours of a rain event to avoid losses below the root zone and in surface runoff.
- ☐ Soil analyses are conducted in order to determine existing nutrient levels in the soil prior to fertilizing.
- ☐ Turf grass fertilizer maintenance schedules are based on UC recommendations found online at UC Guide for Healthy Lawns.

<http://www.ipm.ucdavis.edu/TOOLS/TURF/MAINTAIN/fertilize.html>

- ☐ Sports turf grass fertilizer maintenance guidelines are based on UC recommendations found in **Establishing and Maintaining the Natural Turf Athletic Field (UCR ANR Publication Number: 21617)**.
- ☐ Overfertilization, especially of trees and shrubs, is avoided to ensure plant growth is not excessively succulent making it more susceptible to pest infestations.
- ☐ Off-target fertilizer applications or spills are cleaned up immediately by sweeping up and applying to landscape or turf or replacing in spreader or bag to ensure material does not enter storm drains.

E. Pruning Procedures *(a minimum of three must be selected)*

- ☐ Damaged or diseased wood is regularly pruned from landscape plants.
- ☐ Trees are pruned according to standards set forth by a professional tree care organization such as the International Society of Arboriculture.
- ☐ Replace plants too large for a space instead of pruning them severely.
- ☐ Unnecessary pruning is avoided as wounds are entry sites for decay and disease organisms.
- ☐ The age and species of the plant is taken into account when determining the time of year to prune. For example, eucalyptus should be pruned in December and January when long-horned beetles are not active.
- ☐ Tree height reduction is discouraged. When deemed necessary by a licensed arborist, the crown reduction method approved by a professional tree care organization is utilized. Topping is never done to reduce tree size. NO TOPPING OR 'HAT RACKING' IS PERMITTED.

II. PEST AND SYMPTOM IDENTIFICATION

A. Insects, Mites, and Snails and Slugs *(a minimum of three must be selected)*

- ☐ Field personnel are trained to recognize basic pests found in the landscape in the following groups: insects, mites, and mollusks.
- ☐ A licensed Pest Control Adviser is on staff or hired to properly identify a pest and the symptoms caused by the pest.

- ☐ Field personnel are trained to utilize disease life cycles to apply treatments when the organism can be controlled most effectively.
- ☐ Field personnel are trained to distinguish between beneficial insects and actual pests found in the landscape (e.g. parasitizing wasps).
- ☐ Unknown samples are submitted to the Orange County Agricultural Commissioner for identification by the county entomologist or plant pathologist.
- ☐ Abiotic or nonliving factors (wind, sunburn, air pollution, etc...) are considered as possible causes of observed symptoms as well as biotic (living) factors.

B. Weeds *(a minimum of one must be selected)*

- ☐ Field personnel are trained to identify common weeds in the landscape.
- ☐ Field personnel are trained to utilize weed life cycles to properly control weeds such as controlling crabgrass utilizing a pre-emergent herbicide applied in mid-January.
- ☐ A licensed Pest Control Adviser is on staff or contracted to properly identify the pest.

C. Diseases *(a minimum of one must be selected)*

- ☐ Field personnel are trained to recognize common diseases or their signs/symptoms in the landscape.
- ☐ Field personnel are trained to utilize disease life cycles to apply treatments when the organism can be controlled most effectively.
- ☐ Field personnel are trained to recognize the difference between biotic and abiotic problems.
- ☐ Field personnel are trained to understand how common diseases are spread throughout the landscape.
- ☐ Disease signs and symptoms are sampled and submitted to the Orange County Agricultural Commissioner for identification by the county plant pathologist.
- ☐ A licensed Pest Control Adviser is on staff or contracted to properly identify the pest.

- ☐ Photographs of disease signs and symptoms are taken and compared to reference guides such as UC IPM's *Pests of Landscape Trees and Shrubs*.

D. Vertebrates *(a minimum of one must be selected)*

- ☐ Field personnel are trained to recognize vertebrate pests and the damage they cause in the landscape.
- ☐ Field personnel are trained to utilize vertebrate behavior to properly control the pest most effectively.
- ☐ At least one field staff member is trained in vertebrate baiting and trapping.
- ☐ A licensed Pest Control Adviser is on staff or contracted to properly identify vertebrate pest.

III. MONITORING FOR PESTS AND PROBLEMS

A. Insect/Mollusk Monitoring Procedures *(a minimum of three must be selected)*

- ☐ Visually inspect plants for insects, mites, snail and slug damage at least monthly; recording results utilizing a method conducive to tracking changes and easy recall of data.
- ☐ Yellow sticky traps are utilized to assess populations of insects.
- ☐ Insects are dislodged from plants by shaking over a collection surface usually consisting of a clipboard with a white sheet of paper.
- ☐ If available for a particular insect, pheromone-baited traps are utilized.
- ☐ Soil-dwelling turf insects are brought to the surface for monitoring by flushing a specific area of soil (i.e. 2' x 2' grid) with plain water or a soapy water mixture.
- ☐ The amount of honeydew (aphids) and frass (caterpillars) present is utilized as an indicator of population levels.

B. Weed Monitoring Procedures *(a minimum of two must be selected)*

- ☐ Landscapes are inspected at least 4 times a year (early winter, early spring, summer and early fall) for weeds in order to determine if and when a weed problem exists.

- ☐ Utilize site surveys to record the location, date, and severity of weed problem; recording results utilizing a method conducive to tracking changes and easy recall of data.
- ☐ Count and record the number of weeds encountered at periodic intervals (e.g. every 1 to 2 feet) along a straight line transecting a landscapes area or within a selected area, for example 4 sq. ft. samples done in random places in a bed or turf area.

C. Disease Monitoring Procedures *(a minimum of two must be selected)*

- ☐ Landscapes are regularly checked for conditions, such as overwatering and injuries, which promote disease.
- ☐ Landscapes are checked monthly, at a minimum, for disease symptoms and signs. Disease prone plants are checked more frequently.
- ☐ Records are kept utilizing a method conducive to tracking changes and easy recall of data of each landscape inspection noting, date when disease signs and symptoms were first noticed and the current environmental conditions and soil moisture levels.

D. Vertebrate Monitoring Procedures *(a minimum of two must be selected)*

- ☐ Landscapes are regularly inspected for vertebrate presence either by damage caused by animal, actual animal sightings, and/or droppings.
- ☐ Records are kept of the absence or presence of actual vertebrates, the damage caused, and/or the presence or absence of droppings.
- ☐ Maps are created and updated at least twice a year, recording area of high vertebrate damage or signs (such as gopher mounds).

IV. ACTION THRESHOLDS AND GUIDELINES

A. Insect/Mollusk Thresholds and Guidelines *(a minimum of one must be selected)*

- ☐ Insect tolerance levels are established based on the public's acceptance of damage to the landscape or a certain level of nuisance pests (i.e. ants), the actual plant species in the landscape, and long-term monitoring and knowledge of pests causing the damage.

- ☐ Thresholds are based on levels where reasonable control of the pest can be achieved with minimum impact on the environment.
- ☐ Insect monitoring records are utilized to establish threshold levels for the implementation of control strategies. For example, the threshold for the presence of aphids on a rose garden at City Hall is low, while in a native shrub border it might be considerably higher.

B. Weed Thresholds and Guidelines *(a minimum of one must be selected)*

- ☐ Weed tolerance levels are established based on public safety or the public's acceptance and the resources available to manage the landscape at that level.
- ☐ Weed monitoring records are utilized to rank the percentage of the landscape area infested (none, light, moderate, heavy, or very heavy) with weeds.
- ☐ Public areas are ranked according to high, medium, or low level of weed control and management conducted according to levels set for each rank (see Appendix A)

C. Disease Thresholds and Guidelines *(a minimum of one must be selected)*

- ☐ Disease tolerance levels are established based on the public's acceptance and the resources available to manage the landscape at the level required.
- ☐ Disease monitoring records are utilized to establish threshold levels for the implementation of control strategies. For example, the threshold for the presence of powdery mildew on roses at City Hall is much lower than the threshold for its presence on Euonymus in a parking lot at a city sports park.

D. Vertebrate Thresholds and Guidelines *(a minimum of one must be selected)*

- ☐ Vertebrate tolerance levels are established based on public safety, the public's acceptance and the resources available to manage the landscape at the level required.
- ☐ Vertebrate monitoring records are utilized to establish threshold levels for the implementation of control strategies. For example, the threshold for the presence of gopher mounds in a sport field is zero, while in a native shrub border it might be two before a trapping strategy is implemented.

V. SELECTION OF APPROPRIATE MANAGEMENT METHODS

A. Insect/Mollusk Management Methods

Cultural/Mechanical/Physical Control Methods (a minimum of three methods must be selected)

- ☐ Sticky barriers are applied to trunks of trees and large shrubs to prevent ants and other wingless invertebrates from plant canopies.
- ☐ Small insect infestations are removed by pruning infested plant parts.
- ☐ Copper bands are installed around base of trees or planting areas where snail and slug infestations are prevalent.
- ☐ Plant canopies are thinned to increase light penetration to exposure certain soft-bodied insects (soft-scale) as well as snails and slugs to heat.
- ☐ Strong streams of water are used to dislodge insects such as aphids and whiteflies, from leaves.
- ☐ Avoid use of plants that snails and slugs use for shelter.
- ☐ Avoid irrigating between 5pm and 5am when moisture remains on plant material for several hours.

Biological Control Methods (a minimum of one method must be selected)

- ☐ Persistent broad-spectrum pesticides are avoided, especially if biological control of an insect has been established by UC researchers. Examples include parasitoid wasps controlling *Eugenia Psyllids*, Giant Whitefly, and Ash Whitefly.
- ☐ Natural predators (beneficial insects) are augmented with purchases of additional predators from commercially available resources.

Pesticide Control Methods (a minimum of five methods from must be selected)

- ☐ The most selective, rather than broad-spectrum, pesticide is used
- ☐ If available for controlling a particular insect, biological and botanical pesticides are selected
- ☐ Insecticidal soaps are utilized to control infestations of soft-bodied insects such as aphids, thrips, and immature scales.

- ☐ Horticultural oils (neem oil and narrow-range refined oils) are utilized to control infestations of soft-bodied immature and adult insects such as aphids, scales, and whiteflies.
- ☐ Pesticides are only utilized when the potential for impacts to the environment, especially water quality, are minimized.
- ☐ Equipment is calibrated prior to the application of the insecticide to avoid excess material being applied to the landscape environment.
- ☐ Applicators are trained to not apply pesticides to hard surfaces and to not allow any pesticide to enter the storm drain system
- ☐ Spot treatments are utilized rather than broadcast methods
- ☐ Insecticide/fertilizer combinations are only used if appropriate timing for BOTH the insecticide application and the fertilizer application.

B. Weed Management Methods

Cultural, Mechanical, and Physical Control Methods (a minimum of three methods must be selected)

- ☐ Timers are set to avoid overwatering as weeds establish in areas where soil moisture is excessive.
- ☐ Drainage is managed to avoid wet areas.
- ☐ Weeds are removed from a site prior to planting.
- ☐ Mower height is adjusted to turf species and time of year.
- ☐ Mower is washed after mowing a weedy site.
- ☐ Hand-pulling, mowing, trimmers/brushcutters, flaming, hoeing, and rototilling around landscape plants are the main methods utilized to control annual weeds and young perennial weeds.
- ☐ Soil solarization is utilized to control some annual and perennial weed species.
- ☐ Bare soil areas are covered with a thick layer of mulch to suppress weeds and conserve soil moisture.

- ☐ Soil, mulch, and plant material is weed-free before it is introduced into the landscape.

Pesticide Control Methods (a minimum of three methods must be selected)

- ☐ Spot treatments are utilized rather than broadcast methods.
- ☐ Herbicide/fertilizer combinations are only used if appropriate timing for BOTH the herbicide application and the fertilizer application.
- ☐ Herbicides are utilized according to established thresholds (see Appendix A).
- ☐ Organically acceptable herbicides (shown to be effective through science-based research) are used where appropriate.
- ☐ Herbicides are applied to the stage of weed growth most susceptible to the chemical.
- ☐ Equipment is calibrated prior to the application of the herbicide to avoid excess material being applied to the landscape environment.

C. Disease Management Methods

Cultural, Mechanical, and Physical Control Methods (a minimum of three methods must be selected)

- ☐ Prune out and dispose of localized areas of diseased plants.
- ☐ Pathogen-infested plant parts are removed from the soil surface area to reduce certain pathogens (e.g. Camellia Petal Blight).
- ☐ Pruning tools are sterilized (e.g. a diluted bleach solution) between plants to prevent the spread of pathogen to other plants.
- ☐ Proper irrigation and fertilization are maintained to prevent plant stress, water-logging, and subsequent susceptibility to disease.
- ☐ Soil solarization is utilized to control soil pathogens in annual beds where it is most effective.
- ☐ Mulch is kept at least 6" from base of plants to avoid excessive moisture around crown possibly resulting in crown rots and is no deeper than 4"

- ☐ Replace disease-prone plants with non-susceptible species.

Pesticide Control Methods (a minimum of two methods must be selected)

- ☐ Preventative fungicides and bactericides are only used where diseases can be predicted from environmental conditions and applied prior to infection or the appearance of symptoms.
- ☐ Synthetic fungicides are used sparingly in the landscape and only in high visibility areas in order to minimize development of resistance.
- ☐ Organic fungicides and bactericides are utilized in combination with cultural, mechanical, and physical control methods in order to improve their effectiveness.
- ☐ Copper-based fungicides are only utilized in situations where its entry into surface runoff and storm drains is virtually impossible and after consultation with PCA and IPM coordinator.
- ☐ Mycopesticides, commercially available beneficial microorganisms, are used where appropriate.
- ☐ Fungicides classes are rotated to avoid resistance.

D. Vertebrate Management Methods

Cultural and Physical Control Methods (a minimum of two methods must be selected)

- ☐ Groundcovers are maintained such that they do not harbor rats.
- ☐ Shrubs pruned at least 1 foot from the ground (rats).
- ☐ Sources of drinking water removed (leaky faucets, puddles).
- ☐ Trash cans have lids and are emptied daily (rats).
- ☐ Screens or other barriers installed under structures that have a space between soil and floor (rabbits).
- ☐ Habitat modification, based on pest biology is used to reduce shelter.
- ☐ Trapping is used for gophers when safe and practical.

- ☐ Kill traps used for ground squirrels and rabbits, are checked daily, and in places not accessible by children or non-target animals.
- ☐ Gas cartridges are used for ground squirrels according to UC recommendations.

Pesticide Control Methods (a minimum of two methods must be selected)

- ☐ Anti-coagulant baits are used and applied according to label and UC recommendations.
- ☐ Bait is applied in a manner that non-target animals do not access to it.
- ☐ Restricted use rodenticides, aluminum or zinc phosphide, are used only after applicator has been trained for that product or only by a wildlife management contractor.

VI. GENERAL PESTICIDE MANAGEMENT PRACTICES

(all practices listed below must be selected)

- ☐ Restricted use pesticides are only used when no other alternatives are practical.
- ☐ If pesticides are necessary, CAUTION-labeled pesticides are considered before more toxic alternatives.
- ☐ Only small quantities of pesticides are purchased eliminating the need for stockpiling.
- ☐ MSDSs are regularly updated to reflect new pesticides or label changes to pesticides in storage.

Appendix A

Ranking public areas for weeds (or other pest) management:

Areas ranked as **HIGH** may include areas that the public sees and expects to be well-maintained. Examples are entrances to public buildings such as city hall and libraries.

These areas are allowed to use pesticides based on established thresholds.

Areas ranked as **MEDIUM** may include areas the public sees but does not expect a high level of maintenance. Examples are landscaped areas away from the entrance, recreational and picnic areas. These areas can tolerate a higher level of weeds.

These areas are allowed to use pesticides but the threshold is much higher and pesticides are used infrequently and only after consultation with IPM coordinator.

Areas ranked as **LOW** may include areas the public rarely sees or does not expect a high level of maintenance. Examples are medians, landscaped areas in parking lots, wildlands. These areas can tolerate a higher level of weeds.

These areas are not allowed to use pesticides except in extreme cases and only after consultation with IPM coordinator.

6.0 PUBLIC EDUCATION

6.1 INTRODUCTION

Water quality protection-themed education and outreach can contribute to the protection of creeks, streams and coastal waters. By encouraging and fostering the adoption of behaviors protective of water quality by the general public and by regulating businesses and commerce, the City may reduce the sources and pathways of pollution arising from common daily activities.

The City supports and participates in the countywide public education program *H₂OC*, which is also the principal means of ensuring compliance with the public education and outreach elements of the Fifth Term Permit. In addition to this effort, the City conducts local programs to additionally increase awareness and foster environmental protective behaviors. The below list provides contact information for the primary and secondary City representatives responsible for outreaching to the public concerning stormwater pollution prevention.

Public Works Department

Primary

Contact Name: Stormwater Program Manager
Telephone: 949/635-1800 x 6503
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Secondary

Contact Name: E. (Max) Maximous
Title: Public Works Director/City Engineer
Telephone: 949/635-1800 x 6505
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

6.2 REGULATORY REQUIREMENTS

Federal regulations require a description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials (Federal Register/Vol. 55, No. 222, p. 48071). In addition, the regulations also specify education programs for construction site operators and a program to facilitate public reporting of illicit discharges.

The Public Education Program was developed as a model for fulfilling the public education requirements of:

- Section XIII of the Santa Ana Regional Water Quality Control Board (RWQCB) Municipal NPDES Stormwater permit, Order No. R8-2009-0030; and
- Section E.7 of the Fifth Term Permit.

6.3 MODEL PUBLIC EDUCATION PROGRAM

The City supports *H₂OC*, the dynamic countywide outreach campaign. This campaign is built upon a foundation of cooperative Permittee development of programs and materials,

SECTION 6, PUBLIC EDUCATION

implementation at countywide and city levels, and the validation of its success through the use of opinion surveys and other direct measures of public behavior.

Education efforts of *H₂OC* follow a two-pronged approach comprising large-scale broad residential and business outreach as part of a foundational campaign and small-scale behavior-based action campaigns to build a base of residents from which the Education Program can document adoption of specific BMPs.

The NPDES Public Education Sub-Committee (Committee) comprised of Copermittee representatives meets monthly to collaboratively direct *H₂OC*. The City participates in the Committee to ensure program strategies and materials developed are appropriate to residents and businesses within the City.

The objectives of the Model Public Education Program are to provide the following:

- Increase urban runoff pollution awareness;
- Increase awareness for specific segments of the community of the importance of participation in controlling non-point source pollution;
- Provide information on alternative behaviors and practices that can contribute to controlling non-point source pollution;
- Provide the public with opportunities to participate in the development, implementation, and refinement of the Water Quality Improvement Plan (WQIP); and
- Track public awareness in the educational programs and changes in behavior toward activities more protective of water quality.

6.3.1 Foundational Campaign Elements

The foundational campaign forms the underpinning of *H₂OC* based on maintaining a consistent water quality message and includes overall program branding, school and business outreach, pollutant-specific and residential program outreach and annual development and implementation of a media plan. The primary goal of the foundational campaign is to achieve permit compliance by increasing knowledge of residents and businesses and changing behavior over time. The success of these efforts is measured through the achievement of impressions and building engagement in *H₂OC*.

6.3.1.1 School Outreach

H₂OC uses agreements and relationships with organizations that outreach to school-aged children to deliver messaging on pollution prevention. These organizations, such as the Orange County Department of Education (OCDE), Discovery Science Center (DSC), the Pacific Marine Mammal Center, and the Ocean Institute, provide an avenue for disseminating materials and messaging in a format conducive to student learning. Materials developed to inform children of stormwater pollution prevention behaviors are designed to encourage adoption of BMPs at school and in the home, as well as meet California Content Standards.

SECTION 6, PUBLIC EDUCATION

6.3.1.2 Business Outreach

The City will continue to distribute materials developed specifically for food service establishments (FSEs), mobile businesses, automotive service centers and detailing establishments, pet care businesses, pest control operators, landscape service companies, gasoline service stations and the land development and construction industry.

Previously developed Outreach to the construction industry will be supplemented by materials promoting residential and commercial implementation of LID techniques, retrofitting of existing development and encouragement of infiltration.

6.3.1.3 Pollutant-Specific Outreach

Outreach materials are developed for residents and businesses in Orange County regarding specific pollutants of concern and reviewed annually and updated by *H₂OC* as needed. City-specific materials supplement these efforts ensuring that pollution issues specific to the City are adequately addressed. Pollutant-specific outreach includes proper use and disposal of pesticides and fertilizers, proper disposal of pet waste, residential automobile washing and proper disposal of household hazardous waste. Pollutant-specific outreach to businesses will focus on water conservation, reduction of metals in runoff and proper use and disposal of chemicals and other hazardous wastes.

6.3.1.4 Residential Program

The Residential Program includes recommendations ("*Tips*") for pollution-prevention methods for residential areas. Specific pollution prevention practices identified for each residential activity that poses a threat to water quality are provided in the activity fact sheets presented in **Exhibit 9.2**. The City uses the implementation strategies discussed in **Section 9.5.4** to encourage pollution prevention in residential areas.

In addition, the City will facilitate proper management and disposal of used oil, toxic materials and other household hazardous wastes (HHWs) by providing educational materials describing the operation of the County's principal Household Hazardous Waste Collection Centers.

6.3.1.5 Speakers Bureau

A speakers' bureau was developed for *H₂OC* to supplement the previous outreach efforts through local chambers of commerce. On behalf of the Permittees, the County as Principal Permittee distributes requests for presentations to local groups such as chambers of commerce, Rotary Clubs, Kiwanis Clubs, Key Clubs, National Honor Society groups and environmental groups (e.g., Sierra Club).

6.3.1.6 Common Interest Areas/Homeowner Association Activities Program

The Common Interest Area (CIA)/Homeowner Association Area (HOA) Activities Program includes specifications for pollution-prevention methods for CIA/HOA areas and is described in **DAMP Section 9.6** and **Section 9.6**.

SECTION 6, PUBLIC EDUCATION

6.3.2 Action Campaigns

To document sustainable behavior change, *H₂OC* pairs general pollution prevention outreach (via the Foundational Campaign) with localized action campaigns that focus on changing specific behaviors in small, community-based target groups. The action campaigns utilize Community-Based Social Marketing (CBSM)¹ techniques to document behavior change on a more frequent scale.

Community-Based Social Marketing involves four basic steps:

1. Identifying barriers and motivators to an activity;
2. Developing a strategy that utilizes tools to leverage those barriers and motivators in order to affect behavior change;
3. Pilot the strategy; and
4. Evaluate the strategy and refine it for future implementation.

By simplifying campaign messaging and requesting adoption of specific BMPs, *H₂OC* seeks to remove the uncertainty caused by offering a large number of stormwater pollution-preventing behaviors in favor of one single high-impact action.

Overwatering is Out

The ultimate goal of the *Overwatering is Out* action campaign is to improve water quality through eliminating residential irrigation runoff. This is accomplished by encouraging residents to sign up for program messaging (i.e., tips to reduce overwatering) and to commit to making changes to their irrigation habits or landscape to reduce runoff. Built into the program is also the ability to quantify behavior changes that are the direct result of the action campaign.

The City supports the *Overwatering is Out* action campaign by promoting the program at city events and including a link to www.overwateringisout.org on the city website.

6.4 CITY EDUCATION PROGRAM

The City implements a City-specific public education campaign to complement *H₂OC* to address local issues and target constituencies that are best reached through a local, rather than a countywide, effort.

6.4.1 Public Education Material Distribution

The City makes educational materials available to its residents at public facilities such as the City Hall, Rancho Santa Margarita Public Library, the Bell Tower Regional Community Center, and on the City website.

¹ McKenzie-Mohr, Doug & Smith, William (1999). *Fostering sustainable behavior: An introduction to community-based social marketing*. Gabriola Island, B.C.: New Society (www.CBSM.com)

SECTION 6, PUBLIC EDUCATION

6.4.2 Employee Training and Outreach

In addition to the overall comprehensive training effort, the City conducts broad educational outreach on water quality issues to all its employees.

The following approaches have been identified:

- Conducting meetings with new employees to inform them of water quality issues and the City's responsibilities;
- Placing information on the City's internal website and/or in the City's employee newsletter;
- Routing relevant newspaper and magazine articles to specific departments or personnel; and
- Hold meetings with departments to help fine-tune public outreach based on their experiences and observations. For example, a certain department representative might say that the residents or businesses it works with have a good understanding of one concept, but need more information about another. Based on this information, the City can produce or obtain educational materials that address these issues.

6.4.3 Outreach Events

The City participates in at least one community, regional or countywide event per year. Materials developed by H₂OC encourage the public to report illegal discharges/dumping and include the hotline reporting number. Brochures and other materials also reference the countywide website www.ocwatersheds.com; contained therein are brochures, factsheets and other outreach materials covering a wide range of topics from household use of fertilizers and pesticides to pet care to automotive maintenance activities.

6.4.4 Industrial/Commercial and Construction Outreach

Outreach to Industrial Site Owners and Operators

The City distributes educational materials during inspections to educate industrial facility owners and operators about BMPs. These efforts target employees, property management and focus on specific industrial activities. The Industrial/Commercial Program is further described in **DAMP Section 9.2** and **Section 9.2**.

The following approaches have been identified:

- Mailing or delivering brochures with information about regulations, requirements and industry-specific BMPs to industrial site owners/operators;
- Distributing BMP information and educating owners and operators during inspections or other interactions with City staff (**DAMP Section 9.2.3** and **Section 9.2.3** of this LIP);
- Providing information when industrial companies apply for and/or revise certificates of occupancy; and

SECTION 6, PUBLIC EDUCATION

- Conducting seminars or workshops for targeted industries that have a high potential for pollution. The workshops would cover BMPs for pollution prevention and how their actions can help protect water quality. The City may partner with neighboring cities in a common watershed to maximize attendance and understanding of industries' responsibilities in the watershed.

Outreach to Commercial Site Owners and Operators

During commercial facility inspections, target audiences for BMP materials include employees, property management, franchise chain owners and merchant associations. The Industrial/Commercial Program is further described in **DAMP Section 9.2** and **Section 9.2** of this LIP.

The following approaches have been identified:

- Providing information about BMPs and regulations when commercial owners apply for certificates of occupancy;
- Mailing or delivering brochures on regulations, requirements and business-specific BMPs;
- Distributing BMP information and educating owners and operators during inspections or other interactions with City staff (**DAMP Section 9.2.3** and **Section 9.2.3** of this LIP); and
- Conducting seminars or workshops for targeted commercial sites that have a high potential for pollution. The workshops would cover BMPs for pollution prevention and how their actions can help protect water quality. The City may partner with neighboring cities in a common watershed to maximize attendance and understanding of businesses' responsibilities in the watershed.

Outreach to Construction Site Contractors/Developers

The City distributes BMP and pollution prevention information, including erosion and sediment control, low-impact development (LID) techniques, runoff control and pollutants of concern during construction site inspections. The Construction Program is further described in **DAMP Section 8.2** and **Section 8.2** of this LIP.

The following approaches have been identified:

- Distributing BMP materials to developers, contractors, residential owners and construction companies when City permits are issued;
- Distributing BMP materials at construction sites within the City;
- Sending a letter to construction sites prior to each rainy season re-emphasizing how runoff is created and reminding the operators to update their BMPs;
- Maintaining a supply of informational materials at City offices and facilities for interested parties to obtain during business hours throughout the year.; and
- Requiring that companies submitting construction bids for City Requests for Proposals (RFPs) include language agreeing to follow BMPs.

SECTION 6, PUBLIC EDUCATION

6.4.5 Outreach to Quasi-Governmental Agencies/Districts

The City works to reach agencies such as water districts, school districts, transportation agencies, utility districts, fire and police departments and service providers (i.e., waste haulers).

The following approaches have been identified:

- Providing regulatory and BMP information based on the industry (i.e., information about oil spills and cleanup methods for transportation agencies);
- Forming partnerships with agencies to help distribute information through means such as billing inserts;
- Educating personnel during inspections or other interaction with municipal personnel; and
- Assisting school districts with education programs that meet the Phase I and Phase II public education requirements.

6.4.6 Residential, General Public and School Outreach

Outreach to Residential Community and General Public

Educating the residential community and general public within the City is key to a successful outreach plan. The City has opportunities to supplement the Countywide Program through its daily interactions with its citizenry and in accordance with the Residential Program described above in **Section 6.2.7**, in **DAMP Section 9.5** and **Section 9.5** of this LIP.

Residents engage in numerous activities that can affect stormwater quality, including washing cars, disposing of pet waste, handling hazardous substances and maintaining their lawns. Educating children and adults about these matters can have a tremendous impact on changing behaviors. It is very important that people understand not just what to do or what not to do, but why it is important. When people understand the impact of their actions, they will be more likely to change. Because members of the general public are also the same people who own, work at or patronize commercial or industrial sites, the heightened awareness gained through general public outreach will also assist in those other areas.

Reaching school children is important for two reasons. First, it educates the next generation of adults at an early age and increases the likelihood that they will engage in responsible behavior in the future. Second, children are able to influence their parents by asking for assistance with stormwater projects for school, sharing brochures or repeating information they have learned.

The City uses a variety of techniques including:

- Printing information about stormwater issues in the City's newsletter.
- Publishing information about stormwater issues on the City's website www.cityofrsm.org and providing a link to other websites such as the Principal Permittee's stormwater site, www.ocwatersheds.com.

SECTION 6, PUBLIC EDUCATION

- Maintaining a supply of brochures and promotional materials at public buildings including City Hall, the Rancho Santa Margarita Library, and the Bell Tower Regional Community Center.
- Developing and disseminating City-specific publications targeting specific audiences.
- Annually participating in community events by hosting a booth with informational and promotional materials.
- Presenting information to community or social groups, as requested.
- Conducting Pollution Prevention workshops and training seminars targeting HOA and property management staff.
- Providing educational materials and information to HOAs and property management companies for distribution to interested residents.
- Stenciling storm drains to remind residents that materials entering the storm drain wind up in the ocean.
- Working with other jurisdictions, including the Principal Permittee and other Permittees, on joint outreach programs.
- Sharing and utilizing the materials of the Principal Permittee and other jurisdictions, and maintaining a common theme among all materials used and produced by the City.

The following approaches have been identified for school children:

- Offering child-friendly brochures, coloring books or promotional materials to schools and school districts within the City.
- Offering to provide speakers for assemblies.
- Supporting the Principal Permittee in developing a comprehensive school program in conjunction with other Permittees, water agencies and school districts.

6.4.7 Jurisdictional Program Effectiveness Assessment

The City reports results of its public education and outreach efforts on an annual basis in its Program Effectiveness Assessment (PEA). The Model Public Education Program will be annually evaluated in the WQIP Annual Report.

7.0 NEW DEVELOPMENT/SIGNIFICANT REDEVELOPMENT COMPONENT

7.1 Introduction

Watershed urbanization can adversely impact waterways and coastal waters and give rise to the symptoms of Urban Stream Syndrome (See **Section 1.1**). To reduce these impacts, the City has established design standards for new development and significant redevelopment projects that require implementation of BMPs including Low Impact Development (LID) techniques, hydromodification controls, source controls and treatment controls. Implementation of these design standards ensures that the hydrologic impacts that can arise from watershed imperviousness are mitigated, and consequently, this key element of the Program addresses all of the HPWQCs identified in the WQIP.

7.1.1 Program Overview

The New Development and Significant Redevelopment Program links new development BMP design, construction and operation to the earlier phases of new development project planning encompassed by the General Plan, environmental review process and discretionary development planning and review and approval processes. The General Plan specifies policies that guide new development. The environmental review process examines impacts from proposed new development with respect to the General Plan policies and many environmental issues, including water quality, and includes consideration of mitigation measures to reduce any identified significant impacts.

The development planning and permit approval processes carry forward requirements in the form of CEQA commitments and mitigation measures, conditions of approval, design specifications, tracking, and inspection and enforcement actions. These three “front-end” planning processes must be coordinated and linked to the later phases of BMP design, construction and operation for new development/significant redevelopment to help ensure stormwater quality protection features are planned, evaluated and selected and designed in accordance with goals for the protection of water quality and other environmental resources.

7.2 Organization Structure

The departments responsible for overseeing, implementing, and enforcing the new development/redevelopment program are identified below.

Development Services Department

Title: Development Services Director
Telephone: 949/635-1800 x 6707
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

The Development Services Department is responsible for:

- Implementing the policies and objectives of the City set forth in the General Plan and Zoning Ordinance.
- Reviewing proposed developments for consistency with standards and policies relating to land use and preservation of the environment.

- Preparing for and supporting discretionary review and approval actions taken by the Planning Commission and City Council related to new development and significant redevelopment projects.
- Overseeing that all building construction complies with adopted codes and that permitting and licensing systems are efficient and serve the needs of the public, as well as the City.

Public Works Department

Title: Assistant City Engineer

Telephone: 949/635-1800 x 6507

Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

The Public Works Department is responsible for:

- Administration of City public improvement projects and ensuring construction in the public right-of-way complies with adopted codes and engineering standards.
- Administration of City building improvement projects and ensuring construction complies with adopted codes and engineering standards.

7.3 General Plan Assessment

During the period of the Fourth Permit Term, the City reviewed and revised as necessary its General Plan or equivalent plan, (e.g., Comprehensive, Master, or Community Plan) for the purpose of providing effective water quality and watershed protection principles and policies that direct land-use decisions and require implementation of consistent water quality protection measures for all development and redevelopment projects.

7.4 CEQA Environmental Review Process

During the period of the Fourth Permit Term, the City reviewed and revised as necessary its environmental review process to include requirements for evaluation of water quality effects and identification of appropriate mitigation measures.

7.5 Development Project Review, Approval and Permitting

7.5.1 Project Review, Approval, and Permitting Process Overview

During project review, approval, and permitting, the City shall require new development and significant redevelopment projects to address the quality and quantity of stormwater runoff through the incorporation of permanent (post-construction) BMPs in project design. The City shall require project-specific Water Quality Management Plans (Project WQMPs) for all private and public projects that:

- Qualify as one of the Priority Project Categories listed in **Table 7.1**.

The City shall require completion of a project-specific Non-Priority Project Water Quality Checklist for all public and private projects that:

- Do not qualify as one of the Priority Project Categories but meet one of the following criteria:
 - Fall under the planning and building authority of the City;
 - Do not meet any of the Priority Development Project categories; and
 - Have a significant nexus to water quality.

Table 7.1. Priority Project Categories

Priority Project Categories
New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
<p>New and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses:</p> <ul style="list-style-type: none"> (i) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812). (ii) Hillside development projects. This category includes development on any natural slope that is twenty-five percent (25%) or greater. (iii) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. (iv) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
New or redevelopment projects that create and/or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharge directly to an Environmentally Sensitive Area (ESA). "Discharge directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e., not commingled with flows from adjacent lands).

Priority Project Categories
New development projects, or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, that support one or more of the following uses: <ul style="list-style-type: none">(i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.(ii) Retail gasoline outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.
New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post-construction.

The Model WQMP and TGD contain all the information specified for the BMP Design Manual and should for purposes of compliance be considered to be a BMP Design Manual¹.

The primary difference between a Priority Project and a Non-Priority Project is that Priority Projects are required to fully evaluate and incorporate LID BMPs to meet the quantitative requirements of the Permit and/or demonstrate infeasibility and participate in alternative compliance options, whereas Non-Priority Projects must incorporate all applicable source control BMPs and incorporate to the extent possible site design BMPs. LID BMPs and implement LID BMPs where applicable and feasible.

7.5.2 Public Agency Projects

The City has incorporated the requirement for a Project WQMP into the process of planning, design, approval, and construction oversight of its public agency projects that qualify as Priority Projects based on similar characteristics as one of the categories listed in Table 7.2. Depending upon the type of public agency project being planned or designed, the City's or the design architect/engineering contractor will prepare the Project WQMP for a public facility project.

The City may develop a separate "Master Project WQMP" for all anticipated future projects with similar characteristics based upon the requirements outlined in this document. A Master Project WQMP would list all of the qualifying streets, roads, and highways projects anticipated to occur within the City's jurisdiction over a given time period and the proposed methods of compliance with this Model WQMP.

Non-Priority Project Water Quality Checklist

7.5.3 Conditions of Approval

The City uses the following standard conditions of approval to protect receiving water quality from the short-term and long-term impacts of new development and redevelopment:

¹ The BMP Design Manual was previously referred to as the Standard Storm Water Mitigation Plan under Order No. R8-2009-0002.

General Conditions

The following conditions, or conditions substantially similar, will be applied by the City to the project identified in 7.5.1:

- Prior to the issuance of any grading or building permits for projects that disturb one (1) or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, the applicant shall demonstrate that coverage has been obtained under California's Construction General Permit (Order 2009-0009-DWQ) by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for City review on request.
- Prior to the issuance of any grading or building permits or prior to recordation upon subdivision of land if determined applicable by the City Building Official, the applicant shall submit to the City for review and approval a Water Quality Management Plan that:
 - Discusses regional or watershed programs (if applicable),
 - Identifies selected LID and Hydromodification (as applicable) BMPs,
 - Identifies any applicable waivers, alternative programs, and Treatment Control BMPs,
 - Incorporates the applicable Source Control BMPs,
 - Describes long-term operation and maintenance requirements for BMPs,
 - Identifies the entity that will be responsible for long-term operation and maintenance of the BMPs, and
 - Describes the mechanism for funding the long-term operation and maintenance of the BMPs.
- Prior to grading or building permit close-out and/or the issuance of a certificate of use or a certificate of occupancy, the applicant shall:
 - Demonstrate that all LID, hydromodification and other structural best management practices (BMPs) described in the Project WQMP have been constructed and installed in conformance with approved plans and specifications,
 - Demonstrate that applicant is prepared to implement all non-structural BMPs described in the Project WQMP,
 - Demonstrate that an adequate number of copies of the project's approved final Project WQMP are available for the future property occupants, and

- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs (optional if included in final Project WQMP).

7.5.4 Review and Approval of Project WQMPs

Project WQMPs are required to be submitted as conceptual or preliminary during the discretionary or land use entitlement phase, with the level of detail to ensure the project design meets the LID permit requirements. The level of detail in a Conceptual/Preliminary Project WQMP can vary somewhat depending upon the level of detail known at the time discretionary project approval is sought, but the minimum requirements listed in the Model WQMP and TGD must be satisfied. The city may request additional information and submittal before approving a Conceptual/Preliminary Project WQMP.

The review and approval of a Project WQMP is one of the last critical points at which the City can impose conditions or standards that will minimize the impacts of urban runoff and stormwater pollution on local water resources. The City may request additional information and submittal before approving a Project WQMP. Prior to issuance of grading or building permits, the project applicant must update the Conceptual/Preliminary Project WQMP and submit the completed Project WQMP for review and approval. The Model WQMP and TGD will be used as a guide for preparation of a Conceptual/Preliminary WQMP and/or a Project WQMP. The WQMP Template can be used by a project proponent to complete a Preliminary/Conceptual and/or Final WQMP for a specific project.

When reviewing Conceptual/Preliminary WQMPs and Project WQMPs submitted for approval, Permittees will assess the potential project impacts on receiving waters and ensure that the Project WQMP adequately identifies such impacts, including all pollutants and conditions of concern. The City will examine all identified BMPs, as a whole, to ensure that they address the pollutants and conditions of concern identified within the Project WQMP. LID and hydromodification control BMPs should be considered and incorporated at the earliest conceptual planning stages of a project for early review, to potentially avoid necessary project changes and delays during the review and approval process. For all projects requiring discretionary or land use entitlement actions, a Conceptual or Preliminary WQMP should be submitted as part of the application for project approval during the environmental review phase (CEQA) and must be submitted prior to approval of entitlements and Planning Commission approval of a project or other public hearing.

The City will determine when a Conceptual or Preliminary WQMP must be submitted during the planning process for different planning actions which may vary depending upon the phase of planning for the Project. However, it is strongly recommended that the Conceptual or Preliminary WQMP be prepared and submitted during the preparation of environmental documentation for compliance with CEQA. The local jurisdiction will assure that a final Project WQMP is submitted for review and approval prior to issuance of grading or building permits.

A Conceptual or Preliminary WQMP supports the CEQA process and provides documentation to support a checklist for an initial Study and Negative Declaration or Mitigated Negative Declaration, or serves as the basis for the water quality section of an EIR. It should also serve as the basis for the Lead Agency and Responsible Agency to conclude that the MEP standard is being met by serving as the basis that selected BMPs will not have the potential to cause significant effects and/or that the effects have been mitigated, and “are not significant with

mitigation". The Conceptual or Preliminary WQMP should be circulated with the CEQA document or summarized within the circulated CEQA document.

The Final Project WQMP must be consistent with the Conceptual or Preliminary WQMP. If there are any substantial differences, the City must make a determination that the differences do not diminish the effectiveness of the BMPs to mitigate or address the project's potential impacts to water quality. Furthermore, any changes must not result in any new environmental impacts not previously disclosed in the local jurisdiction's circulated environmental document(s). If the changes diminish the project's ability to mitigate or address its water quality impacts, or result in previously undisclosed environmental impacts, the City should require that the project be subject to further environmental review.

The Permittees recognize the importance of understanding the physical, chemical and biological conditions of the receiving waters at a watershed scale and the impact of incremental projects on these conditions and will continue to enlarge their understanding of receiving waters on a watershed scale through implementation of the watershed chapters of the DAMP. This information will assist in providing a strong linkage between the planning process and the development review and permitting process as required by the Permits. The Project WQMP is a project planning level document and as such is not expected to contain final BMP design drawings and details (these will be in the construction plans). However, the Project WQMP must identify and locate selected BMPs, provide design parameters including hydraulic sizing of treatment BMPs and contain sufficient BMP detail to ensure the BMPs are adequately sized. BMP fact sheets can be used in conjunction with project-specific design parameters and sizing to convey design intent. The Technical Guidance Document contains a number of BMP fact sheets that can be used for most LID BMPs. There are a number of resources listed in the Model WQMP for Site Design, Source Control, and Treatment Control BMPs that should be considered to guide the design and implementation of the BMPs. Each Project WQMP will be stored within the City's files, and will continue with the property after the completion of the construction phase, and the City may require that the terms, conditions and requirements be recorded with the County Recorder's office by the property owner or any successive owner as authorized by the Water Quality Ordinance.

7.5.5 Review and Approval of Non-Priority Project Water Quality Plans

The review and approval of a Non-Priority Project Water Quality Checklist follows similar considerations as review of Project WQMPs. The Non-Priority Project Water Quality Checklists **Exhibit 7.V of LIP Section 7.**

7.5.6 Plan Check: Issuance of Grading or Building Permits

The construction plans submitted by the applicant for plan check must incorporate all of the structural BMPs identified in an approved Project WQMP. Therefore, the City will require applicants to obtain approval of the final Project WQMP prior to issuing a building or grading permit.

The final Project WQMP must include calculations to support the structural integrity of the selected LID or treatment control BMP as appropriate and be prepared by or under the direction of a California Registered Civil Engineer and affixed with their stamp.

Plan Check for Private Projects with Land Use Permits

For projects with land use permits, the City shall review the environmental (CEQA) documentation (including the Mitigation Monitoring and Reporting Program), the conditions of approval and the approved Project WQMP for an understanding of the water quality issues and structural BMPs required. The City shall review construction plans for conformity with the approved Project WQMP. If the selected BMPs were approved in concept during the land use entitlement process, the City shall require the applicant to submit detailed construction plans showing locations and design details of all BMPs that are in substantial conformance with the preliminary approvals. The City shall review a project's construction plans to assure that the plans are consistent with the BMP design criteria and guidance provided in **DAMP Section 7, Exhibit 7.III.**

Plan Check for Projects with By-Right Zoning (Ministerial Projects)

For qualifying projects with by-right zoning or projects that do not involve discretionary authority and review, applicants will typically submit a grading or building permit application consisting of a proposed Project WQMP or Non-Priority Project Water Quality Checklist as applicable and construction plans that incorporate the BMPs included in the proposed Project WQMP or Non-Priority Project Water Quality Plan. The Permittee shall first review the proposed Project WQMP or Non-Priority Project Water Quality Checklist for conformity with the requirements described in Model WQMP and TGD. The approved Project WQMP or Non-Priority Project Water Quality Checklist shall then be used in reviewing the construction plans for consistency with the BMP design criteria.

Plan Check for Public Agency Projects

Prior to initiating grading or construction activities, the City shall ensure that the construction plans for its public works projects reflect the structural BMPs described in the approved Project WQMP. In conducting the design review process for its public agency projects, the City shall review the construction plans and specifications for conformity with the approved Project WQMP and for consistency with the BMP design criteria and guidance provided in **Model WQMP and TGD.**

7.5.7 Permit Closeout, Certificates of Use, and Certificates of Occupancy

The Project WQMP continues with the property after the completion of the construction phase and the City may require that the terms, conditions and requirements be recorded with the County Recorder's office by the property owner or any successive owner as authorized by the Water Quality Ordinance. In lieu of recordation, the Permittee may require the Project WQMP to include a Notice of Transfer Responsibility Form, which serves to notify the Permittee that a

change in ownership has occurred and notify the new owner of its responsibility to continue implementing the Project WQMP.

The end of the construction phase therefore represents a transition from the New Development/Significant Redevelopment Program to the Existing Development Program (**Section 9**). Accompanying this is a close out of permits and issuance of certificates of use and occupancy. The City will use this juncture to assure satisfactory completion of all requirements in the Project WQMP by requiring the applicant to:

- Demonstrate that all structural BMPs described in the Project WQMP have been constructed and installed in conformance with approved plans and specifications;
- Demonstrate that an O&M Plan has been approved for all structural BMPs within the Project WQMP;
- Demonstrate that a mechanism or agreement acceptable to the City has been executed for the long-term funding and performance of BMP operation, maintenance, repair, and/or replacement;
- Demonstrate that the applicant is prepared to implement all non-structural BMPs described in the Project WQMP;
- Demonstrate that an adequate number of copies of the Project WQMP are available onsite; and
- For industrial facilities subject to California's General Permit for Stormwater Discharges Associated with Industrial Activity as defined by Standard Industrial Classification (SIC) code, demonstrate that coverage has been obtained by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the notification of the issuance of a Waste Discharge Identification (WDID) Number

The O&M Plan for structural BMPs that is prepared by the applicant for private sector projects shall describe and/or include:

- Structural BMPs
- Employee responsibilities and training for BMP operation and maintenance
- Operating schedule
- Maintenance frequency and schedule
- Specific maintenance activities
- Required permits from resource agencies, if any
- Forms to be used in documenting maintenance activities
- Recordkeeping requirements (at least 5 years)

At a minimum, the City shall require the annual inspection and maintenance of all structural BMPs.

Following satisfactory inspection, those structural BMPs agreed during the planning process to be within City rights-of-way, or on land to be dedicated to City ownership will be accepted. Upon acceptance, responsibility for operation and maintenance will transfer from the developer or contractor to the appropriate City department, including the funding mechanism identified in the approved final Project WQMP.

If a property owner or a private entity, such as a homeowners association (HOA), retains or assumes responsibility for operation and maintenance of structural BMPs, the Permittee shall require access for inspection through an agreement or other means. The HOA shall be required to maintain the BMPs in operating condition.

If the Permittee will be responsible for operating and maintaining structural BMPs on private property, an easement will be established to allow for entry and proper management of the BMPs. Such access easements shall be binding throughout the life of the project, or until the BMPs requiring access are acceptably replaced with a BMP not requiring access. Funding for the long-term operation and maintenance of structural BMPs will be front-funded or otherwise guaranteed via mechanisms such as approved assessment districts, or other funding mechanisms.

Public Agency Projects

For public agency projects, upon completion of construction when contract close-out occurs, the responsibility for operation and maintenance of the structural BMPs will transfer from the contractor to the appropriate Permittee department and become part of the Municipal Activities Program (Section 5). The Permittee has the authority to approve the transfer of structural BMPs to any other public entity within its jurisdiction and shall negotiate satisfactory operation and maintenance standards with the public agencies accepting the operation and maintenance responsibilities. Alternatively, the responsibility for the operation and maintenance of structural BMPs may be transferred to a private entity through contracts or lease agreements. In any such transfer agreement, the Permittee shall be identified as a beneficiary empowered to enforce maintenance agreements.

7.6 Project Water Quality Management Plan (WQMP) Preparation

In accordance with the requirements in the Development Project Review, Approval and Permitting process stated previously, the City will require Conceptual or Preliminary WQMPs and final Project WQMPs for certain new development and significant redevelopment projects called "Priority Development Projects."

A Non-Priority Project Water Quality Checklist is required to be completed for private new development and significant redevelopment projects, and equivalent public agency capital projects that qualify as Non-Priority Projects. Additional information regarding Non-Priority Projects can be found in the Model WQMP Section 1.3.2.

Conceptual or Preliminary WQMPs and final Project WQMPs are to be prepared using the guidelines set forth in Model WQMP Section 4.3.

7.6.1 Project WQMP Requirements

The purpose of the Project WQMP is to define project features and BMPs that will mitigate the project's impact on water quality and the environment. In order to complete a Project WQMP, the following steps will need to be performed:

1. Determine discretionary permits and WQ conditions that may apply—**Model WQMP Section 2.1**
2. Describe the project—**Model WQMP Section 2.2**
3. Assess the site—**Model WQMP Section 2.3**
4. Develop and select BMPs, including LID BMPs, site design BMPs, hydromodification control BMPs, and source control BMPs—**Model WQMP Section 2.4, 2.5 and 2.6**
5. Determine any applicable alternative compliance approaches—**Model WQMP Section 3.0**
6. Identify parties responsible for BMP maintenance and funding sources—**Model WQMP Section 2.8**

The steps are discussed in further detail in the Model WQMP.

7.7 Education and Training

To assist responsible municipal staff and contract staff in understanding the 2017 Model WQMP and TGD, initial training sessions will be conducted during the 90-day implementation period following Executive Officer approval of the Model WQMP and the Technical Guidance Document. Thereafter, training sessions will be conducted at least annually and/or on-line training will be available. In addition to Permittee-sponsored training, staff may also attend training seminars or workshops related to general water quality and stormwater management during construction conducted by other organizations.

8.0 CONSTRUCTION COMPONENT

8.1 INTRODUCTION

Construction and grading activities are a potential source of pollutants in all phases of execution. Consequently, effective management of construction projects occurs throughout the city by implementing ordinances, performing inspections, requiring BMPs and undertaking enforcement actions. Local regulatory oversight of construction therefore directly supports both the principal requirements of the Fifth Term Permit and effectively addresses two of the HPWQCs identified in the WQIP; specifically, unnatural water balance in dry weather and pathogen health risk.

8.1.1 Program Overview

The following sections present a detailed set of guidelines to prevent or minimize the impacts of urban runoff generated by construction activities within the City of Rancho Santa Margarita on receiving water bodies.

The City of Rancho Santa Margarita has key staff responsible for overseeing, implementing, and enforcing the program. The following section outlines and describes the City departments/key staff that are involved in issuing building and/or grading permits for private development projects and are responsible for inspecting these projects during construction, or that manage public works construction projects that have a potential to impact water quality.

Public Works Department

Title: Public Works Director/City Engineer
Telephone: 949/635-1800 x 6505
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

The Public Works Department develops, builds and maintains the City's infrastructure, including streetscapes, open space, parks, athletic fields, bike trails; roadways, traffic signals and many miles of interconnected drainage system.

Development Services Department – Planning Division

Title: Development Services Director
Telephone: 949/635-1800 x 6707
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

The Development Services Department is responsible for implementing the policies and objectives of the community as set forth in the municipality's General Plan and Zoning Ordinance. This Department also reviews proposed developments for consistency with the City's standards and policies relating to land use and preservation of the environment to ensure that the quality of life will be maintained or enhanced for future generations.

Engineering Division

Title: Assistant City Engineer
Telephone: 949/635-1800 x 6507
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

The Engineering Division is responsible for the administration of public improvement projects (typically resulting in construction activity). The Engineering Division ensures all construction in the public right-of-way complies with adopted codes and engineering standards.

Building Department

Title: Building Official
Telephone: 949/635-1800 x 6106
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

The Building Department ensures that all building construction in the City complies with adopted codes, and that permitting and licensing systems are efficient and serve the needs of the public, as well as the City.

Santa Margarita Water District (non-City entity)

Title: Chief Engineer
Telephone: 949/459-6400
Address: 26111 Antonio Parkway, Las Flores, CA 92688

SMWD is responsible for construction, operation and maintenance of all water and wastewater facilities.

8.1.2 Program Commitments

The major program commitments and the subsections in which they are described in detail include:

- Maintain/update inventories of construction sites (8.2.2);
- Prioritize fixed facilities, construction sites (8.2.3);
- BMPs for construction sites (8.2.4);
- Documentation requirements (8.2.5);
- Inspection and enforcement (8.2.6); and
- Education and training (8.3).

8.1.3 Regulatory Requirements

The Model Construction Program was developed to fulfill the municipal activity commitments and requirements of:

- Section E.4 of the San Diego Regional Water Quality Control Board Municipal NPDES Stormwater permit, Order No. R9-2013-0001 as amended by Order Nos. R9-2015-0001 and R9-2015-0100.

8.2 MODEL CONSTRUCTION PROGRAM

8.2.1 Model Program Overview

The City has incorporated the model construction program described in **DAMP Section 8.2** as the basis for this section of its Local Implementation Plan (LIP)/Jurisdictional Runoff Management Program (JRMP). This construction program presents requirements and guidelines for pollution prevention methods that must be used by construction site owners, developers, contractors, and other responsible parties, in order to prevent illicit discharges into the MS4, implement and maintain structural and non-structural BMPs to reduce pollutants in stormwater runoff from construction sites to the MS4, reduce construction site discharges of stormwater pollutants from the MS4 to the maximum extent practicable (MEP), and prevent construction site discharges from the MS4 from causing or contributing to a violation of water quality standards.

8.2.2 Inventory of Construction Sites

A watershed-based inventory of all construction sites has been developed including sites covered by the State General Permit¹, a local grading permit or a local building permit, and public works construction projects.

The City's comprehensive watershed-based construction site inventory is included in **Exhibit 8.1**. The inventory will, at a minimum, be updated prior to the start of each wet season (October 1). During the update process, projects for which building or grading permits have expired or have been closed and projects that have been completed, will be removed from the inventory. New projects will also be added to the inventory as they are initiated.

8.2.3 Prioritization of Construction Sites

After the inventory is compiled, construction projects are prioritized based on the nature and size of the construction activity, topography, and the characteristics of soils and receiving water quality. Priorities will, at a minimum, be updated annually in conjunction with the annual update of the inventory.

8.2.4 BMPs for Construction Projects

All construction projects, regardless of size, are required to implement BMPs to prevent discharges into the storm drain system or watercourses. The City has established a minimum set of BMPs and other measures to be implemented at all construction sites year round. BMP implementation requirements may vary seasonally (wet and dry seasons); however, dry season BMP implementation must plan for and address unseasonal rain events that may occur during the dry season.

All private and public works projects are required, at a minimum, to implement and be protected by an effective combination of erosion and sediment controls and waste and materials management BMPs. The minimum requirements are summarized in **Table 8.1**. These minimum

¹ State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity

requirements are conveyed to construction contractors as part of the permit conditions and plan notes. In addition, they are reviewed as a part of the pre-construction meeting for projects that require a meeting with the inspector and/or project manager prior to beginning work.

Table 8.1
Minimum Requirements for All Construction Sites

CATEGORY	MINIMUM REQUIREMENTS
Management Measures	<ul style="list-style-type: none"> i. Pollution prevention where appropriate; ii. Development and implementation of a site-specific run-off management plan; iii. Minimization of areas that are cleared and graded to only the portion of the site that is necessary for construction; iv. Minimization of exposure time of disturbed soil areas; v. Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods to the extent feasible; vi. Limitation of grading to a maximum disturbed area as determined by the City before either temporary or permanent erosion controls are implemented to prevent stormwater pollution. The City has the option of temporarily increasing the size of disturbed soil areas by a set amount beyond the maximum, if the individual site is in compliance with applicable stormwater regulations and the site has adequate control practices implemented to prevent stormwater pollution; vii. Temporary stabilization and reseeded of disturbed soil areas as rapidly as feasible; viii. Wind erosion controls; ix. Tracking controls; x. Non-stormwater management measures to prevent illicit discharges and control stormwater pollution sources; xi. Waste management measures; xii. Preservation of natural hydrologic features where feasible; xiii. Preservation of riparian buffers and corridors where feasible; xiv. Evaluation and maintenance of all BMPs until removed; and xv. Retention, reduction, and proper management of all stormwater pollutant discharges on site to the MEP standard.
Erosion and Sediment Controls	<ul style="list-style-type: none"> i. Erosion prevention is to be used as the most important measure for keeping sediment on site during construction; ii. Sediment controls are to be used as a supplement to erosion prevention for keeping sediment on-site during construction; i. Slope stabilization must be used on all active slopes during rain events regardless of the season and on all inactive slopes during the rainy season and during rain events in the dry season; and ii. Permanent revegetation or landscaping as early as feasible.

Enhanced BMPs

The City requires enhanced or additional BMPs should the project site pose an exceptional threat to water quality. In determining the potential threat, the City considers the following factors:

- a) Soil erosion potential or soil type;
- b) Site slopes;
- c) Project size and type;
- d) Sensitivity and proximity to receiving water bodies;
- e) Non-stormwater discharges;
- f) Ineffectiveness of other BMPs;
- g) Proximity and sensitivity of aquatic threatened and endangered species of concern;
- h) Known effects of Advanced Sediment Treatment (AST) chemicals; and
- i) Any other relevant factors

If an exceptional threat to water quality is determined based on the above factors, the City will require implementation of advanced treatment for sediment at construction sites (or portions thereof).

Construction BMPs

The City has designated construction-specific BMPs as set forth in **DAMP Section 8.2.4.3. Table 8.2** below, which describes the BMPs designated for use with this LIP/JRMP. Copies of the corresponding BMP fact sheets are included as **Exhibit 8.2**.

Table 8.2
Designated Construction BMPs

CATEGORY	BMP #	BMP NAME
Erosion Control BMPs	EC-1	Scheduling
	EC-2	Preservation of Existing Vegetation
	EC-3	Hydraulic Mulch
	EC-4	Hydroseeding
	EC-5	Soil Binders
	EC-6	Straw Mulch
	EC-7	Geotextiles and Mats
	EC-8	Wood Mulching
	EC-9	Earth Dikes and Drainage Swales
	EC-10	Velocity Dissipation Devices
	EC-11	Slope Drains
	EC-12	Streambank Stabilization
	EC-13	<i>Reserved</i>
	EC-14	Compost Blanket
	EC-15	Soil Preparation/Roughening
	EC-16	Non-Vegetative Stabilization
Sediment Control BMPs	SE-1	Silt Fence
	SE-2	Sediment Basin
	SE-3	Sediment Trap
	SE-4	Check Dam
	SE-5	Fiber Rolls
	SE-6	Gravel Bag Berm
	SE-7	Street Sweeping and Vacuuming
	SE-8	Sandbag Barrier
	SE-9	Straw Bale Barrier
	SE-10	Storm Drain Inlet Protection
	SE-11	Active Treatment Systems
	SE-12	Temporary Silt Dike
	SE-13	Compost Socks and Berms
	SE-14	Biofilter Bags
Wind Erosion Control BMPs	WE-1	Wind Erosion Control
Tracking Control BMPs	TC-1	Stabilized Construction Entrance/Exit
	TC-2	Stabilized Construction Roadway
	TC-3	Entrance/Outlet Tire Wash
Non-Stormwater Control BMPs	NS-1	Water Conservation Practices
	NS-2	Dewatering Operations
	NS-3	Paving and Grinding Operations
	NS-4	Temporary Stream Crossing
	NS-5	Clear Water Diversion

CATEGORY	BMP #	BMP NAME
	NS-6	Illicit Connection/Illegal Discharge Detection and Reporting
	NS-7	Potable Water/Irrigation
	NS-8	Vehicle and Equipment Cleaning
	NS-9	Vehicle and Equipment Fueling
	NS-10	Vehicle and Equipment Maintenance
	NS-11	Pile Driving Operations
	NS-12	Concrete Curing
	NS-13	Concrete Finishing
	NS-14	Material and Equipment Use Over Water
	NS-15	Structure Demolition/Removal Over or Adjacent to Water
	NS-16	Temporary Batch Plants
Waste Management & Materials Pollution Control BMPs	WM-1	Material Delivery and Storage
	WM-2	Material Use
	WM-3	Stockpile Management
	WM-4	Spill Prevention and Control
	WM-5	Solid Waste Management
	WM-6	Hazardous Waste Management
	WM-7	Contaminated Soil Management
	WM-8	Concrete Waste Management
	WM-9	Sanitary/ Septic Waste Management
	WM-10	Liquid Waste Management

8.2.5 Documentation Requirements

Requirements for General Permit Sites

Construction sites that are subject to the General Permit are required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) meeting the requirements of the General Permit.

Private Construction Projects Covered by the General Permit

The following describes the process that is followed by a private construction project:

- The project owner, developer or contractor is responsible for preparing the Notice of Intent (NOI), which must be signed by the owner or person delegated authority and submitted to the State Water Resources Control Board (SWRCB) via the Stormwater Multi-Application, Reporting, and Tracking System (SMARTS). Before issuing a grading or building permit, the City will require proof of General Permit coverage.
- Once the project owner, developer or contractor receives a grading or building permit (if applicable), the SWPPP must be prepared by a Qualified SWPPP Developer (QSD), and signed by the responsible party and must be implemented year-round throughout the duration of the project's construction. County or District

staff are not responsible for reviewing, approving or enforcing the SWPPP; these are responsibilities of the Regional Board. Inspector(s) may choose to use the SWPPP as a tool for on-site inspections.

- The City will inspect and enforce local permits and ordinances, and will notify the Regional Board of non-compliance when the non-compliance meets the criteria of posing a threat to human or environmental health as discussed in **DAMP Section 8.4.6**.
- Within 90 days of when construction is complete or ownership has been transferred, the discharger shall electronically file a Notice of Termination (NOT), a final site map, and photos through the SWRCB SMARTS system. Filing a NOT certifies that all General Permit requirements have been met.

Public Agency Construction Projects Covered by the General Permit

The following describes the process that is followed by a public works construction project:

- The City will prepare all Permit Registration Documents (PRDs) and submit it to the SWRCB through the SMARTS system.
- The SWPPP will be prepared by a QSD before the contractor is allowed to start construction activities. It is important to note that City staff is not responsible for enforcing the SWPPP; these are responsibilities of the Regional Water Quality Control Board, but inspectors are required to become familiar with the SWPPP as it is part of the contract documents.
- During construction, the City will inspect and enforce the contract documents and will notify the appropriate Regional Board when non-compliance meets the criteria of posing a threat to human or environmental health as discussed in Section 8.2.6.7 of the DAMP.
- Once the project is completed, the City will submit an NOT to the SWRCB.

Requirements for Other Sites

Private Construction Projects Not Covered by the General Permit

Private construction projects not covered by the General Permit but are covered under a grading permit, are required to develop Erosion and Sediment Control Plans (ESCPs). These ESCPs must show proposed locations of the erosion and sediment control BMPs that will be implemented during the construction project to comply with the minimum requirements listed in **Table 8.1**.

Public Works Construction Projects Not Covered by the General Permit

Public agency construction projects not covered by the General Permit comply with appropriate pollution prevention control practices in accordance with the current edition of the “Green Book” Standard Specifications for Public Works Construction and the provisions of Section 8, and shall develop and implement ESCPs.

8.2.6 Municipal Inspections and Enforcement

Inspection Responsibilities

The City performs inspections of construction sites to verify that the requirements for water quality protection are being implemented and maintained, that they appropriately comply with local permits and ordinances and the General Permit, and that they continue to protect water quality. Construction sites are inspected, according to the established priority, until construction activity is complete.

Inspection Frequencies

The City will inspect construction sites based upon the priority of the project. The frequency of construction site inspections is shown in **Table 8.3**.

Table 8.3
Inspection Frequency of Construction Projects Based on Construction Site Priority

Inspection Criteria Priorities for inspecting sites must consider the nature and size of the construction activity, topography, and the characteristics of soils and receiving water quality.	Rainy Season Inspection Frequency (Oct 1 - April 30)	Dry Season Inspection Frequency (May 1 - Sept 30)
Construction sites within the City's jurisdiction meeting any of the following criteria: <ul style="list-style-type: none"> Any site 30 acres or larger. Any site 1 acre or larger and tributary to a CWA Section 303(d) water body segment impaired for sediment or within or directly adjacent to or discharging directly to the ocean or a receiving water within an ESA. Other sites determined by the Copermittees or the Regional Board as a significant threat to water quality. 	Biweekly	Annually in August or September
Construction sites with one acre or more of soil disturbance not meeting the criteria specified for 'high' priority sites.	Monthly	As Needed
Construction sites that are less than one acre in size.	As Needed	As Needed
**Re-inspection frequencies must be determined by each Copermittee based upon the severity of deficiencies, the nature of the construction activity, and the characteristics of soils and receiving water quality. **		

Inspection Documentation Procedures

The City's construction site inspection checklist is included in **Exhibit 8.2**. Records of all inspections and non-compliance reporting will be retained for a period of at least five years.

Enforcement Actions

Enforcement of construction projects will be undertaken by the City's inspectors and/or other staff who possess internal enforcement authority through established policies and procedures. Threat to water quality will be assessed by inspectors for construction site runoff that will not be

reasonably controlled by the BMPs in place or if a failure of BMPs is resulting in the release of sediments or other pollutants. Violations observed will be documented by the inspectors.

If a significant and/or immediate threat to water quality is observed by an inspector, action will be taken to require the developer/contractor to immediately cease the discharge. Consistent with Enforcement Response Plan (see **Exhibit 4.1**) **Table 8.4** outlines the City's enforcement steps that will be taken by inspectors for private construction projects and for public works construction projects. Depending on the violation, the inspector may choose to utilize contract language, a local permit, the grading ordinance or the water quality ordinance as the basis for enforcement.

Table 8.4
Enforcement Actions for Construction Problems

PRIVATE CONSTRUCTION PROJECTS	← WARNING PROGRESSION	PUBLIC WORKS CONSTRUCTION PROJECTS
Verbal Warning		Verbal Warning
Written Warning <ul style="list-style-type: none"> ▪ Notice of Non-Compliance ▪ Administrative Compliance Order ▪ Administrative Citations or Fines ▪ Cease and Desist Order 		Written Warning <ul style="list-style-type: none"> ▪ Notice of Non-Compliance
Stop Work Order		Enforcement of Contract <ul style="list-style-type: none"> ▪ Stop Work Order ▪ Withholding of Payment ▪ Bond ▪ Fines ▪ Revocation of Contract
Revocation of Permit(s) and/or Denial of Future Permits		
Civil and Criminal Court Actions		Civil and Criminal Court Actions

The City's construction site checklist form also serves as the City's approved enforcement form as shown in **Exhibit 8.2**.

Non-Compliance Reporting

The City will consider a site non-compliant when one or more violations of local ordinances, permits, or plans exist on the site. For the purpose of this document, such a violation shall also be considered a violation of the General Construction Permit for sites subject to those requirements. If a non-compliant private construction project meets the criteria of posing a threat to human or environmental health as discussed in of the **DAMP Section 8.2.6.7**, then the SDRWQCB will be notified as required.

Oral notification to the SDRWQCB of non-compliant private construction sites that are determined to pose a threat to human or environmental health will be provided within 24-hours of the discovery of non-compliance. Such oral notification shall be followed up by a written report and submitted to the SDRWQCB within five days of the incidence of non-compliance. Written notification(s) will identify the type(s) of non-compliance, describe the actions necessary

to achieve compliance, and include a time schedule, subject to the modifications by the SDRWQCB, indicating when compliance will be achieved.

The City will notify the Regional Board prior to the wet season, or shall include with its annual LIP update, a summary of all construction sites with alleged violations. Information provided shall include, but not be limited to, the following:

1. WDID number if enrolled under the General Construction Permit
2. Site Location, including address
3. Current violations or suspected violations

8.3 EDUCATION AND TRAINING

For an effective stormwater program to be efficiently implemented, its staff must have sufficient knowledge, experience, and skills. The Principal Permittee will coordinate, develop and present a number of different training modules in accordance with the *The Orange County Stormwater Program Training Program Framework: Core Competencies*. The City will support this effort by requiring the appropriate employees to attend training sessions, including annual pre-wet season training, if necessary.

EXHIBIT 8.1

Active Construction Projects



Exhibit 8-1
City of Rancho Santa Margarita
Active Construction Projects

Active Construction Projects	Street Number	Street Name	Project Description	Project Zoning
Active Construction Projects	2	Las Piedras	PATIO COVER	RESIDENTIAL
2010-0716	9	SPRINGSIDE	ROOM ADDITION	RESIDENTIAL
2010-0674	9	PROMONTORY	SPA/RETAINING WALL/FIREPLACE	RESIDENTIAL
2010-0535	9	PROMONTORY	REMODEL/RENOVATIONS/REPAIRS	RESIDENTIAL
2010-0585	30622	SANTA MARGARITA	ADA COMPLIANCE PROJECT	COMMERCIAL
2010-0616	35	FOXTAIL	REMODEL/RENOVATIONS/REPAIRS	RESIDENTIAL
2010-0617	32692	LARKGROVE	POOL/SPA & PATIO COVER	RESIDENTIAL
2010-0530	29947	ADL BANDERAS	ACCESSORY STRUCTURE	COMMERCIAL
2010-0630	10	MOUNTAIN LAUREL	POOL & SPA	RESIDENTIAL
2010-0608	11	BANSTEAD	SPA ONLY	RESIDENTIAL
2010-0594	6	EL CENCERRO	POOL & SPA	RESIDENTIAL
2010-0564	21201	COUNTRY FARM	ROOM ADDITION	RESIDENTIAL
2010-0573	31945	LA SUBIDA	RETAINING WALL REPAIRS	RESIDENTIAL
2010-0204	22062	ANTONIO	NEW BUILDING	COMMERCIAL

EXHIBIT 8.2

Construction Site Inspection Form





CONSTRUCTION SITE INSPECTION FORM

Stormwater Program City of Rancho Santa Margarita

22112 El Paseo
Rancho Santa Margarita, CA 92688
Phone: 949.635.1800
Fax: 949.635.1667

Project ID:		Date:	
Address/Tract:		Time:	
Weather Conditions:		Inspector:	
Site Supervisor/Representative:			
Developer/Contractor Name:			
Type of Construction: <input type="checkbox"/> High Priority <input type="checkbox"/> Medium Priority <input type="checkbox"/> Low Priority			
Storm Water Pollution Prevention Plan (SWPPP) at the construction site? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Construction Site Stormwater BMPs		Yes	No
		N/A	Comments/Observation
Erosion Control Practices			
1	Are erosion controls being adequately implemented and maintained on inactive and active, disturbed soil areas (sheeting, mulch, hay, soil stabilizers, etc.) in accordance with SWPPP and/or provisions of the Grading ordinance?		
2	Is erosion observed? If YES, describe the evidence of the erosion and required corrective action(s) (use additional comment space below)		
Sediment Control Practices			
3	Are sediment controls being adequately implemented and maintained on all significant slopes (silt fence, fiber rolls, etc. at the base of slopes) and the downstream perimeter?		
4	Sediment discharge observed: If YES, describe the evidence of the discharge and required corrective action (use additional comment space below)		
Tracking Controls			
5	Are the entrances and exits to the construction site adequately protected (tire washout, stabilized entrances, gravel beds, rumble strips)?		
6	Are construction site ingress/egress roads free from sediment and tracking?		
Waste and Disposal Management			
7	Are activities such as concrete/plastering, painting and fueling resulting in a discharge to the storm drain? If YES, describe the evidence of the discharge and required corrective word(s).		
8	Are containers for construction waste and debris being utilized and are they adequate?		
Other			
9	Is there evidence of past illegal discharges?		
ENFORCEMENT ACTIONS <input type="checkbox"/> No Action Required <input type="checkbox"/> Verbal Warning <input type="checkbox"/> Educational Letter <input type="checkbox"/> Notice of Non-Compliance <input type="checkbox"/> Stop Work Order <input type="checkbox"/> Administrative Compliance Order <input type="checkbox"/> Cease & Desist Order <input type="checkbox"/> Administrative Citation <input type="checkbox"/> Other _____			
Additional Comments:			
Any photographs taken? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Facility Representative Signature:		Date:	

9.0 EXISTING DEVELOPMENT

9.1 INTRODUCTION

The City requires industrial and commercial premises to implement principally pollution prevention BMPs and properly maintain any structural incorporated at development or re-development. Businesses are inventoried and the City ensures BMPs are implemented through education, inspections, and enforcement. A parallel program is implemented in residential areas with an emphasis on education and outreach rather than inspections. This local regulatory oversight of the built environment supports both the principal requirements of the Fifth Term Permit and effectively addresses two of the HPWQCs identified in the WQIP, specifically, unnatural water balance in dry weather and pathogen health risk.

9.1.1 Overview

The existing development component of this plan is comprised of eight programs: industrial, commercial, food facility, mobile business, residential, common interest and homeowner association areas, retrofitting existing development, and a training program.

The following outlines and describes City departments and staff that are responsible for implementation of the existing development component.

Public Works Department

Title: Public Works Superintendent
Telephone: 949/635-1800 x 6102
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Responsible for the operation and maintenance of flood control facilities. Field crews should receive training to identify industrial and commercial facilities and activities and residential activities that have potential to threaten receiving water quality.

Community Services Department

Title: Development Services Director
Telephone: 949/635-1816
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Staff oversees community development within City and assists residents with implementation of residential program.

Economic Development

Contact Name: Cheryl Kuta
Title: Development Services Director
Telephone: 949/635-1816
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Staff oversees business development within the City and assists businesses in complying with the industrial/commercial program.

Code Enforcement

Title: Code Enforcement Officer
Telephone: 949/635-1800 x 6703
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Code enforcement inspectors are responsible for inspecting industrial and commercial facilities for compliance with the industrial/commercial program and City code, and residential areas for compliance with the residential program and City codes.

Water & Wastewater Utilities – Santa Margarita Water District

Contact Name: Don Bunts
Title: Chief Engineer
Telephone: 949/459-6400
Address: 26111 Antonio Parkway, Las Flores, CA 92688

Water & Wastewater Utilities – Trabuco Canyon Water District

Contact Name: Hector Ruiz
Title: General Manager
Telephone: 949/858-0277
Address: 32003 Dove Canyon Drive, Trabuco Canyon, CA 92679

Responsible for implementing control measures to minimize infiltration of seepage from sanitary sewers to municipal storm drain systems through the operation and maintenance of all District wastewater facilities. Also responsible for the operation and maintenance of all District water facilities.

Wastewater inspectors are trained to inspect, monitor, and evaluate commercial/industrial facilities and activities. The District is also responsible for promoting water conservation practices within residential areas, an effective form of pollution prevention.

Local Fire Department

Contact Name: Orange County Fire Authority – Station 45
Title: Fire
Telephone: 949/858-8801
Address: 30131 Aventura, Rancho Santa Margarita, CA 92688

Inspects businesses within City for compliance with Uniform Fire Code and responds to 911 emergencies involving industrial and commercial discharges, spills, accidents, etc.

Public Agencies

In addition to the City Departments described, the City relies on certain public agencies for successful implementation of the industrial program.

Orange County Health Care Agency

Environmental Health Division

Certified Unified Program Agency (CUPA)

The Environmental Health Division of the Orange County Health Care Agency inspects businesses within the City that generate hazardous waste for compliance with State and Federal regulations. Proper storage and care of hazardous waste is an important component of pollutant source control.

Orange County Health Care Agency

Environmental Health

Food Facility Inspection

Conducts inspections of all food facilities within the City.

Orange County Fire Authority

Inspects businesses within the City for compliance with the Uniform Fire Code and responds to 911 calls that may involve industrial and commercial discharges, spills, chemical emergencies, accidents, etc. Refers problems associated with non-stormwater discharges to City for enforcement.

9.1.2 Program Commitments

The major program commitments and the subsections in which they are described in detail include:

- Inspection of industrial and commercial facilities (9.2);
- Inspection of Food Service Establishments (9.3)
- Regulation of mobile businesses (9.4)
- Oversight of residential areas (9.5)
- Oversight of Common Interest Area/Homeowners Assoc. Activities Program (9.6)
- Existing development retrofitting (9.7)
- Training (9.8)

9.1.3 Regulatory Requirements

The program described in this section conforms with Section E.5. of the Fifth Term Permit.

9.2 INDUSTRIAL/COMMERCIAL PROGRAM

The City's Industrial/Commercial Program includes specifications for pollution-prevention methods for industrial and commercial areas and activities located within the City. Specific pollution prevention practices that are generally recognized in each Discharger's industry or business, or for that Discharger's activity, as being effective and economically advantageous, were certified by the City (see **Section 9.2.3**). The City, through an inspection program summarized in **Section 9.2.4**, will verify implementation of pollution-prevention methods by industries and commercial facilities. Inspectors will use a checklist for their inspections, which will also include appropriate pollution-prevention methods.

9.2.1 Source Identification and Facility Inventory

The City develops and annually updates a watershed-based inventory of all industrial sites within its jurisdiction, regardless of site ownership. The components that comprise the inventory include:

- All industrial facilities located within the City's jurisdiction.
- All commercial facilities listed in **Table 9-2** from **DAMP Section 9.2.1** that are located within the City's jurisdiction.
- Watersheds where each industrial or commercial facility is located.
- Identified potential pollutants and activities with the potential to discharge pollutants.
- Identified industrial or commercial discharges into, or adjacent to, an Environmentally Sensitive Area (ESA).
- Identified industrial or commercial discharges into an ESA that include pollutants of concern.

The City's inventory database includes the following information about each identified industry or commercial facility within the City's jurisdiction:

- Business Name
- Physical Address Information
- Mailing Address Information
- Business Contact Name
- Emergency Contact
- Lot Size
- SIC Code
- Industrial-Specific Information
- Commercial-Specific Information
- Watershed
- GIS Information
- Local Licensing/Permits
- Potential Pollutants
- Proximity to and/or discharge to ESA/ASBS
- Pollutants of concern into an ESA
- Comments/Notes

The current watershed-based inventory of industrial facilities within the City's jurisdiction is provided in **Exhibit 9.1**.

9.2.2 Prioritization for Inspection

The City prioritizes industrial and commercial facilities within its inventory as needed based on the findings of the City's inspection program and the following factors:

1. Type of activity conducted and SIC code;
2. Materials used at the facility;
3. Amount and type of wastes generated;
4. Pollutant discharge potential;
5. Non-stormwater discharges;
6. Size of facility;
7. Proximity to receiving water bodies;
8. Sensitivity of receiving water bodies;
9. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
10. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
11. Facility design;
12. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
13. The facility's compliance history; and
14. Any other relevant factors

9.2.3 BMP Implementation

The City has designated a minimum set of activity-specific BMPs for industrial and commercial facilities (see **Tables 9.1 and 9.2** below) that are appropriate to prevent or mitigate pollution generated from the specific activities at each site. The corresponding fact sheets are presented in **Exhibit 9.2**.

Table 9.1
Industrial Activity BMPs

BMP FACT SHEET	ACTIVITY
IC1.	ANIMAL HANDLING AREAS
IC2.	BUILDING MAINTENANCE
IC3.	CARPET CLEANING
IC4.	CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING
IC5.	CONTAMINATED OR ERODIBLE SURFACES AREAS
IC6.	LANDSCAPE MAINTENANCE
IC7.	NURSERIES AND GREENHOUSES
IC8.	OUTDOOR DRAINAGE FROM INDOOR AREAS
IC9.	OUTDOOR LOADING/UNLOADING OF MATERIALS
IC10.	OUTDOOR PROCESS EQUIPMENT OPERATIONS AND MAINTENANCE
IC11.	OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND CONTAINERS
IC12.	PAINTING, FINISHING, AND COATINGS OF VEHICLES, BOATS, BUILDINGS, AND EQUIPMENT
IC13.	PARKING AND STORAGE AREA MAINTENANCE
IC14.	POOL AND FOUNTAIN CLEANING
IC15.	SPILL PREVENTION AND CLEANUP
IC16.	VEHICLE AND EQUIPMENT FUELING
IC17.	VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR
IC18.	VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
IC19.	WASTE HANDLING AND DISPOSAL
IC20.	EATING AND DRINKING ESTABLISHMENTS

Table 9.2
Commercial BMPs

Activities/Sources	BMP Fact Sheets
Automobile mechanical repair, maintenance, fueling, or cleaning	IC16. VEHICLE AND EQUIPMENT FUELING IC17. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR IC18. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
Equipment repair, maintenance, fueling, or cleaning	IC16. VEHICLE AND EQUIPMENT FUELING IC17. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR IC18. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
Automobile and other vehicle body repair or painting	IC12. PAINTING, FINISHING, AND COATINGS OF VEHICLES, BOATS, BUILDINGS, AND EQUIPMENT IC17. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR
Mobile automobile or other vehicle washing	IC18. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
Automobile (or other vehicle) parking lots and storage facilities	IC13. PARKING AND STORAGE AREA MAINTENANCE
Retail or wholesale fueling	IC16. VEHICLE AND EQUIPMENT FUELING
Pest control services	IC6. LANDSCAPE MAINTENANCE IC19. WASTE HANDLING AND DISPOSAL
Eating or drinking establishments	IC20. EATING AND DRINKING ESTABLISHMENTS
Mobile carpet, drape or furniture cleaning	IC3. CARPET CLEANING
Cement mixing or cutting	IC4. CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING
Masonry	IC4. CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING
Building maintenance and light construction	IC2. BUILDING MAINTENANCE IC4. CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING IC5. CONTAMINATED OR ERODIBLE SURFACES AREAS
Outdoor activities	IC5. CONTAMINATED OR ERODIBLE SURFACES AREAS IC8. OUTDOOR DRAINAGE FROM INDOOR AREAS IC9. OUTDOOR LOADING/UNLOADING OF MATERIALS IC10. OUTDOOR PROCESS EQUIPMENT OPERATIONS AND MAINTENANCE IC11. OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND CONTAINERS
Painting and coating	IC12. PAINTING, FINISHING, AND COATINGS OF VEHICLES, BOATS, BUILDINGS, AND EQUIPMENT
Landscaping	IC6. LANDSCAPE MAINTENANCE
Nurseries and greenhouses	IC7. NURSERIES AND GREENHOUSES
Golf courses, parks and other recreational areas/facilities	IC5. CONTAMINATED OR ERODIBLE SURFACES AREAS IC6. LANDSCAPE MAINTENANCE
Pool and fountain cleaning	IC14. POOL AND FOUNTAIN CLEANING
Port-a-Potty servicing	IC19. WASTE HANDLING AND DISPOSAL

The City encourages the implementation of the designated BMPs at each industrial and commercial facility based on site-specific conditions in order to limit that facility's impact upon receiving water quality.

9.2.4 Inspection, Monitoring and Enforcement

9.2.4.1 Inspection

The City annually inspects at least 20 percent of the industrial and commercial sites inventoried as described in **Section 9.2.1** (excluding food facilities, which are addressed by **Section 9.3.** and mobile businesses, which are addressed by **Section 9.4**). Other inspection frequencies are based on the factors described in **Section 9.2.2 and Section E.5. of the Fifth Term Permit.**

In addition, the City investigates all complaints of illegal discharges from industrial facilities made by the public or by another agency or those violations arising from the results or dry-weather field screening or analytical monitoring program. In the event that a site is found to be non-compliant, inspection frequency is increased to, at a minimum, once per month. Once a facility has been brought into compliance, an inspection frequency of once every four months is maintained for the next calendar year following the date at which the facility is deemed to be in compliance.

The City inspects industrial facilities to determine if they are in compliance with City ordinances, to review BMP implementation, to assess BMP effectiveness and to verify inventory information used for facility prioritization. Such inspections include review of:

- Material and waste handling and storage practices,
- Pollution control BMP implementation and maintenance, and
- Evidence of past or present unauthorized, non-storm water discharges.

The inspection form provided in **Exhibit-9.3** will be used and provides a series of questions about specific activities taking place at a facility, as well as a list of suggested corrective actions that can be implemented should a problem be found.

In general the City will conduct one of two types of inspections:

- **Compliance Inspections**

Initial compliance inspections will be announced so that the inspector can meet with responsible facility official(s) (e.g., owner, superintendent, compliance manager, engineering consultant, etc.) in order to provide more efficient communication of the stormwater requirements and inspection goals. The inspection will focus on current facility operations and activities, BMPs currently in use, and the effectiveness of those BMPs. This inspection will also focus on verifying inventory spreadsheet information and, whenever possible, provide outreach education to facility staff. All re-occurring compliance inspection will cover the same information as an initial compliance inspection, but will typically be unannounced in order to verify compliance and that BMPs are being effectively implemented.

- **Follow-up Inspections**

For those facilities deemed to be non-compliant, the Permittee will perform compliance inspections once a month until said facilities are shown to be complaint,

and then once every four months for a full calendar year after the facility achieves compliance. Generally, these inspections will be similar to Advisory Inspection except that (a) they will focus primarily on areas where a facility was deemed to be non-compliant, and (b) the inspections may be announced or unannounced, depending on which course of action the Permittee deems will be most conducive to continued facility compliance.

Should an inspected site demonstrate non-compliance, the City will coordinate the notification of appropriate agencies. An incident or practice of non-compliance that requires a hazardous materials emergency response will be considered a threat to human or environmental health and will be reported to the RWQCB and to appropriate hazardous waste management agencies. The City will provide oral notification to the RWQCB within 24 hours of the discovery of a non-compliant site meeting the criteria listed below. This will also be followed by written notification within five (5) days of the discovery.

Criteria to be used to determine whether an event of non-compliance poses a threat to human or environmental health include the following:

- The event poses a significant or imminent threat to the quality of surface or ground waters and/or their beneficial uses.
- The event results in a spill or discharge of hazardous materials in excess of reportable quantities (as listed in 40 CFR Part 117 or 302).
- The event results in a spill or discharge of hazardous materials requiring a hazardous materials emergency response.

9.2.4.2 Monitoring

The City may require its industries to conduct monitoring from high threat to water quality industrial sites. These facilities are noted in the inventory database contained in **Exhibit 9.1**. Industries that conduct monitoring in accordance with the monitoring requirements of the General Industrial Stormwater permit will meet the City requirements. Industries also have the option of participating in a group monitoring program in accordance with the guidelines specified in the General Industrial Stormwater Permit, to meet the requirements of the City.

The purpose of the runoff monitoring will be to characterize the nature of stormwater and non-stormwater discharges from industrial facilities, track changes in these characteristics over time, target management actions to address any identified problems, and assess the effectiveness of those management actions implemented. As a result there will be two efforts: non-stormwater monitoring and stormwater monitoring.

For stormwater monitoring, the City may require a facility to conduct a program to help ensure that:

- The effectiveness of BMPs implemented to prevent or reduce pollutants in stormwater discharges is assessed.
- The stormwater discharges are reported and described annually as part of the annual report from the industrial facility to the City.

In this context, the monitoring program for industrial sites may at a minimum include data collection from two storm events per year on the following constituents:

- Any pollutant listed in effluent guidelines subcategories where applicable;
- Any pollutant for which an effluent limit has been established in an existing NPDES permit for the facility;
- Oil and grease or total organic carbon (TOC);
- pH;
- Total suspended solids (TSS);
- Specific conductance;
- Toxic chemicals and other pollutants that are likely to be present in stormwater discharges; and
- Any pollutant that may be used, stored, or generated at the facility, which may be discharged to a water body or a tributary to a 303(d) water body, unless the facility can demonstrate approval of No Exposure Certification.

Facilities will be required to maintain records of all monitoring information and all High-Priority industrial facilities must submit an Annual Report by July 1 of each year to the City. The report will contain a summary of the results of the observations and sampling for that year, as well as any corrective actions taken in response to the observations and sampling.

9.2.4.3 Enforcement

City inspectors with enforcement authority will issue enforcement actions to industrial and commercial facility owners and operators determined to be out of compliance. The inspectors will document each observed violation. Depending on the severity of the violation, enforcement actions can range from a verbal warning to civil or criminal court actions with monetary fines.

If a City inspector observes a significant and/or immediate threat to water quality, action will be taken to require the facility owner and/or operator to immediately cease the discharge.

City inspectors will apply or recommend any of the enforcement steps as appropriate based on the Enforcement Response Plan (Included as an **Exhibit 4.1 of Section 4**). The City will ensure that violations of a similar nature are subjected to similar types of enforcement remedies.

9.2.5 Outreach and Education

The outreach strategy for reaching industrial businesses includes efforts such as including and providing stormwater information on the City's/County's webpages, conducting mass mailings, holding workshops, and development and distribution of brochures, posters, fact sheets, etc.

9.3 FOOD SERVICE FACILITIES INSPECTION PROGRAM

In accordance with F.3.b(3)(d) of the San Diego Order, the Orange County Health Care Agency (OCHCA), on behalf of the Permittees, conducts initial water quality inspections on all food service facilities. Water quality issues are documented and included in the OCHCA's monthly

reports. The Permittees are responsible for conducting follow-up inspections on facilities with water quality issues to confirm the implementation of best management practices for pollution prevention and to address the following activities:

1. Trash storage and disposal;
2. Grease storage and disposal;
3. Maintenance of trash collection area and grease interceptors;
4. Proper discharge of wash water (e.g., from floor mats, driveways, sidewalks, etc.);
5. Identification of outdoor sewer and MS4 connections; and
6. Education of property managers when grease and/or trash facilities are shared by multiple facilities.

9.4 MOBILE BUSINESS PROGRAM

To address Section F.3.b(3)(a) of the Fifth Term Permit, the City participates in the mobile surface cleaner business program.

The mobile surface cleaner businesses addressed in this program are those which provide one or more of the following services:

1. Cleaning (e.g., power sweeping, washing) driveways and parking lots;
2. Cleaning building exteriors (except sandblasting, window cleaning);
3. Driveway cleaning (e.g., power sweeping, washing) services;
4. Parking lot cleaning (e.g., power sweeping, washing) services;
5. Power washing building exteriors;
6. Pressure washing (e.g., buildings, decks, fences); and
7. Steam cleaning building exteriors

9.4.1 Mobile Business Inventory

The City updates as needed the list of mobile surface cleaner businesses that report their business address as being within the City.

9.4.2 Best Management Practice (BMP) Implementation

The City has designated a minimum set of activity-specific BMPs for mobile surface cleaner businesses, which are presented in the form of a series of brochures, depending on the activity, which describe options for wastewater disposal.

9.4.3 Inspections/Self-Certifications

On a biennial basis, the City will ensure that each known mobile surface cleaner business whose headquarters is listed within the City's jurisdiction achieves one of the following end points:

1. Successful completion of an online training program; or
2. Completion of a self-certification form; or
3. Inspection conducted by the Permittee

9.4.4 Enforcement

City inspectors with enforcement authority will issue enforcement actions to mobile business owners and operators determined to be out of compliance as detailed in **DAMP Section 9.2.4**. The inspectors will document each observed violation. Depending on the severity of the violation, enforcement actions can range from a verbal warning to civil or criminal court actions with monetary fines.

If a City inspector observes a significant and/or immediate threat to water quality, action will be taken to require the mobile business owner and/or operator to immediately cease the discharge.

The enforcement mechanisms available to inspectors, as detailed in **DAMP Section 9.2.4**, are as follows (in increasing order of severity):

- Notice of Non-compliance
- Administrative Compliance Orders
- Cease and Desist Orders
- Infractions and Misdemeanors

While these measures typically escalate in enforcement action, they are not required to be issued in the exact order presented here. City inspectors will apply or recommend any of the enforcement steps as appropriate based on the enforcement consistency guide (included as **DAMP Exhibit 4.I**). The City will ensure that violations of a similar nature are subjected to similar types of enforcement remedies.

9.5 RESIDENTIAL PROGRAM

The program described in this section was developed pursuant to Section E.5. of the Fifth Term Permit and **DAMP Section 9.5**.

9.5.1 Program Overview

The City's Residential Program includes specifications for pollution-prevention methods for residential areas and activities located within the City. Specific pollution prevention practices that are recognized for each residential activity with high potential to pose a threat to water quality, as being effective and economically advantageous, are provided in the activity fact sheets presented in **Exhibit 9.2**. The City will use the implementation strategies discussed in **Section 9.5.4** to encourage pollution prevention.

9.5.2 Source Identification and Inventory

The City has identified the following potential areas and activities that pose a high threat to water quality by following the procedure outlined in **DAMP Section 9.5.2**.

- Automobile repair, maintenance, washing and parking;
- Home and garden care activities and product use (pesticides, herbicides, and fertilizers);
- Disposal of trash, pet waste, green waste, and household hazardous waste (e.g., paints, cleaning products);
- Any other residential source that the Copermittee determines may contribute a significant pollutant load to the MS4;
- Any residential areas tributary to a CWA Section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon, the ocean, or other receiving waters within an environmentally sensitive area.

These residential activities are assumed to occur with equal likelihood in all residential areas within the City's jurisdiction. The implementation of the residential program is designed to address these activities on a citywide basis.

9.5.3 Best Management Practice Requirements

The City has designated a minimum set of activity-specific BMPs for residential activities, as set forth in **DAMP Section 9.5** and modified according to City requirements. The City has selected the BMPs shown in **Table 9.3** below that are appropriate to prevent or mitigate pollution generated from the specific activities typical of residences within the jurisdiction. The corresponding BMP fact sheets are included as **Exhibit 9.2**. The City requires the implementation of the designated BMPs at each residence to limit the potential impact of the residential activities on receiving water quality.

Table 9.3
Designated Residential Activities BMPs

ACTIVITY	BMP FACT SHEET
Automobile Repair and Maintenance	R-1
Automobile Washing	R-2
Automobile Parking	R-3
Home and Garden Care Activities	R-4
Disposal of Pet Wastes	R-5
Disposal of Green Wastes	R-6
Household Hazardous Waste BMPs	R-7
Water Conservation	R-8
Walkways and Driveways	R-9
Pools and Fountains	R-10

9.5.4 Program Implementation

The implementation of the residential program will rely on education and outreach to notify and urge residents to observe the designated sets of BMPs for each of the high-threat activities. The City will encourage the implementation of the designated BMPs for each residence within its jurisdiction by conducting the following as appropriate:

- **Training City Personnel** who have regular contact with residential areas (e.g., park maintenance personnel, street sweepers, code enforcement officers, etc.) to serve as informal inspectors performing field reviews.
- **Responding to Hotline Calls** by activating trained field review response personnel.
- **Updating the City's Website** (www.cityofrsm.org) by providing the BMP fact sheets and information on residential stormwater pollution prevention.
- **Conducting Annual Mailings** which include the BMP fact sheets as well as information on household hazardous waste collection sites and dates and times of operation. Included in mailings will be the City's contact information, the City hotline number 949/635-1800, and a statement to call 911 in an emergency situation. Each mailing will be posted on the City's website.
- **Public Service Announcements** reminding residents that the storm drain system conveys untreated water to the ocean using the established theme, "The Ocean begins at your front door." Announcements shall also include reminders that the County hotline number is a 24-hour service.

9.5.5 Enforcement

Enforcement actions may be initiated by the City as a response to hotline reports and complaints, or by observations by City representatives. All enforcement actions will be documented and recorded for subsequent inclusion in the City's annual progress report. The enforcement

mechanisms available to field reviewers, as detailed in **DAMP Section 10** and the Water Quality Ordinance, are as follows (in increasing order of severity):

- Notice of Non-compliance
- Administrative Compliance Order
- Cease and Desist Orders
- Infractions and Misdemeanors

While these measures typically escalate in enforcement action, they need not be issued in the exact order presented here. City officials will apply or recommend any of the enforcement steps as appropriate based on the enforcement consistency guide, **DAMP Section 4, Exhibit 4.I**. The City will ensure that violations of a similar nature are subjected to similar types of enforcement remedies.

9.6 COMMON INTEREST AREAS/HOMEOWNERS ASSOCIATION ACTIVITIES PROGRAM

The common interest area and homeowners association (CIA/HOA) program described in this section was developed pursuant to Section E.5. of the Fifth Term Permit and **DAMP Section 9.6**.

9.6.1 Program Overview

The City's Common Interest Area/Homeowner Association Area (CIA/HOA) Activities Program includes specifications for pollution-prevention methods for CIA/HOA areas and activities located within the City. Specific pollution prevention practices that are recognized for each CIA/HOA activity with high potential to pose a threat to water quality, as being effective and economically advantageous, are provided in the activity fact sheets presented in **Exhibit 9.2**. The City will use the implementation strategies discussed in **Section 9.6.5** to encourage pollution prevention.

9.6.2 Current Practices and Activities of Concern

DAMP Section 9.6.2.2 lists high-priority activities that commonly occur in CIA/HOA areas, and describes the potential pollutants generated by these activities. **Table 9.4**, presented below, illustrates the relationship of these activities and the potential pollutants they generate.

Table 9.4
Potential Pollutants from CIA/HOA Activities

ACTIVITY	POTENTIAL POLLUTANTS								
	Sediments	Nutrients ^a	Pathogens/ Coliform ^b	Foaming Agents	Metals	Hydrocarbons	Hazardous Materials ^c	Pesticides and Herbicides	Other ^d
Sidewalk, plaza and fountain cleaning	X	X	X	X			X		
Landscape maintenance	X	X	X				X	X	
Home and garden care	X	X	X	X	X		X	X	X
Pet waste	X	X	X						
Garden waste	X	X	X				X	X	
Automobile parking	X				X	X	X		
Community center O&M	X	X	X						X
Recreation area O&M	X	X	X					X	
Maintenance yard operation	X	X	X	X	X	X	X	X	X

^aNitrogen and Phosphorous compounds

^bIncluding fecal and total coliform, E. coli, etc.

^cIncluding chlorinated hydrocarbons, paint, etc.

^dIncluding bleach, etc.

9.6.3 Prioritization of Locations

As part of the residential program, the City has developed, and will update annually, a watershed-based inventory of all residential areas (which includes common interest areas and homeowners associations), pollutants potentially discharged from those areas, and environmentally sensitive areas within its jurisdiction. Specific layers to the map include:

- Residential land use areas
- Watershed(s) within municipality boundaries
- Drainage facilities
- Environmentally sensitive areas (ESAs), including 303(d) water bodies

The process for conducting the inventory is detailed in **Section 9.6.3.1 of the DAMP**. The City's inventory spreadsheet is included in **Exhibit 9.1**.

A residential area, hence CIA/HOA area, is prioritized based on whether it is:

- Directly tributary to 303(d)-listed water bodies, where pollutant-causing impairment is present in discharge (i.e., flows from the CIA/HOA discharge directly to 303(d)-listed water bodies).
- Discharging to environmentally sensitive areas (ESAs).
- Found to be contributing significant pollutant loads to the storm drain system, through analysis of monitoring data.
- Determined to be responsible for maintenance of streets and storm drains within the CIA/HOA.

9.6.4 Best Management Practice (BMP) Implementation

The City has designated a minimum set of activity-specific BMPs for CIA/HOA areas listed in **Table 9.5** and **Table 9.6**, and presented in the fact sheets included in **Exhibit 9.2**. Each CIA/HOA area is expected to implement those BMPs that are associated with the activities being conducted. If the desired result is not being achieved, the BMPs will be assessed and modified or, if necessary, changed.

Table 9.5
BMPs for CIAs/HOAs with Publicly-Owned and -Maintained Streets and Storm Drains

ACTIVITY	BMP	FACT SHEET
Parking vehicles on residential streets, in driveways, or in common area parking lots	Automobile parking BMPs	R-3
Washing vehicles in residential driveways or street	Automobile washing BMPs	R-2
Disposal of household hazardous wastes such as paint, bleach, etc.	Household Hazardous Waste BMPs	R-7
Cleaning of CIA/HOA sidewalks, plaza, and entry monuments and fountains	Sidewalk, plaza, and entry monument and fountain maintenance BMPs	FP-4
Landscape maintenance including irrigation and fertilization	Landscape maintenance BMPs	FP-2 IC-7
Operation and maintenance of community pools	Pool cleaning BMPs	IC-14
Operations and maintenance of recreation areas such as stables, golf courses, and parks	Disposal of Pet Waste BMPs Landscape Maintenance BMPs Disposal of Green Waste BMPs	R-5 FP-2 R-6
Maintenance Yard BMPs		
ACTIVITY	BMP	FACT SHEET
Vehicle maintenance and repair	Equipment maintenance and repair BMPs	FF-3
Vehicle fueling	Vehicle fueling BMPs	FF-4
Storage of vehicles and equipment	Vehicle and equipment storage BMPs	FF-12
Cleaning of vehicles and equipment	Vehicle and equipment cleaning BMPs	FF-11
Storage, handling, and disposal of various materials such as cleaners	Material storage, handling, and disposal BMPs	FF-13
Loading and unloading of materials	Material loading and unloading BMPs	FF-6

Table 9.6
BMPs for CIAs/HOAs with Privately-Owned and Maintained Streets and Storm Drains

Includes all the BMPs listed for publicly-owned CIAs/HOAs from Table 9-11 of the DAMP plus the following:

ACTIVITY	BMP	FACT SHEET
Street sweeping	Street sweeping BMPs	FP-3
Trash collection, recycling, and disposal	Solid waste handling BMPs	FF-13
Inspection and cleaning of storm drains	Drainage system operation and maintenance BMPs	DF-1
Operation and maintenance of water and sewer lined (not controlled by utility company)	Water and sewer utility operation and maintenance BMPs	FP-6

9.6.5 Implementation Strategy

The City's plan for implementing the CIA/HOA Program follows the process outlined in **DAMP Section 9.6.5.2**. The City's implementation plan includes education and outreach as described both in that section and in **DAMP Section 6.0**.

Implementation efforts will vary depending on whether high-priority activities occur within a CIA/HOA area, or if the area is located within an area selected for enhanced implementation as part of the residential program.

The following implementation efforts will be utilized for all CIA/HOA areas within the City's jurisdiction:

- Mail letter explaining CIA/HOA program to association governing board. The letter will explain activities of concern and their environmental impacts, BMPs to reduce the impact, and consequences of not complying with the CIA/HOA program.
- Mail BMP fact sheets to maintenance association governing board.
- Mail questionnaire to all residents based on BMPs appropriate for that CIA/HOA.

9.6.6 Enforcement

Enforcement mechanisms available to the City, as detailed in **DAMP Section 10.0**, are as follows (in increasing order of severity):

- Notice of Non-compliance (verbal and/or written warnings, to individual resident or CIA/HOA Board)
- Administrative Compliance Order (written notice to CIA/HOA Board)
- Cease and Desist Order (written notice to CIA/HOA Board)
- Civil or Criminal Enforcement (includes fines and assessments levied on CIA/HOA Board and/or individual resident)

While these measures typically escalate in enforcement action, they need not be issued in the exact order presented here. City officials will apply or recommend any of the enforcement steps as appropriate based on the enforcement consistency guide, Section 10 of the DAMP. The City will ensure that violations of a similar nature are subjected to similar types of enforcement remedies.

9.7 RETROFITTING EXISTING DEVELOPMENT PROGRAM

[To Be Provided] The Fifth Term Permit requires the City to identify existing development areas that are potential candidate for retrofit and/or rehabilitation projects to address sources of pollutants and/or stressors that contribute to HPWQC in the South OC WMA, which are unnatural water balance, pathogen health risk and stream erosion. As part of WQIP development, the Permittees elected to perform the optional Watershed Management Area Analysis (WMAA) described in Permit Provision B.3.b.(4) to develop an integrated approach for their land development stormwater planning programs by promoting evaluation of multiple strategies for water quality improvement and development of watershed-scale solutions for improving overall water quality in the watershed.

Through the WMAA the following three components were conducted:

1. Perform analysis and develop Geographic Information System (GIS) layers (maps) by gathering information pertaining to the physical characteristics of the WMA (referred to herein as WMA Characterization). This includes identifying hydrologic and infiltration features of the watersheds, land uses, stormwater conveyance and management facility locations that affect the watershed hydrology.
2. Using the WMA Characterization results, compile a list of candidate projects that could potentially be used as alternative compliance options for Priority Development Projects. Such projects may include opportunities for stream or riparian area rehabilitation, opportunities for retrofitting existing infrastructure to incorporate stormwater retention or treatment, or opportunities for regional BMPs, among others.
3. Additionally, using the WMA Characterization maps, identify areas within the watershed management area where it is appropriate to allow for exemptions from hydromodification management requirements that are in addition to those already allowed by the Permit for Priority Development Projects.

Exhibits developed as part of the WMAA are located in Appendix K of the WQIP. The exhibits include hydrologic and infiltration features of the watersheds, land uses, stormwater conveyance and management facility locations. Additionally, existing and potential retrofit locations for each subwatershed are also located in Appendix K of the WQIP and identified as the following:

- Figure 6.11 – Laguna Coastal Watershed,
- Figure 7.11 – Aliso Creek Watershed,
- Figure 8.11 – Dana Point Watershed,
- Figure 9.11 – San Juan Creek Watershed, and,
- Figure 10.11 – San Clemente Creek Watershed

Prior to implementing these retrofit projects the Permittees must demonstrate that implementing such a retrofit project would provide greater overall benefit to the watershed than requiring implementation of the onsite structural BMPs through the implementation of the WQIP. The Permittees are currently implementing a number of WQIP strategies such as:

- Development of the Comprehensive Human Waste Source Reduction Strategy Work Plan
- Outfall Capture Feasibility Studies
- Flow Regime Special Study
- Reach Rehabilitation Alternatives And Feasibility Studies And Associated Upland Flow Control Opportunity Evaluation, etc.

The completion of these strategies will further assist in identifying source and/or stressors that contribute to HPWQC. Overall, the City will employ a range of strategies to facilitate the implementation or construction of retrofit and rehabilitation projects in accordance with the WQIP. The City may also consider partnering with other neighboring jurisdictions to install regional BMPs where retrofit projects are deemed to provide a greater net benefit to the City than projects implemented only by the City.[]

9.8 TRAINING PROGRAM

For an effective stormwater program to be efficiently implemented, its staff must have sufficient knowledge, experience, and skills. The Principal Permittee will coordinate, develop and present a number of different training modules in accordance with the *The Orange County Stormwater Program Training Program Framework: Core Competencies*. The City will support this effort by requiring the appropriate employees to attend training sessions and conduct applicable train-the-trainer sessions, if necessary.

EXHIBIT 9.1

Commercial and Industrial Facility Inventory



Exhibit 9-1
City of Rancho Santa Margarita
Commercial and Industrial Facility Inventory

COMMERCIAL FACILITIES

Business Name	Street Address	City	Zip	SIC	Latitude (Y)	Longitude (X)
AMAZING GRAPES WINE STORE	29911 AVENTURA STE D&E	RSM	92688	5812	33.636168	-117.608646
Angelo Termite and Construction Co.	30306 Esperanza Parkway	RSM	92688	7342	33.631560	-117.600924
APPLIED MEDICAL RESOURCES	22872 AVENIDA EMPRESSA	RSM	92688	5812	33.630390	-117.605387
ARIGATO JAPANESE CUISINE	31441 SANTA MARGARITA PKWY STE J	RSM	92688	5812	33.648970	-117.582447
ARROYO VISTA ELEMENTARY SCHOOL	23371 ARROYO VISTA	RSM	92688	5812	33.622974	-117.614973
ARROYO VISTA MIDDLE SCHOOL	23371 ARROYO	RSM	92688	5812	33.622974	-117.614973
Auto Collision Solutions	23251 Antonio Parkway	RSM	92688	7532	33.625080	-117.607502
Auto Medics	23071 Antonio Parkway B	RSM	92688	7538	33.627370	-117.605531
Awesome Performance	23061 Antonio Parkway H	RSM	92688	7538	33.627461	-117.605425
BAJA FRESH MEXICAN GRILL	22245 EL PASEO STE C	RSM	92688	5812	33.639978	-117.594071
BALLPARK PIZZA TEAM	22431 ANTONIO PKWY #B110	RSM	92688	5812	33.636752	-117.590664
BALUKA JUICE	31431 SANTA MARGARITA PKWY STE D	RSM	92688	5812	33.648976	-117.582520
BARBEQUES GALORE	30592 SANTA MARGARITA PKWY STE A	RSM	92688	5812	33.643308	-117.597102
BASKIN ROBBINS	22461 ANTONIO PKWY STE A 145	RSM	92688	5812	33.636418	-117.590805
BED BATH & BEYOND #479	22235 EL PASEO	RSM	92688	5812	33.640092	-117.594133
BELL TOWER FOUNDATION, THE	22232 EL PASEO	RSM	92688	5812	33.640024	-117.594448
BERRY SWIRL	30461 AVENIDA DE LAS FLORES STE C	RSM	92688	5812	33.642153	-117.599316
BLOCKBUSTER #02527	30465 AVENIDA DE LAS FLORES A	RSM	92688	5812	33.642076	-117.599355
BOBS PHILLYS BEST	30461 AVENIDA DE LAS FLORES D	RSM	92688	5812	33.642153	-117.599316
BRUEGGERS BAGELS	22361 ANTONIO PKWY STE E110	RSM	92688	5812	33.638039	-117.589788
BURGER KING #7397	22351 ANTONIO PKWY	RSM	92688	5812	33.638112	-117.589761
CANYON FIRESIDE GRILLE	22312 EL PASEO STE A	RSM	92688	5812	33.638964	-117.593414
CARLS JR #672	31461 SANTA MARGARITA PKWY	RSM	92688	5812	33.648956	-117.582300
CARNEAL CONCESSION	21472 AVENIDA DE LOS FUNDADORE	RSM	92688	5812	33.651273	-117.587002
CELINDAS THE ORIGINAL MEXICAN	29941 AVENTURA STE O	RSM	92688	5812	33.636199	-117.608288
CHILLZ FROZEN YOGURT	31431 SANTA MARGARITA PKWY STE L	RSM	92688	5812	33.648976	-117.582520
CHINA BOWL	29851 AVENTURA STE F	RSM	92688	5812	33.636139	-117.609356
CIELO VISTA ELEMENTARY	21811 AVENIDA DE LOS FUNDADORE	RSM	92688	5812	33.646550	-117.585464
CINDERELLA CAKES & COOKIES	31431 SANTA MARGARITA PKWY	RSM	92688	5812	33.648976	-117.582520
CINNAMON PRODUCTIONS	22342 EL PASEO STE I	RSM	92688	5812	33.638759	-117.593128
COLD STONE CREAMERY	22342 EL PASEO STE B	RSM	92688	5812	33.638759	-117.593128
COSMOS ITALIAN KITCHEN	28562 OSO PKWY	RSM	92688	5812	33.583537	-117.632311
COX COMMUNICATIONS	29947 AVENIDA DE LAS BANDERAS	RSM	92688	5812	33.630792	-117.607976
CVS PHARMACY #6770	22361 ANTONIA PKWY	RSM	92688	5812	33.638039	-117.589788
DAILY SPORTS GRILL, THE	29881 AVENTURA U	RSM	92688	5812	33.636153	-117.608996
DAPHNES GREEK CAFE	22245 EL PASEO ST STE A	RSM	92688	5812	33.639978	-117.594071
Dewey Pest Control	29734 Avenida de las Banderas	RSM	92688	7342	33.624421	-117.612546
Discount Tires	23051 Antonio Parkway K	RSM	92688	7534	33.627532	-117.605327
Econo Lube	21562 Plano Trabuco	RSM	92688	7538	33.649871	-117.577095
EDIBLE ARRANGEMENTS	29881 AVENTURA STE A	RSM	92688	5812	33.636153	-117.608996
EDWARDS SANTA MARGARITA	30632 SANTA MARGARITA PKWY	RSM	92688	5812	33.643345	-117.596650
EL FENIX CARNICERIA	29941 AVENTURA	RSM	92688	5812	33.636199	-117.608288
EL POLLO LOCO	22381 ANTONIO PKWY	RSM	92688	5812	33.637771	-117.589983
EL TORITO GRILL	22322 EL PASEO	RSM	92688	5812	33.638882	-117.593316
Enterprise Rentacar	23071 Antonio Parkway A	RSM	92688	7538	33.627370	-117.605531
EXXON-MOBIL MART # 10643	31521 SANTA MARGARITA PKWY	RSM	92688	5812	33.648917	-117.581859
Family Nissan	29901 Santa Margarita Parkway	RSM	92688	5511	33.638165	-117.609453
FLAME BROILER	30622 SANTA MARGARITA PKWY	RSM	92688	5812	33.643341	-117.596761
Formdesign Inc.	30243 Tomas	RSM	92688	7538	33.637176	-117.602442
GENERAL NUTRITION CENTER #9920	31431 SANTA MARGARITA PKWY STE H	RSM	92688	5812	33.648976	-117.582520
GOLDEN SPOON OF RSM	21702 PLANO TRABUCO RD STE C	RSM	92688	5812	33.636680	-117.586364
Gregg's Santa Margarita Mobil	31521 Santa Margarita Parkway	RSM	92688	5541	33.648917	-117.581859
HANNAS RESTAURANT & BAR	22195 EL PASEO STE 110	RSM	92688	5812	33.640835	-117.594769
HAT PETROLEUM INC	29880 SANTA MARGARITA PKWY	RSM	92688	5812	33.637726	-117.609406
INTERNATIONAL HOUSE OF PANCAKES 832	30492 AVENIDA DE LAS BANDERAS	RSM	92688	5812	33.636600	-117.601885
JACK IN THE BOX #9387	28592 OSO PKWY	RSM	92688	5812	33.583496	-117.632033
Jiffy Lube #1598	23041 Antonio Parkway	RSM	92688	7533	33.627604	-117.605229
JUICE IT UP	22342 EL PASEO STE D	RSM	92688	5812	33.638759	-117.593128
KOS DONUTS	31431 SANTA MARGARITA PKWY STE C	RSM	92688	5812	33.648976	-117.582520
kFC	29840 SANTA MARGARITA PKWY	RSM	92688	5812	33.637584	-117.609770
LA FIESTA MEXICAN GRILL	22441 ANTONIO PKWY STE A370	RSM	92688	5812	33.636641	-117.590738
LAS FLORES CHEVRON	28632 OSO PKWY	RSM	92688	5812	33.583449	-117.631873
LAS FLORES HAND CARWASH	28622 OSO PKWY	RSM	92688	5812	33.583461	-117.631762
LAS FLORES MIDDLE SCHOOL	25862 ANTONIO PKWY	RSM	92688	5812	33.585301	-117.630033
Majestic Landscape Care Inc.	29812 Avenida de las Banderas	RSM	92688	782	33.628514	-117.609514
MCDONALDS	30672 SANTA MARGARITA PKWY	RSM	92688	5812	33.643374	-117.596192
MELINDA HEIGHTS ELEMENTARY	21001 RANCHO TRABUCO	RSM	92688	5812	33.654468	-117.618917
MESA FOOD AND LIQUOR	28562 OSO PKWY	RSM	92688	5812	33.583537	-117.632311
MESA FOODS & LIQUOR	31431 SANTA MARGARITA PKWY STE A	RSM	92688	5812	33.648976	-117.582520
NEIGHBORHOOD GRILL & SALAD BAR	29941 AVENTURA STE I	RSM	92688	5812	33.636199	-117.608288
NIKO NIKO SUSHI	22245 EL PASEO STE B	RSM	92688	5812	33.639978	-117.594071
Northwest Landscape Management	30211 Avenida de las Banderas	RSM	92688	782	33.634234	-117.603665
NUTRI-STOP	22307 EL PASEO	RSM	92688	5812	33.638824	-117.593703
O'Connell Landscape Maintenance	23091 Arroyo Vista	RSM	92688	781	33.626093	-117.609494
PAD THAI	30486 AVENIDA DE LAS BANDERAS STE C	RSM	92688	5812	33.635724	-117.601736
PANDA EXPRESS #443	22451 ANTONIO PKWY	RSM	92688	5812	33.636530	-117.590811

Exhibit 9-1
City of Rancho Santa Margarita
Commercial and Industrial Facility Inventory

COMMERCIAL FACILITIES

Business Name	Street Address	City	Zip	SIC	Latitude (Y)	Longitude (X)
PAPA JOHNS	29941 AVENTURA STE A	RSM	92688	5812	33.636199	-117.608288
Park West Landscape Inc.	22421 Gilberto	RSM	92688	781	33.637747	-117.605516
PASTA BRAVO	30465 AVENIDA DE LAS FLORES	RSM	92688	5812	33.642076	-117.599355
Pauls Japanese Auto Repair / The Brake Stop	23061 Antonio Parkway O	RSM	92688	7538	33.627461	-117.605425
PAVLIONS #2217	22451 ANTONIO PKWY	RSM	92688	5812	33.636530	-117.590811
Pennas Volvo Services	23061 Antonio Parkway E	RSM	92688	7538	33.627461	-117.605425
PICKUP STIX	30461 AVENIDA DE LAS FLORES STE A	RSM	92688	5812	33.642153	-117.599316
PICKUP STIX	28562 OSO PKWY	RSM	92688	5812	33.583537	-117.632311
PIZZA E VINO	31441 SANTA MARGARITA PKWY STE M	RSM	92688	5812	33.648970	-117.582447
PIZZA HUT #24494	29670 SANTA MARGARITA PKWY	RSM	92688	5812	33.637689	-117.609500
Plano Shell / Soft Touch Car Wash	21712 Plano Trabuco	RSM	92688	5541	33.647898	-117.577334
QUIZNOS SUBS	29880 SANTA MARGARITA PKWY	RSM	92688	5812	33.637726	-117.609406
R & M PACIFIC RIM INC	30114 SANTA MARGARITA PKWY	RSM	92688	5812	33.641661	-117.604904
RALPHS GROCERY COMPANY #78	31481 SANTA MARGARITA PKWY	RSM	92688	5812	33.648943	-117.582153
Rancho Automotive & Towing	23061 Antonio Parkway D	RSM	92688	7538	33.627461	-117.605425
RANCHO FOOD & SPIRITS	29881 AVENTURA STE B	RSM	92688	5812	33.636153	-117.608996
Rancho Santa Margarita ARCO	29880 Santa Margarita Parkway	RSM	92688	5541	33.637726	-117.609406
RANCHO SANTA MARGUERITA	21931 ALMA ALDEA	RSM	92688	5812	33.643154	-117.588173
RICE & SPICE THAI CUISINE	22431 ANTONIO PKWY STE B130	RSM	92688	5812	33.636752	-117.590664
RITE AID #6758	31541 SANTA MARGARITA PKWY	RSM	92688	5812	33.648904	-117.581712
ROCKY MOUNTAIN CHOCOLATE FACTORY	30622 SANTA MARGARITA PKWY STE D104	RSM	92688	5812	33.643341	-117.596761
ROSS DRESS FOR LESS #341	30612 SANTA MARGARITA PKWY STE B-101	RSM	92688	5812	33.643337	-117.596873
ROUND TABLE PIZZA	22205 EL PASEO STE B	RSM	92688	5812	33.640480	-117.594306
Royal Motors Mercedes and BMW	23601 Antonio Parkway A	RSM	92688	7538	33.599410	-117.622869
RSM Automotive	23071 Antonio Parkway F	RSM	92688	7538	33.627370	-117.605531
RSM Honda	29961 Santa Margarita Parkway	RSM	92688	5511	33.638399	-117.608942
RUBIOS	30465 AVENIDA DE LAS FLORES	RSM	92688	5812	33.642076	-117.599355
RUBYS DINER	22411 ANTONIO PKWY STE C-170	RSM	92688	5812	33.636975	-117.590517
SAKE SUSHI	22411 ANTONIO PKWY STE C-160	RSM	92688	5812	33.636975	-117.590517
Santa Margarita Animal Care Center	30052 Santa Margarita Pkwy	RSM	92688	742	33.636418	-117.590885
Santa Margarita Auto body	23061 Arroyo Vista	RSM	92688	7538	33.626457	-117.609211
SANTA MARGARITA CATHOLIC HS	22062 ANTONIO PKWY	RSM	92688	5812	33.644265	-117.582041
Santa Margarita Ford	30031 Santa Margarita Parkway	RSM	92688	5511	33.639862	-117.606975
Santa Margarita Ford Fleet Services	29922 Avenida de las Banderas	RSM	92688	7538	33.630170	-117.608019
Santa Margarita Transmission	23071 Antonio Parkway K	RSM	92688	7538	33.627370	-117.605531
SCOTT'S DONUTS & BAGELS	29941 AVENTURA STE L	RSM	92688	5812	33.636199	-117.608288
SCOTT'S DONUTS & BAGELS	29941 AVENTURA STE L	RSM	92688	5812	33.636199	-117.608288
SELMAS CHICAGO PIZZERIA	30461 AVENIDA DE LAS FLORES STE B	RSM	92688	5812	33.642153	-117.599316
SM Shell	30114 Santa Margarita Parkway	RSM	92688	5541	33.641661	-117.604904
ST JOHNS EPISCOPAL SCHOOL	30382 VIA CON DIOS	RSM	92688	5812	33.644574	-117.600416
STAPLES THE OFFICE SUPERSTORE	30511 AVENIDA DE LAS FLORES	RSM	92688	5812	33.640751	-117.599988
STARBUCKS COFFEE	22421 ANTONIO PKWY STE F100	RSM	92688	5812	33.636864	-117.590591
STARBUCKS COFFEE #5267	31431 SANTA MARGARITA PKWY STE E	RSM	92688	5812	33.648976	-117.582520
STARBUCKS COFFEE #5755	30465 AVENIDA DE LAS FLORES STE D	RSM	92688	5812	33.642076	-117.599355
STARBUCKS COFFEE #9288	28562 OSO PKWY STE F	RSM	92688	5812	33.583537	-117.632311
SUBWAY	30486 AVENIDA DE LAS BANDERAS STE F	RSM	92688	5812	33.636724	-117.601736
TACO BELL #19895	28532 OSO PKWY	RSM	92688	5812	33.583583	-117.632580
TACO BELL #4181	31491 SANTA MARGARITA PKWY	RSM	92688	5812	33.648936	-117.582079
TARGET STORES #914	30602 SANTA MARGARITA PKWY	RSM	92688	5812	33.643308	-117.596991
TARGET STORES #914	30602 SANTA MARGARITA PKWY	RSM	92688	5812	33.643308	-117.596991
TESORO HIGH SCHOOL	1 TESORO CREEK RD	RSM	92688	5812	33.585237	-117.613260
TGI FRIDAYS	22022 EL PASEO	RSM	92688	5812	33.643234	-117.594881
TIJERAS CREEK ELEMENTARY SCHOOL	23072 AVENIDA EMPRESA	RSM	92688	5812	33.627101	-117.603179
TIJERAS CREEK GOLF CLUB	29082 TIJERAS RD	RSM	92688	5812	33.609709	-117.620203
TIJERAS CREEK GOLF CLUB	29082 TIJERAS RD	RSM	92688	5812	33.609709	-117.620203
Total Landscape Care	30211 Avenida de las Banderas	RSM	92688	782	33.634234	-117.603665
Towne Center Car Wash Co. Incorporated	30832 Santa Margarita Parkway	RSM	92688	7542	33.643887	-117.594302
Toyota of Rancho Santa Margarita	22722 Avenida Empresa	RSM	92688	5511	33.632518	-117.606593
TRADER JOES #27	30652 SANTA MARGARITA PKWY STE F102	RSM	92688	5812	33.643353	-117.596428
TUTTO FRESCO TRATTORIA	30642 SANTA MARGARITA PKWY STE E104	RSM	92688	5812	33.643349	-117.596539
UNCORKED WINE BAR	22342 EL PASEO STE A	RSM	92688	5812	33.638759	-117.593128
WAN FU CHINA BISTRO	30642 SANTA MARGARITA PKWY STE 105E	RSM	92688	5812	33.643349	-117.596539
WASABI SUSHI & CUISINE	30642 SANTA MARGARITA PKWY STE E102	RSM	92688	5812	33.643349	-117.596539
WENDIS DONUTS	28562 OSO PKWY STE C	RSM	92688	5812	33.583537	-117.632311
Wendt Landscape Service Inc.	29714 Avenida de las Banderas	RSM	92688	782	33.624002	-117.612648
WENDY'S #108	30471 AVENIDA DE LAS FLORES	RSM	92688	5812	33.641961	-117.599413
William Lyons Classic Auto Corporation	30071 Comercio	RSM	92688	7538	33.633954	-117.606498
WING STAR PIZZA	22307 EL PASEO STE C	RSM	92688	5812	33.638824	-117.593703
WINGS BREW BAR & GRILL	31431 SANTA MARGARITA PKWY STE M	RSM	92688	5812	33.648976	-117.582520
WINGSTOP	22195 EL PASEO STE 100	RSM	92688	5812	33.640835	-117.594769
WOOD RANCH BBQ & GRILL	22352 EL PASEO	RSM	92688	5812	33.636698	-117.593009
YOGURT LAND RANCHO SANTA MARGARITA	22361 ANTONIO PKWY STE E115	RSM	92688	5812	33.638039	-117.589788
YOGZIE	30622 SANTA MARGARITA PKWY STE D105	RSM	92688	5812	33.643341	-117.596761

Exhibit 9-1
City of Rancho Santa Margarita
Commercial and Industrial Facility Inventory

INDUSTRIAL FACILITIES

Business Name	Street Address	City	Zip	SIC	Latitude (Y)	Longitude (X)
Announcements & Invitations by Jeanette	22521 Avenida Empressa 108/109	RSM	92688	2759	33.633654	-117.605640
Apollo Technologies	31441 Santa Margarita Parkway A	RSM	92688	7389	33.648970	-117.582447
Astro Grinding	23091 Antonio Parkway	RSM	92688	3499	33.627049	-117.605867
Car Sound Exhaust Systems Inc.	22961 Arroyo Vista	RSM	92688	3714	33.628674	-117.607385
CCI World Headquarters/Contol Components	22591 Avenida Empressa	RSM	92688	3491	33.634169	-117.607360
CH Grinding Inc.	30062 Aventura	RSM	92688	3541	33.636208	-117.606245
Ebony and Ivory Limo Service	1 Arado	RSM	92688	4119	33.626350	-117.616583
Fast Forward Trucking	49 Calle Gazapo	RSM	92688	4213	33.647333	-117.617059
Forespar	22322 Gilberto	RSM	92688	3441	33.636962	-117.605000
GE Energy Service	30191 Avenida de las Banderas	RSM	92688	4911	33.634009	-117.603841
Gish Biomedical, Inc.	22942 Arroyo Vista	RSM	92688	3841	33.628812	-117.606746
Imperial Custom BBQ's and More	29881 Aventura B	RSM	92688	5631	33.636153	-117.608996
KVB Enertec	30191 Avenida de las Banderas	RSM	92688	3829	33.634009	-117.603841
Latin Press International	34 Paseo Viento	RSM	92688	7383	33.652928	-117.612645
Marden Susco	22931 Arroyo Vista	RSM	92688	5039	33.629224	-117.606642
Micro Precision Swiss	23211 Arroyo Vista	RSM	92688	3499	33.624654	-117.610616
Peak Storage	30191 Avenida de las Banderas	RSM	92688	4225	33.633654	-117.605640
Plano Self Storage	30351-59 Esperanza	RSM	92688	4225	33.632328	-117.601143
Post Office Annex	29862 Avenida de las Banderas	RSM	92688	4311	33.629284	-117.608853
Precision Prep Inc.	30212 Tomas	RSM	92688	3714	33.637429	-117.603068
Precision Prep Inc.	30061 Comercio	RSM	92688	3714	33.633972	-117.606171
Rancho Santa Margarita Limousine	7 Hidalgo Lane	RSM	92688	4119	33.621492	-117.609116
RSM Screen Printing & Embroidery	30304 Esperanza	RSM	92688	2261	33.631517	-117.600934
Santa Margarita Water District	26111 Antonio Parkway	RSM	92688	4941	33.583188	-117.631046
South Coast Stairs, Inc.	30251 Tomas	RSM	92688	2431	33.636921	-117.602486
Storage USA	30231 Tomas	RSM	92688	4225	33.637370	-117.602595
Swiss Micron	22361 Gilberto A	RSM	92688	3499	33.637220	-117.605403
Terry Moving and Storage	22526 Avenida Empressa	RSM	92688	4225	33.635431	-117.606922
Trabuco Canyon Post Office Rancho	29862 Avenida de las Banderas	RSM	92688	4311	33.629284	-117.608853
Viking Components	30200 Avenida de las Banderas	RSM	92688	3674	33.633901	-117.603359
Wild Wallets	30304 Esperanza	RSM	92688	3172	33.631517	-117.600934

EXHIBIT 9.2

Best Management Practices Industrial-Commercial Factsheets

Rancho Santa Margarita Educational Brochures

Pollution Prevention Activity Sheets



IC1. ANIMAL HANDLING AREAS

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Use dry cleaning methods to clean animal handling areas regularly.
2. Properly collect and dispose of water when water is used for cleaning.
3. Keep animals in paved and covered areas, if feasible.
4. If keeping animals in covered areas is not feasible, cover the ground with vegetation or some other type of ground cover such as mulch.
5. Prevent animals from moving away from controlled areas where BMPs are in use (e.g. fencing, leashing, etc.). Clean storm drain inlet(s) on a regular schedule and after large storms.
6. Train employees on these BMPs, storm water discharge prohibitions and wastewater discharge requirements.

Best Management Practices

1. **Use dry cleaning methods to clean animal handling areas regularly.**
 - Sweeping animal handling areas is encouraged over other methods.
 - Properly dispose of droppings, uneaten food, and other potential contaminants.
2. **If water is used for cleaning:**
 - Do not discharge wash water to storm water drains or other receiving waters.
 - Block the storm drain or contain runoff.
 - Wash water should be collected and pumped to the sanitary sewer, do not allow wash water to enter storm drains. **DO NOT** discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
3. **Keep animals in paved and covered areas, if feasible.**
4. **If keeping animals in covered areas is not feasible, cover the ground with vegetation or some other type of ground cover such as mulch.**
5. **Prevent animals from moving away from controlled areas where BMPs are in use (e.g. fencing, leashing, etc.).**
6. **Training**
 1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
 2. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.

- Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
3. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
 4. **Use a training log or similar method to document training.**

References

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

IC2. BUILDING MAINTENANCE

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Properly collect and dispose of water when pressure washing buildings, rooftops, and other large objects.
2. Properly prepare work area before conducting building maintenance.
3. Properly clean and dispose of equipment and wastes used and generated during building maintenance.
4. Employ soil erosion and stabilization techniques when exposing large areas of soil.
5. Store toxic material under cover when not in use and during precipitation events.
6. Properly dispose of fluids from air conditioning, cooling tower, and condensate drains.
7. Regularly inspect air emission control equipment under AQMD permit.
8. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

OPTIONAL:

9. Switch to non-toxic chemicals for maintenance when possible.
10. Use chemicals that can be recycled.

Best Management Practices

1. **Properly collect and dispose of water when pressure washing buildings, rooftops, and other large objects.**
 - If pressure washing where the surrounding area is paved, use a water collection device that enables collection of wash water and associated solids. Use a sump pump, wet vacuum or similarly effective device to collect the runoff and loose materials. Dispose of the collected runoff and solids properly.
 - If pressure washing on a grassed area (with or without soap), runoff must be dispersed as sheet flow as much as possible, rather than as a concentrated stream. The wash runoff must remain on the grass and not drain to pavement.
2. **Properly prepare work area before conducting building maintenance.**
 - Use ground or drop cloths underneath outdoor painting, scraping, and sandblasting work, and properly dispose of collected material daily.
 - Use a ground cloth or oversized tub for activities such as paint mixing and tool cleaning.
 - Use a storm drain cover, filter fabric, or similarly effective runoff control mechanism if dust, grit, wash water, or other pollutants may escape the work area and enter a storm drain.
3. **Properly clean and dispose of equipment and wastes used and generated during building maintenance.**
 - Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers that can be dumped into a sanitary sewer

drain. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.

- Properly dispose of wash water, sweepings, and sediments.
- Properly store equipment, chemicals, and wastes.
- Do not dump any toxic substance or liquid waste on the pavement, the ground, or toward a storm drain.

OPTIONAL:

- Recycle residual paints, solvents, lumber, and other materials to the maximum extent practicable

4. Employ soil erosion and stabilization techniques when exposing large areas of soil.

- Confine excavated materials to pervious surfaces away from storm drain inlets, sidewalks, pavement, and ditches. Material must be covered if rain is expected.
- Use chemical stabilization or geosynthetics to stabilize bare ground surfaces.

5. Store toxic material under cover when not in use and during precipitation events.

6. Properly dispose of fluids from air conditioning, cooling tower, and condensate drains.

7. Regularly inspect air emission control equipment under AQMD permit.

8. Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

2. Train employees on proper spill containment and cleanup.

- Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
- Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
- BMP IC17 discusses Spill Prevention and Control in detail.

3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.

4. Use a training log or similar method to document training.

OPTIONAL:

9. Switch to non-toxic chemicals for maintenance when possible.

- If cleaning agents are used, select biodegradable products whenever feasible
- Consider using a waterless and non-toxic chemical cleaning method for graffiti removal (e.g. gels or spray compounds).

10. Use chemicals that can be recycled.

- Buy recycled products to the maximum extent practicable

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

IC3. CARPET CLEANING

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

Discharge wash water to sink, toilet, or other drain connected to the sanitary sewer system.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

Best Management Practices

Discharge wash water to sink, toilet, or other drain connected to the sanitary sewer system.

- Never discharge wash water to a street, gutter, parking lot, or storm drain. Either:
 - empty the spent cleaning fluid tank into a utility sink or other indoor sewer connection at the service provider's home base
 - or
 - arrange with the customer to discharge into a toilet or utility sink on their premises.
- Check the local wastewater authority's requirements for discharge.
- Filter wash water before discharging to the sanitary sewer to avoid clogging pipes. Dispose of filtered material in the garbage, provided the carpet was not contaminated with hazardous materials.
- These guidelines apply even to cleaning products labeled "nontoxic" and "biodegradable."

Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
3. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
4. **Use a training log or similar method to document training.**

References

Water Quality Guidelines for Carpet Cleaning Activities. Orange County Stormwater Program. Prepared by Watershed & Coastal Resources Division. January 2002. On-line:

http://www.ocwatersheds.com/PublicEducation/pe_brochures_carpet.asp

Orange County Stormwater Program. 2002. Water Quality Guidelines for Carpet Cleaning Activities. March.

IC4. CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Properly collect and dispose of process water.
2. Protect production, pouring, and cutting areas from stormwater runoff and runoff.
3. Sweep the production, pouring, and cutting areas regularly to collect loose materials.
4. Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
5. Use drip pans or absorbent material to catch drips from paving equipment, including equipment that is not in use.
6. Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc.
7. Conduct surface repair work during dry weather to prevent contamination from contacting stormwater runoff.
8. To avoid runoff, use only as much water as necessary for dust control.
9. Do not allow concrete and concrete pumping vehicles to discharge concrete, slurry, or rinse water into gutters, storm drains, or drainage ditches.
10. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

Best Management Practices

1. Properly collect and dispose of process water.

Discharge process water from production, pouring, equipment cleaning, and cutting activities to a sump, process water treatment or recycling system, or sanitary sewer system if allowed.

2. Protect production, pouring, and cutting areas from stormwater runoff and runoff.

Construct a berm around the perimeter of the area to prevent the runoff of uncontaminated stormwater from adjacent areas as well as runoff of stormwater.

3. Sweep the production, pouring, and cutting areas regularly to collect loose materials.

- **DO NOT** hose down area to a storm drain or conveyance ditch.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose in the trash.

4. Pre-heat, transfer or load hot bituminous material away from storm drain inlets.

5. Use drip pans or absorbent material to catch drips from paving equipment, including equipment that is not in use. Dispose of collected material and absorbents properly.

6. Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc.

- Clean covers regularly.
- Leave covers in place until job is complete and clean any debris for proper disposal.

7. Conduct surface repair work during dry weather to prevent contamination from contacting stormwater runoff.

8. To avoid runoff, use only as much water as necessary for dust control.

9. **Do not allow concrete and concrete pumping vehicles to discharge concrete, slurry, or rinse water into gutters, storm drains, or drainage ditches.**

10. Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
3. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
4. **Use a training log or similar method to document training.**

References

Los Angeles County Stormwater Quality. Public Agency Activities Model Program. On-line: http://ladpw.org/wmd/npdes/public_TC.cfm

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998. (Revised February 2002 by the California Coastal Commission)

Santa Clara Valley Urban Runoff Pollution Prevention Program. Maintenance Best Management Practices for the Construction Industry. Brochures: Landscaping, Gardening, and Pool; Roadwork and Paving; and Fresh Concrete and Mortar Application. June 2001.

IC5. CONTAMINATED OR ERODIBLE SURFACES AREAS

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

1. Protect contaminated or erodible surface areas from rainfall and wind dispersal.
2. Protect materials from stormwater runoff and runoff.
3. Minimize pooling of water.
4. Conduct routine maintenance.
5. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

Best Management Practices

1. Protect contaminated or erodible surface areas from rainfall and wind dispersal through one or more of the following:

- Preserve natural vegetation.
- Re-plant or landscaping bare ground surfaces.
- Use chemical stabilization or geosynthetics to stabilize bare ground surfaces.
- Remove contaminated soils.
- Cover materials with a fixed roof or a temporary waterproof covering made of polyethylene, polypropylene or hypalon. Keep covers in place at all times when work is not occurring. If areas are so large that they cannot feasibly be covered and contained, implement erosion control practices at the perimeter of the area and at any catch basins to prevent dispersion of the stockpiled material.

2. Protect materials from stormwater runoff and runoff. Construct a berm around the perimeter of the area to prevent the runoff of uncontaminated stormwater from adjacent areas as well as runoff of stormwater from the material.

3. Minimize pooling of water. Paved areas should be sloped in a manner that minimizes the pooling of water in the area. A minimum slope of 1.5 percent is recommended.

4. Conduct routine maintenance. Sweep paved areas regularly to collect loose materials.

- **DO NOT** hose down area to a storm drain or conveyance ditch.
- Properly dispose of waste materials.

5. Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

2. Train employees on proper spill containment and cleanup.

- Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
3. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
 4. **Use a training log or similar method to document training.**

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

IC6. LANDSCAPE MAINTENANCE

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Take steps to reduce landscape maintenance requirements.
 2. Properly store and dispose of gardening wastes.
 3. Use mulch or other erosion control measures on exposed soils.
 4. Properly manage irrigation and runoff. **In South Orange County, landscape irrigation runoff is prohibited.**
 5. Properly store and dispose of chemicals.
 6. Properly manage pesticide and herbicide use.
 7. Properly manage fertilizer use.
 8. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- OPTIONAL:
9. Incorporate integrated pest management techniques where appropriate.

Best Management Practices

1. Take steps to reduce landscape maintenance requirements.

- Where feasible, retain and/or plant native vegetation with features that are determined to be beneficial. Native vegetation usually requires less maintenance than planting new vegetation.
- When planting or replanting consider using low water use flowers, trees, shrubs, and groundcovers.

OPTIONAL:

- Consider alternative landscaping techniques such as naturescaping and xeriscaping.

2. Properly store and dispose of gardening wastes.

- Dispose of grass clippings, leaves, sticks, or other collected vegetation as garbage at a permitted landfill or by composting.
- Do not dispose of gardening wastes in streets, waterways, or storm drainage systems.
- Place temporarily stockpiled material away from watercourses and storm drain inlets, and berm and/or cover.

3. Use mulch or other erosion control measures on exposed soils.

4. Properly manage irrigation and runoff.

- Irrigate slowly or pulse irrigate so the infiltration rate of the soil is not exceeded.
- Inspect irrigation system regularly for leaks and to ensure that excessive runoff is not occurring. **In South Orange County, landscape irrigation runoff is prohibited.**
- If re-claimed water is used for irrigation, ensure that there is no runoff from the landscaped area(s). **In South Orange County, landscape irrigation runoff is prohibited.**
- If bailing of muddy water is required (e.g. when repairing a water line leak), do not put it in the storm drain; pour over landscaped areas.

OPTIONAL:

- Use automatic timers to minimize runoff.
- Use popup sprinkler heads in areas with a lot of activity or where pipes may be broken. Consider the use of mechanisms that reduce water flow to broken sprinkler heads.

5. Properly store and dispose of chemicals.

- Implement storage requirements for pesticide products with guidance from the local fire department and/or County Agricultural Commissioner.
- Provide secondary containment for chemical storage.
- Dispose of empty containers according to the instructions on the container label.

OPTIONAL:

- Triple rinse containers and use rinse water as product.

6. Properly manage pesticide and herbicide use.

- Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of pesticides and herbicides and training of applicators and pest control advisors.
- Follow manufacturers' recommendations and label directions.
- Use pesticides only if there is an actual pest problem (not on a regular preventative schedule). When applicable use less toxic pesticides that will do the job. Avoid use of copper-based pesticides if possible. Use the minimum amount of chemicals needed for the job.
- Do not apply pesticides if rain is expected or if wind speeds are above 5 mph.
- Do not mix or prepare pesticides for application near storm drains. Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the targeted pest.
- Whenever possible, use mechanical methods of vegetation removal rather than applying herbicides. Use hand weeding where practical.
- Do not apply any chemicals directly to surface waters, unless the application is approved and permitted by the state. Do not spray pesticides within 100 feet of open waters.
- Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.
- Clean pavement and sidewalk if chemicals are spilled on these surfaces before applying irrigation water.
- When conducting mechanical or manual weed control, avoid loosening the soil, which could lead to erosion.

OPTIONAL:

- Purchase only the amount of pesticide that you can reasonably use in a given time period.
- Careful soil mixing and layering techniques using a topsoil mix or composted organic material can be used as an effective measure to reduce herbicide use and watering.

7. Properly manage fertilizer use.

- Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers.
- Follow manufacturers' recommendations and label directions.
- Employ techniques to minimize off-target application (e.g. spray drift) of fertilizer, including consideration of alternative application techniques. Calibrate fertilizer distributors to avoid excessive application.
- Periodically test soils for determining proper fertilizer use.

- Fertilizers should be worked into the soil rather than dumped or broadcast onto the surface.
- Clean pavement and sidewalk if chemicals are spilled on these surfaces before applying irrigation water.
- Sweep pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.

OPTIONAL:

- Use slow release fertilizers whenever possible to minimize leaching

8. Training

- 1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
- 2. Educate and train employees on the use of pesticides and pesticide application techniques. Only employees properly trained to use pesticides can apply them.**
- 3. Train and encourage employees to use integrated pest management techniques.**
- 4. Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
- 5. Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
- 6. Use a training log or similar method to document training.**

OPTIONAL:

9. Incorporate the following integrated pest management techniques where appropriate:

- Mulching can be used to prevent weeds where turf is absent.
- Remove insects by hand and place in soapy water or vegetable oil. Alternatively, remove insects with water or vacuum them off the plants.
- Use species-specific traps (e.g. pheromone-based traps or colored sticky cards).
- Sprinkle the ground surface with abrasive diatomaceous earth to prevent infestations by soft-bodied insects and slugs. Slugs also can be trapped in small cups filled with beer that are set in the ground so the slugs can get in easily.
- In cases where microscopic parasites, such as bacteria and fungi, are causing damage to plants, the affected plant material can be removed and disposed of (pruning equipment should be disinfected with bleach to prevent spreading the disease organism).
- Small mammals and birds can be excluded using fences, netting, and tree trunk guards.
- Promote beneficial organisms, such as bats, birds, green lacewings, ladybugs, praying mantis, ground beetles, parasitic nematodes, trichogramma wasps, seedhead weevils, and spiders that prey on detrimental pest species.

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

Water Quality Handbook for Nurseries. Oklahoma Cooperative Extension Service. Division of Agricultural Sciences and Natural Resources. Oklahoma State University. E-951. September 1999.

IC7. NURSERIES AND GREENHOUSES

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Properly manage irrigation and runoff.
 2. Properly store and dispose of gardening wastes.
 3. Properly store and dispose of chemicals.
 4. Properly manage pesticide and herbicide use.
 5. Properly manage fertilizer use.
 6. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- OPTIONAL:
7. Incorporate integrated pest management techniques where appropriate.

Best Management Practices

1. Properly manage irrigation and runoff.

- Utilize intermittent (pulse) irrigation or drip irrigation so the infiltration rate of the soil is not exceeded.
- Regularly inspect irrigation systems for leaks and to ensure that excessive runoff is not occurring.
- Convert paved or bare soil areas to vegetation that will retard runoff (turf grasses or other comparable plant materials) wherever possible.

OPTIONAL:

- Group plants with similar water needs together to improve irrigation efficiency.
- Establish plant buffer zones between production areas and ditches, creeks, ponds, lakes, or wetlands.
- Install and use moisture sensors and automatic sprinklers for more accurate scheduling of irrigation.
- Recycle runoff, blend with fresh water as necessary.

2. Properly store and dispose of gardening wastes.

- Dispose of grass clippings, leaves, sticks, or other collected vegetation as garbage at a permitted landfill or by composting.
- Do not dispose of gardening wastes in streets, waterways, or storm drainage systems.
- Place temporarily stockpiled material away from watercourses and storm drain inlets, and berm and/or cover.

3. Properly store and dispose of chemicals.

- Implement storage requirements for pesticide products with guidance from the local fire department and/or County Agricultural Commissioner.
- Provide secondary containment for chemical storage.

- Dispose of empty containers according to the instructions on the container label.

OPTIONAL:

- Triple rinse containers and use rinse water as product.

4. Properly manage pesticide and herbicide use.

- Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of pesticides and herbicides and training of applicators and pest control advisors.
- Follow manufacturers' recommendations and label directions.
- Use pesticides only if there is an actual pest problem (not on a regular preventative schedule). When applicable use less toxic pesticides that will do the job. Avoid use of copper-based pesticides if possible. Use the minimum amount of chemicals needed for the job.
- Do not apply pesticides if rain is expected or if wind speeds are above 5 mph.
- Do not mix or prepare pesticides for application near storm drains. Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the pest.
- Do not mix, prepare, or spray pesticides within 100 feet of any well, stream, or pond.
- Do not get rid of unused pesticides by washing them down drains.
- Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.
- Clean pavement and sidewalk if chemicals are spilled on these surfaces before applying irrigation water

OPTIONAL:

- Careful soil mixing and layering techniques using a topsoil mix or composted organic material can be used as an effective measure to reduce herbicide use and watering.

5. Properly manage fertilizer use.

- Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers.
- Follow manufacturers' recommendations and label directions.
- Employ techniques to minimize off-target application (e.g. spray drift) of fertilizer, including consideration of alternative application techniques. Calibrate fertilizer distributors to avoid excessive application.
- Periodically test soils for determining proper fertilizer use.
- Whenever feasible, spread out applications of controlled-release fertilizers and use split applications of soluble fertilizers over the growing season.
- Work fertilizers into the soil rather than dumping or broadcasting them.
- Sweep pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.

OPTIONAL:

- Transition from the use of soluble fertilizers to controlled-release fertilizers. Use slow release fertilizers whenever possible to minimize leaching.
- Reduce or eliminate routine leaching of crops.

6. Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Educate and train employees on the use of pesticides and pesticide application techniques.**
3. **Train and encourage maintenance crews to use integrated pest management techniques.**
4. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
5. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
6. **Use a training log or similar method to document training.**

OPTIONAL:

7. **Incorporate the following integrated pest management techniques where appropriate:**
 - Remove insects by hand and place in soapy water or vegetable oil. Alternatively, remove insects with water or vacuum them off the plants.
 - Use species-specific traps (e.g. pheromone-based traps or colored sticky cards).
 - Sprinkle the ground surface with abrasive diatomaceous earth to prevent infestations by soft-bodied insects and slugs. Slugs also can be trapped in small cups filled with beer that are set in the ground so the slugs can get in easily.
 - In cases where microscopic parasites, such as bacteria and fungi, are causing damage to plants, the affected plant material can be removed and disposed of (pruning equipment should be disinfected with bleach to prevent spreading the disease organism).
 - Small mammals and birds can be excluded using fences, netting, and tree trunk guards.
 - Promote beneficial organisms, such as bats, birds, green lacewings, ladybugs, praying mantis, ground beetles, parasitic nematodes, trichogramma wasps, seedhead weevils, and spiders that prey on detrimental pest species.

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

Water Quality Handbook for Nurseries. Oklahoma Cooperative Extension Service. Division of Agricultural Sciences and Natural Resources. Oklahoma State University. E-951. September 1999.

IC8. OUTDOOR DRAINAGE FROM INDOOR AREAS

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Design operating areas to minimize stormwater exposure.
2. Utilize dry cleanup methods such as sweeping for removal of litter and debris, or use of rags and absorbents for leaks and spills.
3. Use secondary containment or protective barriers for indoor liquid storage.
4. Install a fire sprinkler containment system for hazardous material storage.
5. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

Best Management Practices

1. **Design operating areas to minimize stormwater exposure.**
 - Construct a berm or intercept trench at doorways.
 - Install a collection system for pretreatment and sewer disposal under permit.
2. **Utilize dry cleanup methods such as sweeping for removal of litter and debris, or use of rags and absorbents for leaks and spills.** Properly dispose of collected wastes.
3. **Use secondary containment or protective barriers for indoor liquid storage.**
4. **Install a fire sprinkler containment system for hazardous material storage.**
5. **Training**
 1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
 2. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
 3. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
 4. **Use a training log or similar method to document training.**

References

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

IC9. OUTDOOR LOADING/UNLOADING OF MATERIALS

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Properly design loading/unloading areas to prevent storm water runoff, runoff of spilled liquids, etc.
2. Park vehicles and conduct loading/unloading only in designated loading/unloading areas so that spills or leaks can be contained.
3. Clean loading/unloading areas regularly to remove potential sources of pollutants.
4. Reduce exposure of materials to rain.
5. Use drip pans underneath hose and pipe connections and other leak-prone spots during liquid transfer operations, and when making and breaking connections.
6. Inspect equipment regularly.
7. If possible, conduct loading and unloading in dry weather.
8. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

Best Management Practices

1. **Properly design loading/unloading areas to prevent storm water runoff, runoff of spills, etc.**
 - Grade and/or berm the area to prevent runoff.
 - Position roof downspouts to direct stormwater away from the area.
 - Grade and/or berm the loading/unloading area to a drain that is connected to a dead-end.
 - The area where truck transfers take place should be paved. If the liquid is reactive with the asphalt, Portland cement should be used to pave the area.
 - Avoid placing loading/unloading areas near storm drains.
2. **Park vehicles and conduct loading/unloading only in designated loading/unloading areas so that spills or leaks can be contained.**
3. **Clean loading/unloading areas regularly to remove potential sources of pollutants.** This includes outside areas that are regularly covered by containers or other materials.
4. **Reduce exposure of materials to rain.**
 - Cover the loading/unloading areas.
 - If a cover is unfeasible, use overhangs, or seals or door skirts to enclose areas.
5. **Use drip pans underneath hose and pipe connections and other leak-prone spots during liquid transfer operations, and when making and breaking connections.**
6. **Inspect equipment regularly**
 - Designate a responsible party to check under delivery vehicles for leaking fluids, spilled materials, debris, or other foreign materials.
 - Check loading/unloading equipment regularly for leaks.
7. **If possible, conduct loading and unloading in dry weather.**

8. Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
3. **Train employees on the proper techniques used during liquid transfers to avoid leaks and spills.**
4. **Train forklift operators on the proper loading and unloading procedures.**
5. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
6. **Use a training log or similar method to document training.**

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

IC11. OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND CONTAINERS

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Store materials indoors, if feasible.
2. Store materials on paved or impervious surfaces.
3. Protect materials stored outside from rainfall and wind dispersal.
4. Protect materials stored outside from stormwater runoff.
5. Minimize pooling of water.
6. All materials stored outside should have a secondary containment system.
7. Properly store and handle chemical materials.
8. Keep outdoor storage containers in good condition.
9. Conduct regular inspections of storage areas.
10. If drums are stored in an area where unauthorized persons may gain access secure them in such a manner as to prevent accidental spillage, pilferage, or any unauthorized use.
11. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

Best Management Practices

1. **Store materials indoors, if feasible.**
 2. **Store materials on paved or impervious surfaces.**
 3. **Protect materials stored outside from rainfall and wind dispersal.**
 - Cover materials with a fixed roof or a temporary waterproof covering made of polyethylene, polypropylene, or hypalon.
 - Keep covers in place at all times when work is not occurring.
 - If areas are so large that they cannot feasibly be covered and contained, implement erosion control practices at the perimeter of the area and at any catch basins to prevent dispersion of the stockpiled material.
 4. **Protect materials stored outside from stormwater runoff.** Construct a berm around the perimeter of the material storage area to prevent the runoff of uncontaminated stormwater from adjacent areas as well as runoff of stormwater from the material.
 5. **Minimize pooling of water.** Slope paved areas to minimize the pooling of water on the site, particularly with materials that may leach pollutants into stormwater and/or groundwater, such as compost, logs, and wood chips. A minimum slope of 1.5 percent is recommended.
 6. **All materials stored outside should have a secondary containment system.**
 - Surround storage tanks with a berm or other secondary containment system.
 - Slope the area inside the berm to a drain.
 - Drain liquids to the sanitary sewer if available.
 - **DO NOT** discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required. If discharge to the sanitary sewer is not allowed, pump water to a tank and dispose of properly.
- OPTIONAL:
- Pass accumulated stormwater in petroleum storage areas through an oil/water separator.

7. Properly store and handle chemical materials.

- Designate a secure material storage area that is paved with Portland cement concrete, free of cracks and gaps, and impervious in order to contain leaks and spills.
- Do not store chemicals, drums, or bagged materials directly on the ground. Place these items in secondary containers.
- Liquid materials should be stored in UL approved double walled tanks or surrounded by a curb or dike to provide the volume to contain 10 percent of the volume of all the containers or 110 percent of the volume of the largest container, whichever is greater.
- Keep chemicals in their original containers, if feasible, and keep them well labeled.

8. Keep outdoor storage containers in good condition.

- Keep storage areas clean and dry.
- Sweep and maintain routes to and from storage areas.

9. Conduct regular inspections of storage areas.

- Check for external corrosion of material containers, structural failures, spills and overfills due to operator error, failure of piping system, etc.
- Inspect tank foundations, connections, coatings, tank walls, and piping system.
- Look for corrosion, leaks, cracks, scratches, and other physical damage that may weaken tanks or container systems.

10. If drums are stored in an area where unauthorized persons may gain access secure them in such a manner as to prevent accidental spillage, pilferage, or any unauthorized use.

11. Training

- 1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
- 2. Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
- 3. Train forklift operators on the proper loading and unloading procedures.**
- 4. Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
- 5. Use a training log or similar method to document training.**

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

IC12. PAINTING, FINISHING, AND COATINGS OF VEHICLES, BOATS, BUILDINGS, AND EQUIPMENT

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

1. Use drop/ground cloths.
2. Shelter any blasting and spray painting activities.
3. Maintain a clean working environment.
4. Cover and seal nearby storm drain inlets.
5. Properly clean, store, and dispose of painting, finishing, and coating materials.
6. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

Best Management Practices

- 1. Use drop/ground cloths.**
 - Underneath outdoor painting, scraping, and sandblasting work.
 - Underneath outdoor mixing of paints, solvents, and tool cleaning.
- 2. Shelter any blasting and spray painting activities.**
 - Hang wind-blocking tarps to prevent sand blasting dust and overspray from escaping.
 - Do not conduct these activities when wind conditions are such that containment is rendered ineffective.
 - Do not conduct these activities over open water.
- 3. Maintain a clean working environment.**
 - Utilize dry cleaning methods (e.g. sweeping). If washing is unavoidable, collect wash water for treatment and/or proper disposal.
 - Vacuum loose paint chips and paint dust to prevent paint and other chemical substances from entering waters.
 - Properly dispose of surface chips, used blasting sand, residual paints, and other materials. Use temporary storage containment that is not exposed to rain.
- 4. Cover and seal nearby storm drain inlets.**
 - Cover and seal nearby storm drain inlets with waterproof material, mesh, or other runoff control device.
 - Leave covers in place until job is complete.
 - Clean covers daily and remove any debris for proper disposal.
- 5. Properly clean, store, and dispose of painting, finishing, and coating materials.**
 - Do not dispose of toxic substances or liquid wastes on the pavement, the ground, or toward a storm drain.

- Cover materials left outdoors at the end of the workday with a temporary waterproof covering made of polyethylene, polypropylene or hypalon.
- Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers that can be poured into a sanitary sewer drain.
- Clean paint brushes and tools covered with non-water-based paints, finishes, or other materials such that used solvents (e.g., paint thinner, turpentine, etc.) can be collected for recycling or proper disposal.

OPTIONAL:

- Recycle paint, paint thinner, solvents, and other recyclable materials whenever possible.

6. Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
3. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
4. **Use a training log or similar method to document training.**

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

IC13. PARKING AND STORAGE AREA MAINTENANCE

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Conduct regular cleaning.
2. Properly collect and dispose of wash water.
3. Consider use of source treatment BMPs to treat runoff.
4. Keep the parking and storage areas clean and orderly.
5. When cleaning heavy oily deposits:
6. When conducting surface repair work:
7. Conduct inspections on a regular basis.
8. Keep accurate maintenance logs to evaluate materials removed/stored and improvements made.
9. Arrange rooftop drains to prevent drainage directly onto paved surfaces.
10. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

Best Management Practices

1. Conduct regular cleaning.

- Sweeping or vacuuming the parking facility is encouraged over other methods.
- Sweep all parking lots at least once before the onset of the wet season.

OPTIONAL:

- Establish frequency of sweeping based on usage and field observations of waste accumulation.

2. Properly collect and dispose of wash water.

- Block the storm drain or contain runoff.
- Wash water should be collected and pumped to the sanitary sewer or discharged to a pervious surface, do not allow wash water to enter storm drains. **DO NOT** discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
- Dispose of parking lot sweeping debris and dirt at a landfill.

3. Consider use of source treatment BMPs to treat runoff.

- Allow sheet runoff to flow into biofilters (vegetated strip and swale) and/or infiltration devices.
- Utilize sand filters or oleophilic collectors for oily waste in low quantities.

4. Keep the parking and storage areas clean and orderly.

- Clean out and cover litter receptacles frequently to prevent spillage.
- Remove debris in a timely fashion.

OPTIONAL:

- Post "No Littering" signs.

5. When cleaning heavy oily deposits:

- If possible, clean oily spots with absorbent materials.
- Do not allow discharges to the storm drain.
- Appropriately dispose of spilled materials and absorbents.

6. When conducting surface repair work:

- Pre-heat, transfer or load hot bituminous material away from storm drain inlets.

- Conduct surface repair work during dry weather to prevent contamination from contacting stormwater runoff.
 - Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and clean any debris for proper disposal.
 - To avoid runoff, use only as much water as necessary for dust control.
 - Use drip pans or absorbent material to catch drips from paving equipment that is not in use. Dispose of collected material and absorbents properly.
7. **Conduct inspections on a regular basis.**
 - Designate personnel to conduct inspections of the parking facilities and stormwater conveyance systems associated with them.
 - Inspect cleaning equipment/sweepers for leaks on a regular basis.
 8. **Keep accurate maintenance logs to evaluate materials removed/stored and improvements made.**
 9. **Arrange rooftop drains to prevent drainage directly onto paved surfaces.**

10. Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
3. **Provide regular training to field employees and/or contractors regarding cleaning of paved areas and proper operation of equipment.**
4. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
5. **Use a training log or similar method to document training.**

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

IC14. POOL AND FOUNTAIN CLEANING

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

1. Prevent algae problems with regular cleaning, consistent adequate chlorine levels, and well-maintained water filtration and circulation systems.
2. Manage pH and water hardness to minimize corrosion of copper pipes.
3. Discharge pool and fountain water properly.
4. Properly clean and/or dispose of filters.
5. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

Best Management Practices

1. **Prevent algae problems with regular cleaning, consistent adequate chlorine levels, and well-maintained water filtration and circulation systems.**
 - Do not use copper-based algaecides.
 - Control algae with chlorine or other alternatives, such as sodium bromide.
2. **Manage pH and water hardness to minimize corrosion of copper pipes.**
3. **Discharge pool and fountain water properly.** Consider hiring a professional pool-draining service to collect all pool water for off-site disposal. If this is not feasible, adhere to the following:
 - When draining pools or fountains never discharge water to a street or storm drain, discharge to the sanitary sewer if permitted to do so.
 - If draining a pool to the sanitary sewer, prevent backflow by maintaining an “air gap” between the discharge line and the sewer line (do not seal the connection between the hose and sewer line). Be sure to call the local sewer authority for guidance on flow rate restrictions, backflow prevention, and handling special cleaning waste (such as acid wash). Keep discharge flows to the low levels. Higher flow rates may be prohibited by local ordinance.
 - If water is dechlorinated with a neutralizing chemical or by allowing chlorine to dissipate for a few days (do not use the facility during this time), the water may be recycled/reused by draining it gradually onto a landscaped area. Water must be tested prior to discharge to ensure that chlorine is not present.
 - Provide drip pans or buckets beneath drain pipe connections to catch leaks. This will be especially pertinent if pool or spa water that has not been dechlorinated is pumped through piping to a discharge location.
4. **Properly clean and/or dispose of filters.**
 - Never clean a filter in the street or near a storm drain.

- Rinse cartridge filters onto a dirt area, and work filter residue into soil.
- Backwash diatomaceous earth filters onto dirt. Dispose of spent diatomaceous earth in the garbage. Diatomaceous earth cannot be discharged to surface waters, storm drainage systems, septic systems, or on the ground.
- If there is not a suitable dirt area, discharge filter backwash or rinsewater to the sanitary sewer if permitted to do so by the local sewerage agency.

5. Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
3. **Train maintenance personnel on the proper techniques for testing chlorine levels and applying neutralizing chemicals.**
4. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
5. **Use a training log or similar method to document training.**

References

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. 1995.
King County Surface Water Management. July. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Los Angeles County Stormwater Quality. Public Agency Activities Model Program. On-line:
http://ladpw.org/wmd/npdes/public_TC.cfm

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Santa Clara Valley Urban Runoff Pollution Prevention Program. Maintenance Best Management Practices for the Construction Industry. Brochures: Landscaping, Gardening, and Pool; Roadwork and Paving; and Fresh Concrete and Mortar Application. June 2001.

IC15. SPILL PREVENTION AND CLEANUP

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Develop procedures to prevent/mitigate spills to storm drain systems.
2. Post "No Dumping" signs with a phone number for reporting illegal dumping and disposal.
3. Conduct routine cleaning, inspections, and maintenance.
4. Properly store and handle chemical materials.
5. Utilize secondary containment systems for liquid materials.
6. Protect materials stored outside from stormwater runoff.
7. Secure drums stored in an area where unauthorized persons may gain access to prevent accidental spillage, pilferage, or any unauthorized use.
8. Identify key spill response personnel.
9. Adopt the Orange County Hazardous Materials Area Plan or an equivalent plan.
10. Clean up leaks and spills immediately.
11. Report and track spills.
12. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

Best Management Practices

Spill Prevention

1. **Develop procedures to prevent/mitigate spills to storm drain systems.**
Standardize reporting procedures, containment, storage, and disposal activities, documentation, and follow-up procedures.
2. **Post "No Dumping" signs with a phone number for reporting illegal dumping and disposal. Signs should also indicate fines and penalties applicable for illegal dumping.**
3. **Conduct routine cleaning, inspections, and maintenance.**
 - Sweep and clean storage areas consistently at a designated frequency (e.g. weekly, monthly). **DO NOT** hose down areas to storm drains.
 - Place drip pans or absorbent materials beneath all mounted taps, and at all potential drip and spill locations during filling and unloading of tanks. Reuse, recycle, or properly dispose of any collected liquids or soiled absorbent materials.
 - Check tanks (and any containment sumps) frequently for leaks and spills. Replace tanks that are leaking, corroded, or otherwise deteriorating with tanks in good condition. Collect all spilled liquids and properly dispose of them.
 - Check for external corrosion of material containers, structural failures, spills and overfills due to operator error, failure of piping system, etc.
 - Inspect tank foundations, connections, coatings, and tank walls and piping system.
4. **Properly store and handle chemical materials.**
 - Designate a secure material storage area that is paved with Portland cement concrete, free of cracks and gaps, and impervious in order to contain leaks and spills.

- Do not store chemicals, drums, or bagged materials directly on the ground. Place these items in secondary containers.
 - Keep chemicals in their original containers, if feasible.
 - Keep containers well labeled according to their contents (e.g., solvent, gasoline).
 - Label hazardous substances regarding the potential hazard (corrosive, radioactive, flammable, explosive, poisonous).
 - Prominently display required labels on transported hazardous and toxic materials (per US DOT regulations).
- 5. Utilize secondary containment systems for liquid materials.**
- Surround storage tanks with a berm or other secondary containment system.
 - Slope the area inside the berm to a drain.
 - Drain liquids to the sanitary sewer if available.
 - Pass accumulated stormwater in petroleum storage areas through an oil/water separator.
 - Use catch basin filtration inserts.
 - **DO NOT** discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
 - If the liquid is oil, gas, or other material that separates from and floats on water, install a spill control device (such as a tee section) in the catch basins that collect runoff from the storage tank area.
- 6. Protect materials stored outside from stormwater runoff.** Construct a berm around the perimeter of the material storage area to prevent the runoff of uncontaminated stormwater from adjacent areas as well as runoff of stormwater from the material.
- 7. Secure drums stored in an area where unauthorized persons may gain access to prevent accidental spillage, pilferage, or any unauthorized use.**

Spill Control and Cleanup Activities

- 8. Identify key spill response personnel.**
- 9. Adopt the Orange County Hazardous Materials Area Plan or an equivalent plan, which includes a set of planned responses to hazardous materials emergencies addressing chain-of-command, public agency participation, and allocation of authority. The plan should include such items as:**
- Description of the facility, owner and address, activities and chemicals present
 - Facility map
 - Notification and evacuation procedures
 - Cleanup instructions
 - Identification of responsible departments
- 10. Clean up leaks and spills immediately.**
- Place a stockpile of spill cleanup materials where they will be readily accessible (e.g. near storage and maintenance areas).
 - Utilize dry cleaning methods to clean up spills to minimize the use of water. Use a rag for small spills, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then used cleanup materials are also hazardous and must be sent to a certified laundry (rags) or disposed of as hazardous

waste. Physical methods for the cleanup of dry chemicals include the use brooms, shovels, sweepers, or plows.

- Never hose down or bury dry material spills. Sweep up the material and dispose of properly.
- Clean up chemical materials with absorbents, gels, and foams. Use adsorbent materials on small spills rather than hosing down the spill. Remove the adsorbent materials promptly and dispose of properly.
- For larger spills, a private spill cleanup company or Hazmat team may be necessary.

11. Reporting

- 1. Report spills that pose an immediate threat to human health or the environment to local agencies, such as the fire department, and the Regional Water Quality Control Board.**
- 2. Establish a system for tracking incidents. The system should be designed to identify the following:**
 - Types and quantities (in some cases) of wastes
 - Patterns in time of occurrence (time of day/night, month, or year)
 - Mode of dumping (abandoned containers, “midnight dumping” from moving vehicles, direct dumping of materials, accidents/spills)
 - Responsible parties
- 3. Federal regulations require that any oil spill into a water body or onto an adjoining shoreline be reported to the National Response Center (NRC) at 800-424-8802 (24 hour).**

12. Training

- 1. Educate employees about spill prevention and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Educate employees on aboveground storage tank requirements.
 - Train all employees upon hiring and conduct annual refresher training.
- 2. Train employees responsible for aboveground storage tanks and liquid transfers on the Spill Prevention Control and Countermeasure Plan.**

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

IC16. VEHICLE AND EQUIPMENT FUELING

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Use properly maintained off-site fueling stations whenever possible.
 2. Maintain clean fuel-dispensing areas.
 3. Design fueling areas to minimize stormwater exposure.
 4. Minimize pooling of water.
 5. If conducting mobile fueling, designate mobile fueling areas and bring equipment to these areas.
 6. Utilize fueling safeguards.
 7. Conduct regular inspections of fueling equipment.
 8. Use secondary containment when transferring fuel from the tank truck to the fuel tank and cover storm drains in the vicinity during transfer.
 9. Fit underground storage tanks (USTs) with spill containment and overfill prevention systems meeting the requirements of Section 2635(b) of Title 23 of the California Code of Regulations.
 10. Equip USTs with spill and overfill protection.
 11. Install required AQMD equipment and post a notice.
 12. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- OPTIONAL:
13. Post signs to remind employees and customers not to top off the fuel tank when filling and signs that ban customers and employees from changing engine oil or other fluids at that location.

Best Management Practices

1. **Use properly maintained off-site fueling stations whenever possible.** These businesses are better equipped to handle fueling and spills.
2. **Maintain clean fuel-dispensing areas.**
 - Use dry cleanup methods such as sweeping for removal of litter and debris, or use of rags and absorbents for leaks and spills.
 - If cleaning by washing, place a temporary plug in the downstream drain and pump out the accumulated water. Properly dispose of the water. **DO NOT** discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
3. **Design fueling areas to minimize stormwater exposure.**
 - Cover the fuel dispensing area such that the cover's minimum dimensions are equal to or greater than the area within the grade break or fuel dispensing area. Position roof downspouts to direct water away from fueling areas.
 - Pave fuel area with Portland cement concrete or equivalent smooth impervious surface. Grade with a 2 to 4 percent slope to prevent ponding.
 - Use secondary containment. Construct a berm around the perimeter of the material storage area to prevent the runoff of uncontaminated stormwater from adjacent areas as well as stormwater runoff.

4. Minimize pooling of water.

- Use a perimeter drain or slope pavement inward with drainage to sump. A minimum slope of 1.5 percent is recommended.
- Install inlet catch basin equipped with a small sedimentation basin or grit chamber to remove large particles from stormwater in impervious areas.
- During the wet season, release accumulated stormwater frequently.

5. If conducting mobile fueling, designate mobile fueling areas and bring equipment to these areas.

- Use secondary containment when conducting mobile fueling.
- Cover storm drains in the vicinity during transfer.

6. Utilize fueling safeguards.

- Use overflow protection devices on tank systems to warn the operator to automatically shutdown transfer pumps when the tank reaches full capacity.
- Install protective guards around tanks and piping to prevent vehicle or forklift damage.
- Clearly tag or label all valves to reduce human error.
- Place spill kits at fueling areas and/or on vehicles.
- Install vapor recovery nozzles to help control drips as well as air pollution.
- Eliminate or post hose bibs.

OPTIONAL:

- Fit fuel dispensing nozzles with "hold-open latches" (automatic shutoffs) except where prohibited by local fire departments.

7. Conduct regular inspections of fueling equipment.

- Check fueling equipment for external corrosion and structural failure.
- Check for spills and overfills due to operator error.
- Check for failure of piping system.
- Check for leaks or spills during pumping of liquids or gases from truck or rail car to a storage facility or visa versa.
- Visually inspect new tank or container installation for loose fittings, poor welding, and/or improper or poorly fitting gaskets.
- Inspect tank foundations, connections, leaks, cracks, scratches, and other physical damage that may weaken the tank or container system.
- Report leaking vehicles to fleet maintenance.

OPTIONAL:

- Periodically, have a qualified professional conduct integrity testing.

8. Use secondary containment when transferring fuel from the tank truck to the fuel tank and cover storm drains in the vicinity during transfer.

9. Fit underground storage tanks (USTs) with spill containment and overfill prevention systems meeting the requirements of Section 2635(b) of Title 23 of the California Code of Regulations.

10. Equip USTs with spill and overfill protection.

11. Install required AQMD equipment and post a notice.

12. Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train employees on proper fueling and cleanup procedures.**
3. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
4. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
5. **Use a training log or similar method to document training.**

OPTIONAL:

13. **Post signs to remind employees and customers not to top off the fuel tank when filling and signs that ban customers and employees from changing engine oil or other fluids at that location.**

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

IC17. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

Best Management Practices

1. Only conduct maintenance or repair work in designated areas.

- Conduct maintenance and repair work in a designated area with spill containment.
- Construct a berm or intercept trench at doorways to prevent the runoff of uncontaminated stormwater from adjacent areas as well as stormwater runoff.

2. Utilize dry cleanup methods such as sweeping, try to avoid washing down work areas.

- If work areas are washed and if discharge to the sanitary sewer is allowed, treat water with an appropriate treatment device (e.g. clarifier) before discharging. **DO NOT** discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
- If discharge to the sanitary sewer is not permitted, pump water to a tank and dispose of properly.

3. Use drip pans and/or containers where needed. Keep a drip pan or container under equipment or vehicles when unclipping hoses, unscrewing filters, or conducting other maintenance and repair work that may result in fluids dripping or splattering onto the shop floor or ground.

4. Inspect vehicles and equipment for leaks.

- Inspect incoming vehicles and equipment for leaks.
- Inspect vehicles and equipment during regular maintenance; keep records.

5. Dispose of all waste products properly and recycle whenever possible.

- Promptly transfer waste materials to the proper waste or recycling drums.
- Store waste and/or recycling drums in designated areas with spill containment.
- Separate hazardous and non-hazardous wastes, do not mix used oil and solvents and keep chlorinated solvents separate from non-chlorinated solvents.
- Store cracked batteries in a non-leaking secondary container and dispose of properly at recycling or household hazardous waste facilities.

OPTIONAL:

- Recycle greases, used oils, oil filters, antifreeze, cleaning solutions, batteries, and hydraulic and transmission fluids whenever possible.

1. Only conduct maintenance or repair work in designated areas.
 2. Utilize dry cleanup methods such as sweeping try to avoid washing down work areas.
 3. Use drip pans and/or containers where needed.
 4. Inspect vehicles and equipment for leaks.
 5. Dispose of all waste products properly and recycle whenever possible.
 6. Paint signs near outdoor drains and post signs at sinks to remind employees and others not to pour wastes down drains.
 7. Clean storm drain inlet(s) on a regular schedule and after large storms.
 8. Store idle equipment under cover.
 9. Keep equipment clean and free of excess oil and grease.
 10. Completely drain oil filters before recycling/disposal.
 11. Remove all fluids from retired, wrecked, or salvaged vehicles.
 12. Dispose of per instructions on the container.
 13. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- OPTIONAL:
14. Use non-toxic chemicals for maintenance when possible.
 15. Reduce or eliminate use of solvents when feasible.

- Label and track the recycling of waste material (e.g. used oil, spent solvents, batteries). Purchase recycled products to support the market for recycled materials.
 - Separate wastes for easier recycling. Keep hazardous and non-hazardous wastes separate, do not mix used oil and solvents, and keep chlorinated solvents separate from non-chlorinated solvents.
6. **Paint signs near outdoor drains and post signs at sinks to remind employees and others not to pour wastes down drains.**
 7. **Clean storm drain inlet(s) on a regular schedule and after large storms.**
 8. **Store idle equipment under cover.**
 9. **Keep equipment clean and free of excess oil and grease.**
 10. **Completely drain oil filters before recycling/disposal.**
 11. **Remove all fluids from retired, wrecked, or salvaged vehicles.**
 12. **Dispose of solvents per instructions on the container.**
 13. **Training**
 1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
 2. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
 3. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
 4. **Use a training log or similar method to document training.**

OPTIONAL:

14. **Use non-toxic chemicals for maintenance when possible.**
 - Use non-caustic detergents instead of caustic cleaning for parts cleaning.
 - Use a water-based cleaning service and have tank cleaned. Use detergent-based or water-based cleaning systems in place of organic solvent degreasers.
 - Replace chlorinated organic solvents with non-chlorinated solvents. Non-chlorinated solvents like kerosene or mineral spirits are less toxic and less expensive to dispose of properly. Check list of active ingredients to see whether it contains chlorinated solvents.
 - Choose cleaning agents that can be recycled.
15. **Reduce or eliminate use of solvents when feasible**

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

IC18. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Consider using off-site commercial washing and/or steam cleaning businesses, if feasible.
 2. Use on-site commercial washing and/or steam cleaning businesses capable of disposing of wastewater off-site.
 3. Designate an impervious indoor or outdoor area to be used solely for vehicle and equipment washing/steam cleaning.
 4. Clearly mark the vehicle and equipment washing/steam cleaning area.
 5. Design wash area to properly collect and dispose of wash water and/or effluent generated.
 6. If the area is outdoors, cover the wash area when not in use to prevent contact with rainwater.
 7. Provide trash containers in wash area and empty on a regular basis.
 8. Use hoses with nozzles that automatically turn off when left unattended.
 9. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- OPTIONAL:
10. Use biodegradable, phosphate-free detergents if possible
 11. Recycle waste materials, whenever possible
 12. If possible, **eliminate or reduce the amount of hazardous materials and waste by substituting non-hazardous or less hazardous material**

Best Management Practices

1. **Use off-site commercial washing and/or steam cleaning businesses.** These businesses are better equipped to handle and properly dispose of the wash waters.
2. **Use on-site commercial washing and/or steam cleaning businesses capable of disposing of wastewater off-site.** Mobile cleaning businesses must use a leak proof cover device that will catch and contain all contaminated (i.e. chemical additives such as soaps, solvents, or degreasers are used) wastewater runoff for later disposal in a manner that complies with all city, county, state, and federal codes.

If washing must occur on-site:

3. **Designate an impervious indoor or outdoor area to be used solely for vehicle and equipment washing/steam cleaning.** Do not conduct oil changes and other engine maintenance in the designated washing area.
4. **Clearly mark the vehicle and equipment washing/steam cleaning area.**
5. **Design wash area to properly collect and dispose of wash water and/or effluent generated.** This applies when engine cleaning is conducted and when chemical additives, solvents, or degreasers are used.
 - Install sumps or drain lines to collect wash water.
 - Construct a berm around the designated area and grade to collect wash water as well as to prevent storm water runoff.

- Use portable containment (such as ground cover devices) and vacuum collection of wastewater.
- Inspect and maintain equipment (such as ground cover devices) regularly to ensure proper and effective functioning.

When engine cleaning is not involved, vehicle washing can be performed using deionized water, purified water, and/or tap water with no additives for wash and rinse purposes. This water may be discharged to the storm drain system provided there is no visible evidence of chemical contamination such as foams, odors, discoloration, etc.

6. **If the area is outdoors, cover the wash area when not in use to prevent contact with rainwater.**
7. **Provide trash containers in wash area and empty on a regular basis.**
8. **Use hoses with nozzles that automatically turn off when left unattended.**

9. Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train staff on the proper maintenance of the wash area.**
3. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
4. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
5. **Use a training log or similar method to document training.**

OPTIONAL:

10. **Use biodegradable, phosphate-free detergents if possible.**
11. **Recycle waste materials, whenever possible**
 - Recycling is always preferable to disposal of unwanted materials.
 - Separate wastes for easier recycling. Keep hazardous and non-hazardous wastes separate, do not mix used oil and solvents, and keep chlorinated solvents separate from non-chlorinated solvents.
 - Label and track the recycling of waste material (e.g. used oil, spent solvents, batteries).
 - Purchase recycled products to support the market for recycled materials.
12. **If possible, eliminate or reduce the amount of hazardous materials and waste by substituting non-hazardous or less hazardous material:**
 - Use non-caustic detergents instead of caustic cleaning for parts cleaning.
 - Use a water-based cleaning service and have tank cleaned. Use detergent-based or water-based cleaning systems in place of organic solvent degreasers.

- Replace chlorinated organic solvents with non-chlorinated solvents. Non-chlorinated solvents like kerosene or mineral spirits are less toxic and less expensive to dispose of properly. Check list of active ingredients to see whether it contains chlorinated solvents.
- Choose cleaning agents that can be recycled.

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

Orange County Stormwater Program. 2001. Mobile Detailing and the Water Quality Act. June.

IC19. WASTE HANDLING AND DISPOSAL

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Prevent waste materials from coming in direct contact with wind or rain.
 2. Design waste handling and disposal area to prevent stormwater runoff.
 3. Design waste handling and disposal area to contain spills.
 4. Keep waste collection areas clean.
 5. Secure solid waste containers when not in use.
 6. Regularly inspect, repair, and/or replace waste containers.
 7. Do not fill waste containers with washout water or any other liquid.
 8. Use all of a product before disposing of the container.
 9. Segregate wastes by type and label and date wastes.
 10. Label and store hazardous wastes according to hazardous waste regulations.
 11. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- OPTIONAL:
12. Minimize waste.

Best Management Practices

1. **Prevent waste materials from coming in direct contact with wind or rain.**
 - Cover the waste management area with a permanent roof.
 - If this is not feasible, cover waste piles with temporary covering material such as reinforced tarpaulin, polyethylene, polyurethane, polypropylene, or hypalon.
 - Cover dumpsters to prevent rain from washing out waste materials.
2. **Design waste handling and disposal area to prevent stormwater runoff.**
 - Enclose the waste handling and disposal area or build a berm around it.
 - Position roof downspouts to direct stormwater away from waste handling and disposal area.
3. **Design waste handling and disposal area to contain spills.**
 - Place dumpsters or other waste receptacles on an impervious surface.
 - Construct a berm around the area to contain spills.
 - Install drains connected to the public sewer or the facility's process wastewater system within these contained areas. **DO NOT** discharge to a public sewer until contacting the local sewer authority to find out if pretreatment is required.
4. **Keep waste collection areas clean.**
 - When cleaning around waste handling and disposal areas use dry methods when possible (e.g. sweeping, use of absorbents).
 - If water must be used, collect water and discharge to the sewer if permitted to do so. **DO NOT** discharge to a public sewer until contacting the local sewer authority to find out if pretreatment is required. If discharge to the sanitary sewer is not allowed, pump water to a tank and dispose of properly.

OPTIONAL:

- Post “No Littering” signs.
- 5. **Secure solid waste containers when not in use.**
- 6. **Regularly inspect, repair, and/or replace waste containers.**
- 7. **Do not fill waste containers with washout water or any other liquid.**
- 8. **Use all of a product before disposing of the container.**
- 9. **Segregate wastes by type and label and date wastes.**
 - Do not mix wastes; this can cause chemical reactions, make recycling impossible, and complicate disposal.
 - Ensure that only appropriate solid wastes are added to solid waste containers.
 - Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc. may not be disposed of in solid waste containers.
- 10. **Label and store hazardous wastes according to hazardous waste regulations.**
 - Consult your local hazardous waste agency or Fire Department for details.
 - Obtain a hazardous waste generator license or permit.

11. Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train employees in proper waste handling and disposal.**
3. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site’s spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
4. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
5. **Use a training log or similar method to document training.**

OPTIONAL:

12. Minimize waste.

- Recycle materials whenever possible.
- Modify processes or equipment to increase efficiency.
- Identify and promote use of non-hazardous alternatives.
- Reduction in the amount of waste generated can be accomplished using many different types of source controls such as:
 - Production planning and sequencing
 - Process or equipment modification
 - Raw material substitution or elimination
 - Loss prevention and housekeeping
 - Waste segregation and separation

- Close loop recycling
- Establish a material tracking system to increase awareness about material usage. This may reduce spills and minimize contamination, thus reducing the amount of waste produced.

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

OPTIONAL:

- ♦ Reduction in the amount of waste generated can be accomplished using many different types of source controls such as:
 - Production planning and sequencing
 - Process or equipment modification
 - Raw material substitution or elimination
 - Loss prevention and housekeeping
 - Waste segregation and separation
 - Close loop recycling

Establish a material tracking system to increase awareness about material usage. This may reduce spills and minimize contamination, thus reducing the amount of waste produced.

IC20. EATING AND DRINKING ESTABLISHMENTS

Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

1. Practice good housekeeping.
2. Clean equipment (floor mats, grease filters, grills, garbage cans, etc.) indoors or in a covered outdoor wash area that is plumbed to the sanitary sewer or in an area that will contain the wash water.
3. Recycle and/or properly dispose of grease and oil.
4. Block the storm drain when hosing or steam/pressure washing outside dumpster areas, sidewalks, and common areas with hot water, soap, or other cleaning agent.
5. If only tap water and no cleaning agents are used sweep area, clean up spills, direct water to vegetative area or collect and properly dispose of it contaminated.
6. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

Best Management Practices

1. **Practice good housekeeping.**
 - Conduct regular sweeping or vacuuming of outdoor areas: Dry sweep pavement areas including “drive-thru” areas, parking lots, sidewalks, outdoor eating areas and dumpster storage areas frequently.
 - Keep outside areas free of trash & debris.
 - Do not hose out dumpsters or fill them with liquid waste.
 - Regularly inspect, repair, and/or replace dumpsters.
2. **Clean equipment (floor mats, grease filters, grills, garbage cans, etc.) indoors or in a covered outdoor wash area that is plumbed to the sanitary sewer.**
 - Clean equipment in a mop sink if possible (never in a food preparation sink). If there is no mop sink, dedicate an indoor cleaning area where a drain is plumbed to the sanitary sewer.
 - Dispose mop water from cleaning floors in a mop sink, toilet or other drain that is plumbed to the sanitary sewer.
 - Do not pour wash water outside or into a street, gutter, or storm drain.
 - Dispose of all wastewater containing oil and grease in a grease trap or interceptor.
3. **Recycle and/or properly dispose of grease and oil.** Collect and dispose of concentrated waste oil and grease and disposed of by a certified waste grease hauler. NEVER pour grease or oil into a sink, floor drain, storm drain or dumpster.
4. **Block storm drain(s) when cleaning (hosing or steam/pressure washing) outside dumpster areas, sidewalks, and common areas with hot water, soap, or other cleaning**

agent. Collect water/waste and discharge to the sanitary sewer (with approval of the local sanitation district).

5. If only cold tap water with no cleaning agents are used, then the following must be implemented:

- Prior to washing clean and/or sweep all large debris from the area.
- Clean any fluid spills with an appropriate dry method, such as kitty litter or other absorbent, and dispose of appropriately.
- To the extent practicable, the wash water must be directed to vegetative or unpaved areas where it would soak into the ground.
- If wash water appears contaminated (cloudy, colored, presence of suspended solids), additional BMPs such as diversion to the sanitary sewer (with approval) or filtration methods must be implemented.

6. Training

- 1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
- 2. Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
 - BMP IC17 discusses Spill Prevention and Control in detail.
- 3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
- 4. Use a training log or similar method to document training.**

References

Carlsbad Jurisdictional Urban Runoff Management Plan. Best Management Practices for Restaurants. City of Carlsbad. February 2002. On-line:
<http://www.ci.carlsbad.ca.us/cserv/jurmp.html>

Orange County Stormwater Program. 2001. Water Quality Guidelines for Exterior Restaurant Cleaning Operations. Brochure. June.

Orange County Stormwater Program. Good Cleaning Practices Food & Restaurant Industry. Poster. Courtesy of the City and County of LA.



Contact your local hardware or construction material stores for available tools and materials for mobile detailers including vacuum pumps, mats, sand or gravel bags, wattles, etc.



City of Rancho Santa Margarita

22112 El Paseo
Rancho Santa Margarita, CA 92688

Phone: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org



City of Ranch Santa Margarita STORM WATER PROGRAM

Best Management Practices for Mobile Detailers

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water generated from washing the exterior and/or interior surfaces vehicles, boats, motorcycles, and light or heavy equipment

Why should we be concerned with vehicle waste water discharge?

Pollutants from vehicle washing and cleaning include heavy metals (copper, lead, nickel and zinc), hydrocarbons (oil & grease), toxic chemicals (solvents, chlorinated compounds, glycols), acids and alkalis. These pollutants drain off the vehicle finding their way into the street and into the storm drain systems which is polluting our creeks, beaches and Ocean. The implementation of the proper BMP's is required for compliance with State and local regulations which were developed to prevent water pollution and protect the public health.

It is unlawful for wash water or other non-storm water, generated by mobile detailers, to enter storm drains. Mobile detailers that do not prevent waste water from entering the storm drain systems are subject to Administrative Citations and/or fines.

Best Management Practices (BMPs)

Mobile detailers must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use.
- Use cleaning products as described on their labels and dispose of properly. Even biodegradable products impact our waterways.
- Vacuum or shake floor mats into a trash can.
- If feasible, wash vehicle on a vegetated or gravel surface where wash water can infiltrate into the ground without runoff.
- Sweep wash area to remove debris.
- Wash area must be contained so that water does not drain down streets and gutters– use sand bag berms, wattles, or bermed mats.
- Protect downstream storm drain inlet so that wash water does not enter storm drain. Protection must be placed before starting the washing process and removed before you leave the site.
- Use a "wet-vac" to vacuum up the wash water for proper disposal.

Options for wash water management

- **Preferred Option:**
Zero discharge or closed-loop recycled water
- **Second Option:**
Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.
- **Third Option:**
Discharge to a land with vegetative or gravel surfaces.

If you would like further information about water quality pollution prevention, please call the Department of Public Works at (949) 635-1800 ext.6503 or visit our website at www.cityofrsm.org.

Thank you for your effort in helping to improve the quality of our environment.



Los materiales y equipos requeridos, tales como aspiradoras de líquidos (wet-vacuums), alfombras (mats), tapetes, y bolsas de arena (sand bags) podrían ser disponibles en su ferretería o tienda de materiales de construcción.



City of Rancho Santa Margarita

22112 El Paseo
Rancho Santa Margarita, CA 92688

Telefono: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org

Las Mejores Prácticas (BMPs) para Detallistas Móviles



City of Rancho Santa Margarita
PROGRAMA DEL OCEANO LIMPIO

Las Mejores Prácticas (BMPs) para Detallistas Móviles

Este folleto proporciona información sobre utilizar mejores prácticas para la colección, tratamiento, y disposición de agua de lavado generado por el lavado exterior y/o superficies interiores de vehículos, barcos, motocicletas, y equipo ligero o pesado.

¿Por qué debemos preocuparnos por la descarga de agua sucia del lavado de vehículos?

Los contaminantes de lavado de vehículos y limpieza incluyen metales pesados (cobre, plomo, níquel y zinc), hidrocarburos (petróleo y grasa), sustancias químicas tóxicas (solventes, compuestos clorados, glicoles), ácidos y álcalis. Estos agentes contaminantes desaguan desde las vías de acceso vehicular, calles y cunetas hasta los sistemas de drenaje, causando contaminación en nuestros riachuelos, playas y océano. La implementación de Mejores Prácticas BMPs es requerida para la conformidad con el estado y las regulaciones locales que fueron desarrolladas para prevenir contaminación de agua y proteger la salud pública.

Es ilegal que el agua de lavado u otra agua de no-tormenta, causada por los detallistas móviles entrar al sistema de drenaje. Detallistas Móviles que no prevengan agua de desecho entrar a los sistemas de drenaje son sujetos a infracciones administrativas y/o multas.

Las Mejores Prácticas (BMPs)

Detallistas Móviles necesitan usar los siguientes BMPs para cumplir con las regulaciones, de la ciudad y prevenir contaminación de agua:

- Minimice el uso de agua.
- Utilice productos de limpieza en el modo como se indica en sus etiquetas y disponga de ellos correctamente. Productos bio-degradables también impactan nuestras vías/canales acuáticos.
- Aspire o sacuda los tapetes dentro del recipiente de basura.
- Si es posible, lave el vehículo en superficie vegetal o grava donde el agua de desecho pueda ser absorbida por el suelo en vez de crear descarga.
- Barra el área usada para quitar basura y residuos.
- Contenga el área de lavado de tal manera que el agua no fluya hacia las calles y cunetas. Se puede usar barreras de bolsas de arena o de paja, o tapetes con barreras.
- Proteja las entradas de las alcantarillas de drenaje ubicadas en la dirección que corre el agua de tal manera que el agua generada por el lavado no entre en ellas. Esta protección debe ser instalada antes de comenzar el proceso de lavado y removidas antes de dejar el sitio (al terminar).
- Usar aspiradora de líquidos ("wet-vac") para absorber el agua sucia y desecharla de la manera apropiada.

Opciones para desechar apropiadamente el agua de lavado sucia:

- **Opción preferida:**

Cero descarga, bandejas colectoras o medios de contención secundarios.

- **Segunda Opción:**

Descargue en el sistema de alcantarilla municipal incluyendo el sistema residencial, fregadero, lavabo, escusado, etc. y tome precauciones para prevenir escombros pesados, materiales peligrosos y/o cualquier cosa que puede atascar el fregadero o lavabo. El agua de lavado también puede ser llevada a su casa o negocio para ser disponible correctamente.

- **Tercera Opción:**

Descargue en superficie vegetal o grava.

Si usted quiere mas información sobre

**la prevención de contaminación y
calidad de agua, porfavor llame el
Departamento de Trabajos Públicos
al (949) 635.1800 ext. 6503
o visite nuestro website**

www.cityofrsm.org.

**Gracias por su esfuerzo en ayudar a
mejorar la calidad de nuestro medio**

ambiente April 1, 2017



Best Management Practices (BMPs) for Construction Sites & Home Remodeling Projects



Stormwater Program
Department of Public Works
City of Rancho Santa Margarita
22112 El Paseo
Rancho Santa Margarita, CA 92688

Construction Sites – Best Management Practices

Storm water pollution is a major concern to water quality. Water when mixed with contaminants such as litter, sediment, construction debris, paints and chemicals creates storm water pollution.

Why are Construction Sites a Problem?

Construction activities have the potential to impact water quality. Pollutants including trash, metals, solvents, vehicle fluids, as well as pesticides, nutrients and bacteria from landscaping activities are associated with construction activities. Sediment is the most common pollutant washed from work sites, which creates multiple problems when it enters natural water bodies. Sediment also carries with it other work site pollutants such as pesticides, cleaning solvents, cement wash, asphalt, and car fluids like motor oil, grease, and fuel.

How do Construction Activities Affect You?

The Storm Water Permit requires cities, including Rancho Santa Margarita, to implement a development construction program. The City's Building and Safety inspectors must ensure that storm water pollution controls are in place on construction sites.

The City of Rancho Santa Margarita has developed this Construction Pamphlet to provide guidance to contractors, developers and homeowners on best management practices (BMPs) for construction sites and remodels.

The following are some general principles that can significantly reduce pollution from construction activity and help make compliance with storm water regulation easy.



For more information about BMPs for construction activities or additional brochures, please contact the the Department of Public Works at 949.635.1800 Ext. 6501

City of Rancho Santa Margarita

22112 El Paseo

Rancho Santa Margarita, CA 92688

www.cityofrsm.org

December 2009
April 1, 2017

Construction Sites a Threat to Water Quality?

How often do you see construction activities occur in your neighborhood? It is safe to say most of us do. But do we know that these activities can pose a threat to water quality? The photos below illustrate some of the most common activities that are found at many construction sites, remodels, and redevelopment projects and should be avoided.

Practices to Avoid...



Don't stockpile dirt and other materials in the street.



Don't track dirt and mud to the streets.

Best Management Practices (BMP)s Reference Guides for Construction Activities

For more information about BMPs to prevent storm water and non-storm water pollution from construction related activities, please refer to the following construction activities BMPs reference guides/handbooks:

- ♦ **California Storm Water Quality Association. California Stormwater BMP Handbook – Construction.**

Website address: <http://www.cabmphandbooks.com>

- ♦ **Orange County Stormwater Program Construction Runoff Guidance Manual.**

Website address: <http://www.ocwatershed.com/StormWater/>

- ♦ **Urban Runoff Quality Management.**

Website address: <http://ww.wef.org>

- ♦ **Stormwater Managers Resource Center.**

Website address: <http://www.stormwatercenter.net>

Don't overfill
the trash
dumpsters.



Don't expose
construction
materials to
the rain.

Don't hose down
the pavement. Do
use a broom to
clean up spilled
materials.



Best Management Practices for Construction Sites

DO's

- ✓ Protect stockpiles and materials from wind and rain by storing them under secured plastic sheeting or temporary roofs.
- ✓ Whenever possible schedule grading and excavation projects for dry weather.
- ✓ Avoid contaminating clean runoff from areas adjacent to your site by using berms and temporary check dams to divert water flow around the site.
- ✓ Always cover and maintain dumpsters. Check thoroughly and frequently for leaks.
- ✓ Clean up leaks, drips and other spills immediately. This will prevent contaminated soil or residue on paved surfaces from blowing or washing into the storm drains.
- ✓ Identify all storm drains, drainage swales and creeks located near the construction site and make sure all subcontractors are aware of their locations to prevent pollutants from entering them.
- ✓ Use terracing, rip rap, sand bags, rocks, straw bales, and/or temporary vegetation on slopes to reduce runoff velocity and trap sediments.
- ✓ Dispose of all waste properly. Many construction materials, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation can be recycled.
- ✓ Train your employees and subcontractors in erosion and runoff control procedures.



Spill containment for portable toilets



Sidewalk closure signs to ensure public safety



Sandbags and straw fiber rolls for runoff, erosion and sediment control

Best Management Practices for Construction Sites

DON'Ts

- ⊘ Do not wash out concrete chutes into the street or storm drains.
- ⊘ Do not throw food wrappers on the ground. Use a trash can to dispose of food waste and wrappers.
- ⊘ Never clean brushes or rinse paint containers into a storm drain, gutter or street.
- ⊘ Never clean a dumpster by hosing it down on-site!
- ⊘ Never hose down dirty pavement or surfaces where materials have spilled. Use dry cleanup methods (e.g. absorbent materials such as kitty litter, sawdust, or cornmeal) whenever possible.
- ⊘ Never throw debris and waste or wash sweepings into the storm drain.
- ⊘ Do not use asphalt rubble or other demolition debris on slopes to trap sediments.
- ⊘ Never use the street to stockpile dirt, sand and other construction materials that can contribute to storm water pollution.
- ⊘ Do not allow vehicles exiting construction sites to track dirt and mud to the street.

Best Management Practices (BMPs) at Work

These photos depict construction sites implementing best management practices (BMPs). You will observe that stock piles are covered by a tarp and/or sandbags are utilized around the perimeter of the disturbed soil.



Sandbags and fabrics to protect catch basins and storm drains



Sandbag barriers along a catch basin are used as a sediment control measure



On the steep slope, matting in combination with permanent vegetation are used for erosion control





Please use the proper equipment to contain wash water. Contact your local hardware or construction material stores for available tools and materials for mobile carpet cleaners including storm train filters, spill kits, oil/water separators, etc.

City of Rancho Santa Margarita
Local Implementation Plan (LIP)
Existing Development



City of Rancho Santa Margarita

Phone: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org

Exhibit 9-2
Page 56



STORM WATER PROGRAM

BEST MANAGEMENT PRACTICES FOR CARPET CLEANERS



22112 El Paseo
Rancho Santa Margarita, CA 92688

April 1, 2017

Best Management Practices for Carpet Cleaners

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water generated from washing the carpeting of homes and businesses.

Why should we be concerned with carpet waste water discharge?

Water from washing carpets at residential and commercial locations may contain a wide range of contaminants, including detergents, solvents, disinfectants, suspended solids, grit and carpet fibers. If a carpet cleaner discharges these contaminants to the ground surface or surface waters, they can degrade water quality and threaten aquatic life.

Please note that it is unlawful to discharge contaminated water to a waterbody, e.g., a lake, stream, river or wetland, or to a storm drain or drainage swale leading to a waterbody. Carpet cleaners that do not prevent waste water from entering the storm drain systems are subject to Administrative Citations and/or fines.

Best Management Practices (BMPs)

Carpet cleaners must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use.
- Use cleaning products as described on their labels and dispose of properly. Even biodegradable products impact our waterways.
- Store materials and equipment securely in the vehicle.
- Wash water must be disposed of to a sanitary sewer at an approved location.
- Maintain spill clean up kits in vehicles and ensure that spill kit is appropriate for material used in your activities.
- Clean work areas using dry methods.

Options for wash water management

- **Preferred Option:**
Zero discharge or closed-loop recycled water
- **Second Option:**
Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.

If you would like further information about water quality pollution prevention, please contact the Public Works Department at (949) 635-1800 or visit our website at www.cityofrsm.org. Thank you for your effort in helping to improve the quality of our environment.



Goal: Implement all feasible measures to eliminate surface runoff of irrigation water.

Contact your local hardware or gardening stores and water districts for available tools and materials to prevent irrigation runoff, including new sprinkler heads, sprinkler nozzles, irrigation controller batteries, etc.



City of Rancho Santa Margarita
 Department of Public Works
 Phone: 949.635.1800 ext. 6501
www.cityofrsm.org



STORMWATER PROGRAM

BEST MANAGEMENT PRACTICES FOR ELIMINATING IRRIGATION RUNOFF



City of Rancho Santa Margarita
 22112 El Paseo
 Rancho Santa Margarita, CA 92688

April 1, 2017

Best Management Practices for Eliminating Irrigation Runoff

This brochure provides information on the selection and implementation of proper best management practices (BMPs) for effective irrigation systems to prevent irrigation runoff.

Why should we be concerned with irrigation runoff?

Irrigation runoff can be a significant contributor to ocean pollution. Over-watering results in urban runoff that finds its way through the streets, gutters, and storm drains before entering the ocean. The implementation of BMPs is required for water quality compliance with State and local regulations which were developed to prevent water pollution and protect public health.

The City of Rancho Santa Margarita's Water Quality Control program (Municipal Code 5.10) requires home and business owners to prevent discharge into the storm drain systems.

Best Management Practices (BMPs)

The following recommended BMP's will help Home and Business owners comply with the City's water quality and water pollution prevention requirements:

- Minimize water use. Conserve water by using irrigation practices such as drip irrigation, soaker hoses, micro-spray systems or weather based controllers.
- Inspect the irrigation system regularly, while it is operating, and promptly repair leaks or breaks.
- Adjust sprinkler heads and nozzles to avoid over-spray onto pavement and/or other impervious areas.
- Ensure that persons responsible for landscape maintenance are aware of irrigation management techniques and regulations for pollution prevention.
- Irrigate slowly or pulse irrigate to allow infiltration through the soil.
- Adjust watering schedule seasonally to reflect reduced winter water demand.

Irrigation runoff management includes having a goal of zero discharge or a closed-loop recycled water system.

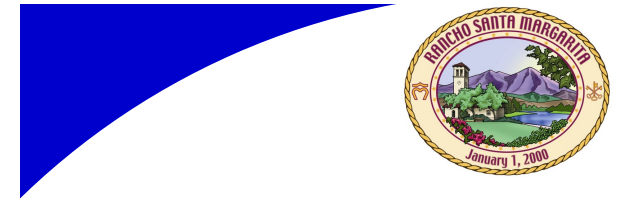
Please consider the following:

- Upgrading irrigation system components to increase efficiency and reduce the potential for irrigation runoff.
- Reducing the need for irrigation by planting drought resistant species.



If you would like further information about water quality pollution prevention,
please contact the Public Works Department at (949) 635-1800 or visit our website at www.cityofrsm.org.

Thank you for your effort in helping to improve the quality of our environment.



STORM WATER PROGRAM

BEST MANAGEMENT PRACTICES FOR LANDSCAPING SERVICES



Use proper equipment for landscaping services. Contact your local hardware or gardening stores for available tools and materials for mobile landscapers including vacuum pumps, mats, sand or gravel bags, wattles, etc.



City of Rancho Santa Margarita

Phone: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org

22112 El Paseo
Rancho Santa Margarita, CA 92688

Best Management Practices for Landscapers

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water generated from mobile landscaping.

Why should we be concerned with landscaping wash water discharge?

Landscaping and garden maintenance activities can be major contributors to ocean pollution. Soils, yard wastes, overwatering and garden chemicals become part of the the urban runoff mix that finds its way through the streets, gutters, and storm drains before entering the ocean. The implementation of the proper BMP's is required for compliance with State and local regulations which were developed to prevent water pollution and protect the public health.

Please note that it is unlawful for wash water or other non-storm water, generated by landscapers, to enter storm drains. Landscapers that do not prevent waste water from entering the storm drain systems are subject to Administrative Citations and/or fines.

Best Management Practices (BMPs)

Mobile landscapers must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use. Conserve water by using irrigation practices such as drip irrigation, soaker hoses or micro-spray systems.
- Schedule grading and excavation projects for dry weather.
- Sweep wash area to remove debris, but do not blow or rake leaves into the street, gutter or storm drains.
- Use organic or non-toxic fertilizers and do not over-fertilize.
- Protect downstream storm drain inlet so that wash water does not enter storm drain. Protection must be placed before starting the washing process and removed before you leave the site.
- Protect stockpiles and materials from wind and rain by storing them under traps or secured plastic sheeting.

Options for wash water management

- **Preferred Option:**
Zero discharge or closed-loop recycled water
- **Second Option:**
Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.

If you would like further information about water quality pollution prevention, please contact the Public Works Department at (949) 635-1800 or visit our website at www.cityofrsm.org. Thank you for your effort in helping to improve the quality of our environment.



Please use proper equipment to collect and dispose of wash water and solid wastes. Contact your local hardware or construction material stores for available tools and materials for mobile cement mixing and masonry including vacuum pumps, mats, sand or gravel bags, wattles, etc.



City of Rancho Santa Margarita

**Phone: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org**



STORM WATER PROGRAM

BEST MANAGEMENT PRACTICES FOR MOBILE CEMENT MIXING & MASONRY



**22112 El Paseo
Rancho Santa Margarita, CA 92688**

Best Management Practices for Mobile Cement Mixing and Masonry

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water and solid wastes generated from washing the cement mixing/cutting and masonry areas.

Why should we be concerned with cement mixing and masonry waste water discharge?

Pollutants from cement and masonry wasting and cleaning, including toxic chemicals, dust, debris, and aggregate. These pollutants drain off the work site finding their way into the street and into the storm drain systems which is polluting our creeks, beaches and Ocean. The implementation of the proper BMP's is required for compliance with State and local regulations which were developed to prevent water pollution and protect the public health.

Please note that it is unlawful for contaminated water or other non-storm water, generated by mobile cement mixing and masonry work to enter storm drains. Mobile cement mixing and masonry work that do not prevent waste water from entering the storm drain systems are subject to Administrative Citations and/or fines.

Best Management Practices (BMPs)

Mobile cement mixing and masonry must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use.
- Sweep streets, gutters, alleys, and sidewalks rather than hosing.
- Do not dispose to excess slurry.
- Divert slurry to a collection or washout area.
- Keep materials covered and off the ground.
- Wash area must be contained so that water does not drain down streets and gutters- use sand bag berms, wattles, or bermed mats.
- Protect downstream storm drain inlet so that wash water does not enter storm drain. Protection must be placed before starting the washing process and removed before you leave the site.
- Use a "wet-vac" to vacuum up the wash water for proper disposal.

Options for wash water management

- **Preferred Option:**
Zero discharge or closed-loop recycled water
- **Second Option:**
Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.

If you would like further information about water quality pollution prevention, please call the Public Works Department at (949) 635-1800 or visit our website at www.cityofrsm.org.

Thank you for your effort in helping to improve the quality of our environment.

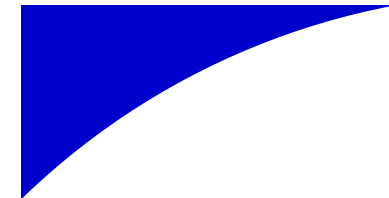


Use proper containers for collection and disposal of wash water, oil, and other chemicals. Contact your local hardware or construction material stores for available tools and materials for mobile detailers including vacuum pumps, mats, sand or gravel bags, wattles, etc.



City of Rancho Santa Margarita

Phone: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org



STORM WATER PROGRAM

BEST MANGEMENT PRACTICES FOR MOBILE DETAILERS



22112 El Paseo
Rancho Santa Margarita, CA 92688

Best Management Practices for Mobile Detailers

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water generated from washing the exterior and/or interior surfaces vehicles, boats, motorcycles, and light or heavy equipment

Why should we be concerned with vehicle waste water discharge?

Pollutants from vehicle washing and cleaning include heavy metals (copper, lead, nickel and zinc), hydrocarbons (oil & grease), toxic chemicals (solvents, chlorinated compounds, glycols), acids and alkalis. These pollutants drain off the vehicle finding their way into the street and into the storm drain systems which is polluting our creeks, beaches and Ocean. The implementation of the proper BMP's is required for compliance with State and local regulations which were developed to prevent water pollution and protect the public health.

It is unlawful for wash water or other non-storm water, generated by mobile detailers, to enter storm drains. Mobile detailers that do not prevent waste water from entering the storm drain systems are subject to Administrative Citations and/or fines.

Best Management Practices (BMPs)

Mobile detailers must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use.
- Use cleaning products as described on their labels and dispose of properly. Even biodegradable products impact our waterways.
- Vacuum or shake floor mats into a trash can.
- If feasible, wash vehicle on a vegetated or gravel surface where wash water can infiltrate into the ground without runoff.
- Sweep wash area to remove debris.
- Wash area must be contained so that water does not drain down streets and gutters– use sand bag berms, wattles, or bermed mats.
- Protect downstream storm drain inlet so that wash water does not enter storm drain. Protection must be placed before starting the washing process and removed before you leave the site.
- Use a “wet-vac” to vacuum up the wash water for proper disposal.

Options for wash water management

- **Preferred Option:**
Zero discharge or closed-loop recycled water
- **Second Option:**
Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.

If you would like further information about water quality pollution prevention, please contact the Public Works Department at (949) 635-1800 or visit our website at www.cityofrsm.org. Thank you for your effort in helping to improve the quality of our environment.



Use proper equipment for mobile pet services. Contact your local hardware or construction material stores for available tools and materials for mobile pet services including vacuum pumps, sand or gravel bags, etc.



City of Rancho Santa Margarita

Phone: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org



STORM WATER PROGRAM

BEST MANAGEMENT PRACTICES FOR MOBILE PET SERVICES



22112 El Paseo
Rancho Santa Margarita, CA 92688

Best Management Practices for Mobile Pet Services

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water generated from pet-related services.

Why should we be concerned with pet grooming waste water discharge?

Washing and grooming activities can pollute waterways if they are not properly managed. Wastewater containing soaps, chemicals (flea dip residues or equipment cleaning solutions), fur, sediment and other wastes can enter the river if discharged to them. Water quality may be affected - some wastes are toxic - others have a "nutrient load" that can upset the ecosystem by causing algal blooms.

Please note that it is unlawful for wash water or other non-storm water, generated by mobile pet services to enter storm drains. Mobile pet services that do not prevent waste water from entering the storm drain systems are subject to Administrative Citations and/or fines.

Best Management Practices (BMPs)

Mobile pet services must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use. Unused water may be directed to landscape as long as it doesn't contain any pollutants or soaps.
- Remove any fur or sediment from the wastes to avoid clogged drains. Use a strainer in the drain and empty to the trash.
- Avoid spills and leaks by maintaining equipment/use equipment that is adequately sized for the job and keeping soaps and chemicals in closed containers and in secondary containment.
- Sweep wash area to remove debris.
- Wash area must be contained so that water does not drain down streets and gutters- use sand bag berms, wattles, or bermed mats.
- Protect downstream storm drain inlet so that wash water does not enter storm drain. Protection must be placed before starting the washing process and removed before you leave the site.
- Discharge wastes from equipment cleaning to a sink.

Options for wash water management

- **Preferred Option:**
Zero discharge or closed-loop recycled water
- **Second Option:**
Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.

If you would like further information about water quality pollution prevention, please contact the Public Works Department at (949) 635-1800 or visit our website at www.cityofrsm.org. Thank you for your effort in helping to improve the quality of our environment.



Use proper equipment for pressure washing. Contact your local hardware or construction material stores for available tools and materials for mobile detailers including vacuum pumps, mats, sand or gravel bags, wattles, etc.



City of Rancho Santa Margarita

Phone: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org



STORM WATER PROGRAM

BEST MANAGEMENT PRACTICES FOR MOBILE PRESSURE WASHING



22112 El Paseo
Rancho Santa Margarita, CA 92688

Best Management Practices for Mobile Pressure Washers

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water generated from washing cars, parking lots, building exteriors, etc.

Why should we be concerned with pressure water cleaning waste water discharge?

Pollutants from pressure washing and cleaning include heavy metals (copper, lead, nickel and zinc), hydrocarbons (oil & grease), toxic chemicals (solvents, chlorinated compounds, glycols), acids and alkalis. These pollutants drain off other surfaces finding their way into the street and into the storm drain systems which is polluting our creeks, beaches and Ocean. The implementation of the proper BMP's is required for compliance with State and local regulations which were developed to prevent water pollution and protect the public health.

Please note that it is unlawful for wash water or other non-storm water, generated by mobile pressure washers, to enter storm drains. Mobile pressure washers that do not prevent waste water from entering the storm drain systems are subject to Administrative Citations and/or fines.

Best Management Practices (BMPs)

Mobile pressure washers must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use.
- Use cleaning products as described on their labels and dispose of properly. Even biodegradable products impact our waterways.
- If feasible, wash object on a vegetated or gravel surface where wash water can infiltrate into the ground without runoff.
- Sweep wash area to remove debris.
- Wash area must be contained so that water does not drain down streets and gutters- use sand bag berms, wattles, or bermed mats.
- Protect downstream storm drain inlet so that wash water does not enter storm drain. Protection must be placed before starting the washing process and removed before you leave the site.
- Use a "wet-vac" to vacuum up the wash water for proper disposal.

Options for wash water management

- **Preferred Option:**
Zero discharge or closed-loop recycled water
- **Second Option:**
Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.

If you would like further information about water quality pollution prevention, please contact the Public Works Department at (949) 635-1800 or visit our website at www.cityofrsm.org. Thank you for your effort in helping to improve the quality of our environment.



Contact your local stores or construction material stores for available tools and materials for mobile sanitary toilet servicing including vacuum pumps, mats, sand or gravel bags, wattles, etc.



City of Rancho Santa Margarita

**Phone: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org**



STORM WATER PROGRAM

BEST MANAGEMENT PRACTICES FOR MOBILE SANITARY TOILET SERVICING



**22112 El Paseo
Rancho Santa Margarita, CA 92688**

Best Management Practices for Cleaning and Maintenance for Mobile Sanitary Toilets

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water generated from washing the exterior and/or interior surfaces of portable sanitary toilets.

Why should we be concerned with portable sanitary toilet wash water discharge?

Pollutants from portable sanitary toilet washing and cleaning include sanitary chemicals and human waste. These pollutants drain off the toilet finding their way into the street and into the storm drain systems which will pollute our creeks, beaches and Ocean. The implementation of the proper BMP's is required for compliance with State and local regulations which were developed to prevent water pollution and protect the public health.

Please note that it is unlawful for contaminated water or other non-storm water, generated by mobile sanitary toilet servicing, to enter storm drains. Mobile sanitary toilet servicing that do not prevent waste water from entering the storm drain systems are subject to Administrative Citations and/or fines.

Best Management Practices (BMPs)

Mobile sanitary toilet services must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use.
- Remove paper and trash before cleaning toilet.
- Use cleaning products as described on their labels and dispose of properly. Even biodegradable products impact our waterways.
- Wash areas must be designed to drain into sewer or to a holding tank.
- Sweep area to remove debris.
- Wash water must be contained so that water does not drain down streets and gutters- use sand bag berms, wattles, or bermed mats.
- Protect downstream storm drain inlet so that wash water does not enter storm drain. Protection must be placed before starting the washing process and removed before you leave the site.
- Use a "wet-vac" to vacuum up the wash water for proper disposal.
- Maintain equipment and spill response material on site.

Options for wash water management

- **Preferred Option:**
Zero discharge or closed-loop recycled water
- **Second Option:**
Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.

If you would like further information about water quality pollution prevention, please contact Public Works Department at (949) 635-1800 or visit our website at www.cityofrsm.org. Thank you for your effort in helping to improve the quality of our environment.



Use proper equipment for painting. Contact your local hardware or construction material stores for available tools and materials for painters including vacuum pumps, mats, sand or gravel bags, wattles, etc.



City of Rancho Santa Margarita

Phone: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org



STORM WATER PROGRAM

BEST MANAGEMENT PRACTICES FOR PAINTING SERVICES



22112 El Paseo
Rancho Santa Margarita, CA 92688

Best Management Practices for Painters

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water generated from paint services.

Why should we be concerned with painting wash water discharge?

Pollutants from paint washing and cleaning include many different types of toxic chemicals (solvents, mercury, petrochemicals etc.). These pollutants drain out of the work area finding their way into the street and into the storm drain systems which is polluting our creeks, beaches and Ocean. The implementation of the proper BMP's is required for compliance with State and local regulations which were developed to prevent water pollution and protect the public health.

Please note that it is unlawful for wash water or other non-storm water, generated by painters, to enter storm drains. Painters that do not prevent waste water from entering the storm drain systems are subject to Administrative Citations and/or fines.

Best Management Practices (BMPs)

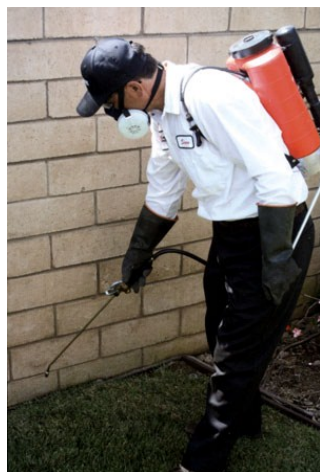
Painters must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use.
- Collect paint chips and dust daily using dry methods such as sweeping or vacuuming to cleanup pollutants.
- Use drop clothes during paint removal, paint mixing and application of paint.
- Filter, reuse, and recycle paint thinner, and solvents whenever possible.
- Never rinse out paint brushes or equipment on an impervious surface
- Latex paint waste must be recycled. Never pour latex paint into the sanitary sewer or storm drain system.
- Wash area must be contained so that water does not drain down streets and gutters– use sand bag berms, wattles, or bermed mats.
- Protect downstream storm drain inlet so that wash water does not enter storm drain. Protection must be placed before starting the washing process and removed before you leave the site.
- Use a “wet-vac” to vacuum up the wash water for proper disposal.

Options for wash water management

- **Preferred Option:**
Zero discharge or closed-loop recycled water
- **Second Option:**
Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.

If you would like further information about water quality pollution prevention, please contact the Public Works Department at (949) 635-1800 or visit our website at www.cityofrsm.org. Thank you for your effort in helping to improve the quality of our environment.



Use proper equipment for the application of pesticides. Contact your local hardware or construction material stores for available tools and materials for mobile pest control including vacuum pumps, mats, sand or gravel bags, wattles, etc.



City of Rancho Santa Margarita

Phone: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org



STORM WATER PROGRAM

BEST MANAGEMENT PRACTICES FOR PEST CONTROL



22112 El Paseo
Rancho Santa Margarita, CA 92688

Best Management Practices for Pest Control

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water generated from pest control products.

Why should we be concerned with pest control was water discharge?

Pollutants from pesticides increase the potential of groundwater contamination. This is particularly true for areas with coarse textured soils and shallow water tables. These pollutants drain off the vehicle finding their way into the street and into the storm drain systems which is polluting our creeks, beaches and Ocean. The implementation of the proper BMP's is required for compliance with State and local regulations which were developed to prevent water pollution and protect the public health.

Please note that it is unlawful for wash water or other non-storm water, generated by mobile pest control, to enter storm drains. Pest control that do not prevent waste water from entering the storm drain systems are subject to Administrative Citations and/or fines.

Best Management Practices (BMPs)

Pest control must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use.
- Use pesticides as described on their labels and dispose of properly. Even biodegradable products impact our waterways.
- Use pesticides with low mobility and persistence.
- Release pesticide spray as close to target as possible.
- Treat each affected area using droplets of pesticide to reduce drift.
- Never apply pesticides during weather conditions that may cause significant drift of small droplets away from the spray target.
- Avoid pesticide applications prior to intense rainfall events.
- Use methods of pesticide application that target individual pests or improve uniformity of application if possible.
- Calibrate application equipment to ensure that the proper amount of pesticide is applied.

Options for wash water management

- **Preferred Option:**
Zero discharge or closed-loop recycled water
- **Second Option:**
Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.

If you would like further information about water quality pollution prevention, please contact the Public Works Department at (949) 635-1800 or visit our website at www.cityofrsm.org. Thank you for your effort in helping to improve the quality of our environment.

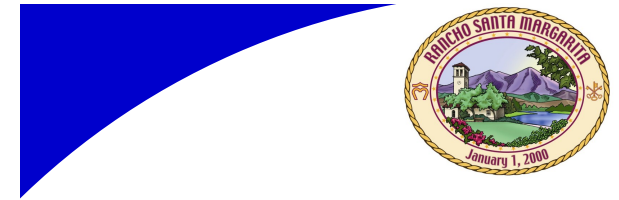


Use proper equipment for pool and fountain cleaning. Contact your local hardware or construction material stores for available tools and materials for mobile pool and fountain cleaners including vacuum pumps, mats, sand or gravel bags, wattles, etc.



City of Rancho Santa Margarita

Phone: 949.635.1800
Fax: 949.635.1667
www.cityofrsm.org



STORM WATER PROGRAM

BEST MANAGEMENT PRACTICES FOR POOL AND FOUNTAIN CLEANERS



22112 El Paseo
Rancho Santa Margarita, CA 92688

Best Management Practices for Pool and Fountain Cleaners

This brochure provides information about using best management practices (BMPs) for the collection, treatment, and disposal of wash water generated from pool and fountain cleaning.

Why should we be concerned with pool and fountain wash water discharge?

When water is left undisturbed in a pool or fountain for long periods it discolors sediment washing into the pool or foundation or from leaves decomposing in the water. The threat to fish is the lack of dissolved oxygen in the water and high chlorine levels that is discharged into the storm drain system. The implementation of the proper BMP's is required for compliance with State and local regulations which were developed to prevent water pollution and protect the public health.

Please note that it is unlawful for wash water or other non-storm water, generated by pool and fountain cleaners, to enter storm drains. Pool and fountain cleaners that do not prevent waste water from entering the storm drain systems are subject to Administrative Citations and/or fines.

Best Management Practices (BMPs)

Pool and fountain cleaners must use the following BMPs to comply with the City's water quality requirements and water pollution prevention:

- Minimize water use.
- Use cleaning products as described on their labels and dispose of properly. Even biodegradable products impact our waterways.
- Prevent algae problems with regular cleaning, consistently adequate chlorine levels, and well-maintained water filtration and circulation systems.
- Manage pH and water hardness to minimize corrosion of copper pipes.
- Discharge pool and fountain water over a grassy area to slow it down and aerate it.
- Properly clean and/or dispose of filters.
- Cleaning area must be contained so that water does not drain down streets and gutters– use sand bag berms, wattles, or bermed mats.
- Protect downstream storm drain inlet so that wash water does not enter storm drain. Protection must be placed before starting the washing process and removed before you leave the site.

Options for wash water management

- **Preferred Option:**
Zero discharge or closed-loop recycled water
- **Second Option:**
Discharge into municipal sewer system including residential sewer cleanout, utility sink or toilet, etc. and precautions must be taken to prevent any heavy debris, hazardous materials or anything that can clog sink or toilet. Wash water may also be taken off site for proper disposal at your home or business.

If you would like further information about water quality pollution prevention, please contact the Public Works Department at (949) 635-1800 or visit our website at www.cityofrsm.org. Thank you for your effort in helping to improve the quality of our environment.



CITY OF RANCHO SANTA MARGARITA STORMWATER MANAGEMENT PROGRAM

30211 Avenida de las Banderas
Rancho Santa Margarita, CA 92688
949-635-1800
www.cityofrsm.org



Water Quality Requirements for Public Events

GRAY WATER DISPOSAL

Gray water (water from washing hands, utensils, mop water, etc.) needs to be disposed of in the sanitary sewer. An indoor sink will be sufficient.

OUTSIDE CLEANING

All discharges generated from outside washing are considered liquid wastes. All water or wastewater discharges from any washing activities must be collected for disposal into the sanitary sewer system. Failure to dispose of liquid wastes in a correct manner may result in a citation and a fine.

One way to keep the wash water from entering the storm drainage system is to place a temporary dam at a low point on the property. The resultant waste can be collected at this point and disposed of in the sanitary sewer, or could be diverted to a grassy area, and allowed to soak into the ground.

SPILL CLEAN UP

Spillage of drinks, food, and any other material on a paved area must be cleaned. Liquid spills can be cleaned by using absorbent materials such as paper towels or mops (see gray water). Food or other solid materials may be swept up, and placed in the trash.

TRASH

Trash needs to be picked up periodically and placed in trash container. Trash should not be allowed to be blown away, because it can end up into the storm drain system, and wind up at the Ocean.

PROTECTION OF NEARBY CATCH BASINS:

Prior to start of event, organizers should assess the event location, and identify the nearby catch basins, that would receive any trash, debris or spills from the event. These catch basins shall be protected at a minimum with gravel bags to prevent non-storm water material from entering the drainage system. If the event is during the rainy season, event personnel shall monitor catch basin protection to avoid flooding. In case of stormy weather, no catch basin protection shall be installed. Organizers shall coordinate this activity with city staff.

RECYCLING:

All festivals and public events in the Rancho Santa Margarita are requested to provide recycling containers.



DF-1

DRAINAGE FACILITY OPERATION AND MAINTENANCE

As a consequence of its function, the stormwater conveyance system collects and transports urban runoff and storm water that may contain certain pollutants. Consequently these pollutants may accumulate in the system and must be removed periodically. In addition, the systems must also be maintained to function properly hydraulically to avoid flooding. Maintaining the system may involve the following activities:

Inspection and Cleaning of Stormwater Conveyance Structures

Controlling Illicit Connections and Discharges

Controlling Illegal Dumping

MODEL PROCEDURES:

1. Inspection and Cleaning of Drainage Facilities

General Guidelines

- ✓ Annually inspect and clean drainage facilities as needed. Maintain appropriate records. This information should be used to determine problem areas that may need to be checked more often.
- ✓ Remove trash and debris as needed from open channels and properly dispose of these materials (at an approved landfill or recycling facility). It should be noted that major debris removal may require other regulatory permits prior to completing the work.
- ✓ Conduct annual visual inspections during the dry season to determine if there are problem inlets where sediment/trash or other pollutants accumulate.
- ✓ Eliminate any discharges that may occur while maintaining and cleaning any municipal drainage facilities.
- ✓ Train crews in proper maintenance activities, including record keeping and disposal.
- ✓ Provide energy dissipaters (e.g. riprap) below culvert outfalls to minimize potential for erosion.

Storm Drain Flushing

- ✓ Flushing of storm drains or storm drain inlets should only be done in emergencies.
- ✓ If flushed, the material should be collected (vacuumed), treated with an appropriate filtering device to remove sand and debris and disposed of properly.

Waste Management

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewerage agency.*

- ✓ Store wastes collected from cleaning activities of the drainage facilities in appropriate containers or temporary storage sites in a manner that prevents discharge to the storm drain.
- ✓ Dewater the wastes if necessary with outflow into the sanitary sewer if permitted. Water should be treated with an appropriate filtering device to remove the sand and debris prior to discharge to the sanitary sewer. If discharge to the sanitary sewer is not permitted, water should be pumped or vacuumed to a tank and properly disposed of. Do not dewater near a storm drain or stream.

OPTIONAL:

- Provide for laboratory analysis of at least one randomly collected sediment (less the debris) sample per year from the storm drain inlet cleaning program to ensure that it does not meet the EPA criteria for hazardous waste. If the sample is determined to be hazardous, the sediment must be disposed of as hazardous waste.

2. Controlling Illicit Connections and Discharges

Improper physical connections to the storm drain system can occur in a number of ways, such as overflow cross-connects from sanitary sewers and floor drains from businesses like auto shops and restaurants. Illicit discharges and illegal connections can generally be detected and investigated through a combination of programs and approaches that target a variety of pollutants and sources.

- ✓ Report prohibited discharges such as dumping, paint spills, abandoned oil containers, etc. observed during the course of normal daily activities so they can be investigated, contained, and cleaned up.
- ✓ Conduct field investigations to detect and eliminate existing illicit connections and improper disposal of pollutants into the storm drain (i.e. identify problem areas where discharges or illegal connections may occur and follow up stream to determine the source(s)).
- ✓ Report all observed illicit connections and discharges to the 24-hour water pollution problem reporting hotline (714) 567-6363.
- ✓ Encourage public reporting of improper waste disposal by distributing public education materials and advertising the 24-hour water pollution problem reporting hotline.

Storm Drain Stenciling



Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets.

- ✓ Implement a storm drain stenciling program.

OPTIONAL:

- Create a volunteer work force to stencil storm drain inlets; municipal staff must organize, market, and provide training to initiate the volunteer program:
 - Promote volunteer services through radio/television and mail-out campaigns.
 - Educate businesses and residents about storm water pollution, the storm drain system, and the watershed and provide information on alternatives such as recycling, household hazardous waste disposal, and safer products.

3. Controlling Illegal Dumping

Illegally dumped wastes can cause storm water and receiving water quality problems as well as clog the storm drain system itself. Non-hazardous solid wastes may include garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes and other discarded solid or semi-solid waste provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentration which exceed applicable water quality objectives or could cause degradation of waters of the state.

Field Investigation

- ✓ Report prohibited discharges such as dumpings observed during the course of normal daily activities so they can be investigated, contained and cleaned up.
- ✓ Conduct field investigations to detect and eliminate improper disposal of pollutants into the storm drain (i.e. identify problem areas where discharges or illegal connections may occur and follow up stream to determine the source(s)).
- ✓ Report all observed illicit connections and discharges to the 24-hour water pollution problem reporting hotline (714) 567-6363.
- ✓ Encourage public reporting of improper waste disposal by distributing public education materials and advertising the 24-hour water pollution problem reporting hotline.

OPTIONAL:

- Post “No Dumping” signs in problem areas with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.

Training/Education/ Outreach

- ✓ Annually train municipal employees to recognize and report illegal dumping.
- ✓ Encourage public reporting of illegal dumping by advertising the 24-hour water pollution problem reporting hotline (714) 567-6363.

OPTIONAL:

- Educate the public with public education materials such as a hotline and/or door hanger (door hangers are placed on the front doors in neighborhoods where illegal dumping has occurred to inform the reader why illegal dumping is a problem, and that illegal dumping carries a significant financial penalty).
- Educate the public through volunteer water quality monitoring programs. Volunteers can be trained to notice and report the presence and suspected source of an observed pollutant to the appropriate public agency.

LIMITATIONS:

Clean-up activities may create a slight disturbance for local aquatic species. Access to items and material on private property may be limited. Trade-offs may exist between channel hydraulics and water quality/riparian habitat. If storm channels or basins are recognized as wetlands, many activities, including maintenance, may be subject to regulation and permitting.

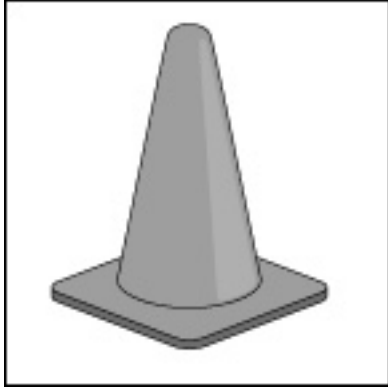
REFERENCES:

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Harvard University. 2002. Solid Waste Container Best Management Practices – Fact Sheet On-Line Resources – Environmental Health and Safety.

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.



FF-8

MINOR CONSTRUCTION

Minor construction activities can result in the use of materials or generation of waste that may contain toxic hydrocarbons or other organic compounds, suspended solids, heavy metals, abnormal pH, and oils and greases. Minor construction activities may involve one or more of the following:

- 1. General Construction Activities**
- 2. Interim Material Storage**
- 3. Concrete Work**
- 4. Building Work**

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for minor construction include:

- Schedule activities during dry weather whenever possible.
- Use dry cleaning methods whenever possible.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. General Construction Activities

- ✓ Prevent debris from entering the storm drain.
- ✓ Do not wash materials into a storm drain or bury spilled dry material.
- ✓ Do not clean or rinse equipment into a street, gutter, or storm drain.
- ✓ Use a storm drain cover, filter fabric, or similarly effective runoff control mechanism if dust, grit, wash water, or other pollutants may escape the work area and enter a storm drain inlet. This is particularly necessary on rainy days. The containment device(s) must be in place at the beginning of the work day, and accumulated dirty runoff and solids must be

See Waste Handling and Disposal

procedure sheet

- collected and disposed of before removing the containment device(s) at the end of the work day.
- ✓ Clean the storm drain inlets in the immediate vicinity of the construction activity after it is completed.
 - ✓ If a spill occurs on dirt, excavate and remove the contaminated (stained) soil.
 - ✓ Clean up spills and leaks immediately using dry methods, whenever possible.
 - ✓ Designate an area for clean up and proper disposal of excess materials.
 - ✓ Sweep up dry materials and residue from cleaning operations. Avoid using water to clean up.
 - ✓ Use soil erosion control techniques if bare ground is temporarily exposed.
 - ✓ Promptly clean up trash, debris, and litter from job sites and dispose properly.
 - ✓ Inspect vehicles and equipment used at the construction site regularly for leaks.
 - ✓ Train employees and subcontractors in proper waste management.

2. Interim Material Storage

- ✓ Properly store and cover materials that are normally used during minor construction such as paints, solvents, equipment, fuel, asphalt/concrete materials, sand, etc.
- ✓ Properly store and dispose of wastes generated from the activity.
- ✓ Store dry and wet materials under cover, protected from rainfall and runoff and away from storm drain inlets. After job is complete, remove temporary stockpiles (asphalt materials, sand, etc.) and other materials as soon as possible.
- ✓ Apply and store all products in accordance with manufacturer's instructions and proper safety measures.
- ✓ Store products in labeled containers and with covers or lids.
- ✓ Keep paved areas adjacent to stockpiles and earthwork sites free from loose sediment and tracked materials.
- ✓ Place stockpiled materials away from storm drain inlets, drainage paths, and natural waterways and provide cover to protect from runoff/runoff if feasible.
- ✓ Control stockpiled materials if windy or rainy weather is predicted (e.g. tarps, berming, sandbags, etc.).
- ✓ Prevent storm water from eroding loose soil and stockpiles.

- ✓ Inspect stockpiles regularly and after significant rain events.

3. Concrete Work

- ✓ Take measures to protect nearby storm drain inlets prior to breaking up asphalt or concrete (e.g. place hay bales or sand bags around inlets). Clean afterwards by dry sweeping up as much waste material as possible.
- ✓ When making saw cuts in pavement, use as little water as possible. Cover each storm drain inlet completely with filter fabric during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets. Vacuum saw cuttings and water from the pavement or gutter and remove from site.
- ✓ Avoid mixing excess amounts of fresh concrete or cement mortar on site.
- ✓ Apply concrete, asphalt, and seal coat during dry weather to prevent contamination from contacting stormwater runoff.
- ✓ Protect applications of fresh concrete from rainfall and runoff until the material has dried.
- ✓ Do not allow excess concrete to be dumped on-site, except in designated areas and promptly remove when concrete has dried.
- ✓ Tarps should be placed under concrete pumper trucks and the rear of trucks while concrete is being delivered or transferred from one area to another.
- ✓ Wash concrete trucks and concrete pumper trucks and trailers off site or in designated areas on site, such that there is no discharge of concrete wash water into storm drains, open ditches, streets, catch basins, or other stormwater conveyance structures.
- ✓ For on-site washout:
 - Locate washout area at least 50 feet from storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
 - Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed of properly.
 - Whenever possible, recycle washout by pumping back into mixers for reuse.
 - Never dispose of washout into the street, storm drains, drainage ditches, or creeks.
- ✓ When washing concrete to remove fine particles and expose the aggregate, contain the wash water for proper disposal. Do not allow water to enter storm drain inlets.
- ✓ Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stock pile, or

dispose in the trash

- ✓ Return left-over materials to the transit mixer. Dispose excess concrete, grout, and mortar in the trash.

4. Building Work

General Guidelines

- ✓ Use ground or drop cloths underneath outdoor painting, scraping, and sandblasting work, and properly dispose of collected material daily.
- ✓ Do not dump any toxic substance or liquid waste on the pavement, the ground, or toward a storm drain.
- ✓ Use a ground cloth or oversized tub for activities such as paint mixing and tool cleaning.
- ✓ Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.
- ✓ If a spill occurs on dirt, excavate and remove the contaminated (stained) soil.

Building Demolition

- ✓ Spray water throughout the site to help control wind-blowing of fine materials such as soil, concrete dust, paint chips, and metal chips. The amount of water must be controlled so that runoff from the site does not occur; yet dust control is accomplished.
- ✓ Oils must never be used for dust control.
- ✓ Place filter fabric or a similarly effective device at nearby storm drain inlets to prevent particles and solids from entering the storm drainage system. Filters should be placed at the beginning of the workday and the accumulated materials collected and disposed properly before removing them at the end of the workday
- ✓ Dry sweep surrounding street gutters, sidewalks, driveways, and other paved surfaces at the end of each workday to collect and properly dispose of loose debris and garbage, do not hose down the area to a storm drain.
- ✓ Use permanent soil erosion control techniques if a building cleared from an area is not to be replaced.

LIMITATIONS:

This procedure sheet is for minor construction only; the State's General Construction Activity Storm Water permit has more requirements for larger projects. Be certain that actions to help stormwater quality are consistent with Cal- and Fed-OSHA and air quality regulations.

REFERENCES:

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. 1995. King County Surface Water Management. July. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

The Stormwater Managers Resource Center (<http://www.stormwatercenter.net/>)

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.



ROADS, STREETS, AND HIGHWAYS OPERATION AND MAINTENANCE

Streets, roads, and highways are significant sources of pollutants in storm water discharges, and operation and maintenance (O&M) practices, if not conducted properly, can contribute to the problem. O&M practices may involve one or more of the following activities:

- 1. Sweeping & Cleaning**
- 2. Street Repair & Maintenance**
- 3. Bridge and Structure Maintenance**

Streets, roads, and highways are significant sources of pollutants in storm water discharges, and operation and maintenance (O&M) practices, if not conducted properly, can contribute to the problem. O&M practices may involve one or more of the following activities:

Pollution prevention measures that should be consider and the minimum required and optional model procedures for each performance standard are provided below.

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measure for roads, streets, and highways operation and maintenance include:

- Use the least toxic materials available (e.g. water based paints, gels or sprays for graffiti removal)
- Recycle paint and other materials whenever possible.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. Sweeping & Cleaning

Sweeping Frequency and Timing

- ✓ Maintain a consistent sweeping schedule. Provide minimum monthly sweeping of streets.
- ✓ Perform street cleaning during dry weather if possible.
- ✓ Avoid wet cleaning or flushing of streets, and utilize dry methods where possible.
- ✓ If flushing of a street is absolutely necessary, sweep and remove debris before flushing. Do not let wash water enter storm drain inlets. Collect wash water and direct to a dirt or vegetated area, pump into a vacuum truck and dispose of properly.

OPTIONAL:

- Consider increasing sweeping frequency based on factors such as traffic volume, land use, field observations of sediment and trash accumulation, proximity to water courses, etc.

Equipment Operation and Selection

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewerage agency.*

- ✓ Maintain cleaning equipment in good working condition and purchase replacement equipment as needed. Old sweepers should be replaced as needed with new technologically advanced sweepers (preferably regenerative air sweepers) that maximize pollutant removal.
- ✓ Operate sweepers at manufacturer requested optimal speed levels to increase effectiveness.
- ✓ Clean sweepers at a wash rack that drains to the sanitary sewer. The wash rack area should be covered and bermed and wash water should drain to a clarifier prior to entering the sanitary sewer.
- ✓ Regularly inspect vehicles and equipment for leaks, and repair immediately.

OPTIONAL:

- If available use vacuum or regenerative air sweepers in the high sediment and trash areas (typically industrial/commercial).

Management of Material Removed by Sweeping

- ✓ Dispose of street sweeping debris and dirt at a landfill.
- ✓ Do not store swept material along the side of the street or near a storm drain inlet.
- ✓ If dewatering of saturated materials is necessary it should be conducted in a designated area away from storm drain inlets and the water contained for proper disposal.

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewerage agency.*

Maximize Access for Sweepers

- ✓ If authorized by the local sanitation agency, water may be discharged to the sanitary sewer only after passing through a clarifier. As an alternative, dewatering can be conducted in a containment area in which saturated materials are placed on a tarp and allowed to dry. Dry debris is then disposed of properly.
- ✓ Keep debris storage to a minimum during the wet season or make sure debris piles are contained (e.g. by berming the area) or covered (e.g. with tarps or permanent covers).
- ✓ Keep accurate operation logs to track program.
- ✓ Properly maintain and operate equipment; which will increase efficiency.
- ✓ Sweeping should be conducted as close to the curb line as possible.

OPTIONAL:

- Institute a parking policy to restrict parking in problematic areas during periods of street sweeping.
- Post permanent street sweeping signs in problematic areas; use temporary signs if installation of permanent signs is not possible.
- Develop and distribute flyers notifying residents of street sweeping schedules.

2. Repair and Maintenance

Pavement Marking

- ✓ Develop paint handling procedures for proper use, storage, and disposal of paints.
- ✓ Transfer and load paint and hot thermoplastic away from storm drain inlets.
- ✓ Street or hand sweep thermoplastic grindings. Yellow thermoplastic grindings may require special handling as they may contain lead.
- ✓ Replace paints containing lead and tributyltin with less toxic alternatives.
- ✓ Use water based paints. Clean application equipment in a sink that is connected to the sanitary sewer.
- ✓ Properly store leftover paints if they are to be kept for the next job, or dispose of properly.
- ✓ See *Spill Control procedure sheet* for guidance on the proper cleanup of paint spills.

Concrete Installation and Repair

- ✓ Avoid mixing excess amounts of fresh concrete or cement mortar on-site. Only mix what is needed for the job.
- ✓ Wash concrete trucks off site or in designated areas on site, such that there is no discharge of concrete wash water into storm drain inlets, open ditches, streets, or other stormwater conveyance structures.

- ✓ Store concrete materials under cover, away from drainage areas.
- ✓ Return leftover materials to the transit mixer. Dispose of small amounts of hardened excess concrete, grout, and mortar in the trash.
- ✓ Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose in the trash.
- ✓ When washing poured concrete areas to remove fine particles and expose the aggregate, contain the wash water for proper disposal; do not discharge water to the storm drain system.
- ✓ Do not allow excess concrete to be dumped on-site, except in designated areas.
- ✓ Apply concrete, asphalt, and seal coat during dry weather to allow the material to adequately dry prior to a rain event.
- ✓ When making saw cuts in pavement, use as little water as possible and perform during dry weather. Cover each nearby or appropriate storm drain inlet completely with filter fabric or plastic during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets. After the liquid drains or evaporates, shovel or vacuum the slurry residue from the pavement or gutter and remove from site. Alternatively, a small on-site vacuum may be used to pick up the slurry as this will prohibit slurry from reaching storm drain inlets.

Patching, Resurfacing, and Surface Sealing

- ✓ Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
- ✓ Apply concrete, asphalt, and seal coat during dry weather to allow the material to adequately dry prior to a rain event.
- ✓ Where applicable, cover and seal each nearby or appropriate storm drain inlet (with waterproof material, plastic or mesh) and maintenance holes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from covered man holes and storm drain inlets when the job is complete.
- ✓ Use only as much water as necessary for dust control, to avoid runoff.
- ✓ Catch drips from paving equipment that is not in use with pans or absorbent material placed under the machines. Dispose of collected material and absorbents properly.
- ✓ Prior to a rain event or at the completion of a project, sweep the project area by hand or with a street sweeper.

Equipment Cleaning, Maintenance, and Storage

Also see Equipment Repair & Maintenance procedure sheet.

- ✓ Clean equipment including sprayers, sprayer paint supply lines, patch and paving equipment, and mudjacking equipment at the end of each day. If equipment can be cleaned and materials reapplied at the job site, do so in compliance with the laws and regulations. Clean in a sink or other area (e.g. vehicle wash area) that is connected to the sanitary sewer.

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewerage agency.*

- ✓ If refueling or repairing vehicles and equipment must be done on-site, conduct the activity away from storm drain inlets and watercourses.
- ✓ Place drip pans or absorbent materials under heavy equipment when not in use.
- ✓ Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.

OPTIONAL:

- Conduct cleaning at a corporation or maintenance yard if possible.
- When practical, perform major equipment repairs at the corporation yard.

→ *In addition to the procedures above, review and apply general procedures outlined for Minor Construction activities when conducting street, road, and highway repair and maintenance activities.*

3. Bridge and Structure Maintenance

Painting and Paint Removal

- ✓ Transport paint and materials to and from job sites in containers with secure lids and tied down to the transport vehicle.
- ✓ Do not transfer or load paint near storm drain inlets or watercourses.
- ✓ Test and inspect spray equipment prior to starting to paint. Tighten all hoses and connections and do not overfill paint container.
- ✓ If sand blasting is used to remove paint, cover nearby storm drain inlets prior to starting work.
- ✓ If the bridge crosses a watercourse, perform work on a maintenance traveler or platform, or use suspended netting or tarps to capture paint, rust, paint removing agents, or other materials, to prevent discharge of materials to surface waters. If sanding, use a sander with a vacuum filter bag.
- ✓ Recycle paint when possible (e.g. paint may be used for graffiti removal activities). Dispose of paint at an appropriate household hazardous waste facility.
- ✓ See Spill Control procedure sheet for guidance on the proper cleanup of paint spills.

Graffiti Removal

- ✓ Avoid graffiti abatement activities during rain events.
- ✓ Protect nearby storm drain inlets prior to removing graffiti from walls, signs, sidewalks, or other structures needing graffiti abatement. Clean up

afterwards by sweeping or vacuuming thoroughly, and/or by using absorbent and properly disposing of the absorbent.

- ✓ Note that care should be taken when disposing of waste since it may need to be disposed of as hazardous waste.
- ✓ When graffiti is removed by painting over, implement the procedures under Painting and Paint Removal above.
- ✓ Direct runoff from sand blasting and high pressure washing (with no cleaning agents) into a landscaped or dirt area.
- ✓ If a graffiti abatement method generates wash water containing a cleaning compound (such as high pressure washing with a cleaning compound), plug nearby storm drains and collect wash water and dispose of properly.

OPTIONAL:

- Consider using a waterless and non-toxic chemical cleaning method for graffiti removal (e.g. gels or spray compounds).

Guardrail and Fence Repair

- ✓ When cleaning guardrails or fences follow the appropriate surface cleaning methods (depending on the type of surface) outlined in the *Sidewalk, Plaza, and Fountain Maintenance and Cleaning* procedure sheet.
- ✓ If painting is conducted, follow the *Painting and Paint Removal* procedures above.
- ✓ If graffiti removal is conducted, follow the *Graffiti Removal* procedures above.
- ✓ If construction takes place, see the procedure sheet for *Minor Construction*.
- ✓ Recycle materials whenever possible.

LIMITATIONS:

Limitations related to street sweeping may include high equipment costs, the potential inability to restrict parking in urban areas, the need for sweeper operator training, the inability of current sweeper technology to remove oil and grease, and the lack of scientific evidence regarding the expected levels of pollutant removal.

REFERENCES:

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.



FP-6

WATER AND SEWER UTILITY OPERATION AND MAINTENANCE

Although sewage systems the operation and maintenance of public utilities are not considered themselves are not a chronic sources of stormwater pollution, some activities and accidents can result in the discharge of raw sewage contains pollutants that can pose a 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. Activities associated with the operation and maintenance of water and sewer utilities to prevent and handle such incidents include the following:

- 1. Water Line Maintenance**
- 2. Sanitary Sewer Maintenance**
- 3. Spill/Leak/Overflow Control, Response, and Containment**

Cities that do not provide maintenance of water and sewer utilities should coordinate with the contracting agency responsible for these activities and ensure that these model procedures are followed.

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for water and sewer utility operation and maintenance include:

- Inspect potential non-storm water discharge flow paths and clear/cleanup any debris or pollutants found (i.e. remove trash, leaves, sediment, and wipe up liquids, including oil spills).
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. Water Line Maintenance

Procedures can be employed to reduce pollutants from discharges associated with water utility operation and maintenance activities. Planned discharges may include fire hydrant testing, flushing water supply mains after new construction, flushing lines due to complaints of taste and odor, dewatering mains for maintenance work. Unplanned discharges from treated, recycled water, raw water, and groundwater systems operation and maintenance activities can occur from water main breaks, sheared fire hydrants, equipment malfunction, and operator error.

Planned Discharges

- ✓ For planned discharges use one of the following options:
 - Reuse water for dust suppression, irrigation, or construction compaction
 - Discharge to the sanitary sewer system with approval
 - Discharge to the storm drain system or to a creek using applicable pollution control measures listed below (this option is ONLY applicable to uncontaminated pumped ground water, water line flushing, discharges from potable water sources other than water main breaks) and may require a permit from the Regional Water Quality Control Board.
- ✓ If water is discharged to a storm drain inlet (catch basin), control measures must be put in place to control potential pollutants (i.e. sediment, chlorine, etc.). Examples of some storm drain inlet protection options include:
 - Silt fence – appropriate where the inlet drains a relatively flat area.
 - Gravel and wire mesh sediment filter – Appropriate where concentrated flows are expected.
 - Wooden weir and fabric – use at curb inlets where a compact installation is desired.
- ✓ Prior to discharge, inspect discharge flow path and clear/cleanup any debris or pollutants found (i.e. remove trash, leaves, sediment, and wipe up liquids, including oil spills).
- ✓ Select appropriate pollution control measure(s) considering the receiving system (i.e. curb inlet, drop inlet, culvert, creek, etc.) and ensure that the control device(s) fit properly.
- ✓ General design considerations for inlet protection devices include the following:
 - The device should be constructed such that cleaning and disposal

of trapped sediment is made easy, while minimizing interference with discharge activities.

- Devices should be constructed so that any standing water resulting from the discharge will not cause excessive inconvenience or flooding/damage to adjacent land or structures.
- ✓ The effectiveness of control devices must be monitored during the discharge period and any necessary repairs or modifications made as needed.

OPTIONAL:

- Sediment removal may be enhanced by placing filter fabric, gravel bags, etc. at storm drain inlets.

Unplanned Discharges

- ✓ Stop the discharge as quickly as possible by turning off water source.
- ✓ Inspect flow path of the discharged water:
 - Control erosion along the flow path.
 - Identify areas that may produce significant sediment or gullies, use sandbags to redirect the flow.
 - Identify erodible areas which may need to be repaired or protected during subsequent repairs or corrective actions
- ✓ If repairs or corrective action will cause additional discharges of water, select the appropriate procedures for erosion control, chlorine residual, turbidity, and chemical additives. Prevent potential pollutants from entering the flow path and ensure that no additional discharged water enters storm drain inlets.

2. Sanitary Sewer Maintenance

Applicable to municipalities who own and operated a sewage collection system. Facilities that are covered under this program include sanitary sewer pipes and pump stations owned and operated by the Permittee. The owner of the sanitary sewer facilities is the entity responsible for carrying out this prevention and response program.

Sewer System Cleaning

- ✓ Sewer lines should be cleaned on a regular basis to remove grease, grit, and other debris that may lead to sewer backups.
- ✓ Establish routine maintenance program. Cleaning should be conducted at an established minimum frequency and more frequently for problem areas such as restaurants that are identified

Preventative and Corrective Maintenance

- ✓ Cleaning activities may require removal of tree roots and other identified obstructions.
- ✓ During routine maintenance and inspection note the condition of sanitary sewer structures and identify areas that need repair or maintenance. Items to note may include the following:
 - cracked/deteriorating pipes
 - leaking joints/seals at manhole
 - frequent line plugs
 - line generally flows at or near capacity
 - suspected infiltration or exfiltration
- ✓ Document suggestions and requests for repair and report the information to the appropriate manager or supervisor.
- ✓ Prioritize repairs based on the nature and severity of the problem. Immediate clearing of blockage or repair is required where an overflow is currently occurring or for urgent problems that may cause an imminent overflow (e.g. pump station failures, sewer line ruptures, sewer line blockages). These repairs may be temporary until scheduled or capital improvements can be completed.
- ✓ Review previous sewer maintenance records to help identify “hot spots” or areas with frequent maintenance problems and locations of potential system failure.

3. Spill/Leak/Overflow Control, Response, and Containment

Control

Also see Drainage System procedures sheet

- ✓ Refer to countywide *Illicit Discharge Detection and Elimination Program*. Components of this program include:
 - Investigation/inspection and follow-up
 - Elimination of illicit discharges and connections
 - Enforcement of ordinances
 - Respond to sewage spills
 - Facilitate public reporting of illicit discharges and connections. A citizen’s hotline for reporting observed overflow conditions should be established to supplement the field screening efforts being conducted by the Principal Permittee.

Response and Containment

- ✓ Establish lead department/agency responsible for spill response and containment. Provide coordination within departments.

- ✓ When a spill, leak, and/or overflow occurs, keep sewage from entering the storm drain system to the maximum extent practicable by covering or blocking storm drain inlets or by containing and diverting the sewage away from open channels and other storm drain facilities (using sandbags, inflatable dams, etc.).
- ✓ If a spill reaches the storm drain notify County of Orange Health Care Agency through Control One at (714) 628-7208.
- ✓ Remove the sewage using vacuum equipment or use other measures to divert it back to the sanitary sewer system.
- ✓ Record required information at the spill site.
- ✓ Perform field tests as necessary to determine the source of the spill.
- ✓ Develop additional notification procedures regarding spill reporting as needed.

LIMITATIONS:

Private property access rights needed to perform testing along storm drain right-of-ways. Requirements of municipal ordinance authority for suspected source verification testing necessary for guaranteed rights of entry.

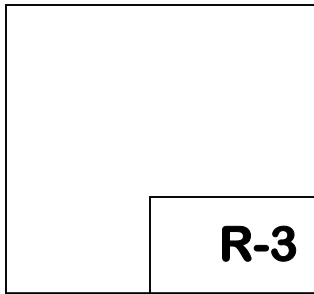
REFERENCES:

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Los Angeles County Stormwater Quality. Public Agency Activities Model Program. On-line:
http://ladpw.org/wmd/npdes/public_TC.cfm

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.

Santa Clara Valley Urban Runoff Pollution Prevention Program. Water Utility Pollution Prevention Plan.



AUTOMOBILE PARKING

Parked automobiles may contribute pollutants to the storm drain because poorly maintained vehicles may leak fluids containing hydrocarbons, metals, and other constituents. In addition, heavily soiled automobiles may drop clods of dirt onto the parking surface, contributing to the sediment load when runoff is present. During rain events, or wash-down activities, the pollutants may be carried into the storm drain system.

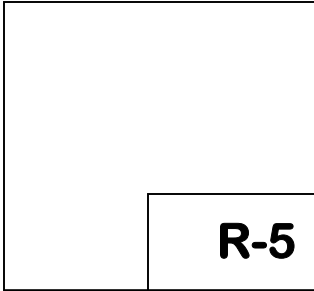
Think before leaving anything in the storm drain. The ocean starts at your front door.

Designated BMPs

- Residents will be required to remove vehicles from the street during designated street sweeping/cleaning times.
- Residents are encouraged to place a pan or similar collection device under their automobile if it is leaking fluids, until such time as the leak may be repaired.
- Use dry cleaning methods to remove any materials deposited by vehicles (e.g. adsorbents for fluid leaks, sweeping for soil clod deposits).
- Residents are encouraged to perform routine maintenance on their automobiles to minimize fluid leaks, and maximize efficiency.

Optional BMPs

- Residents are encouraged/required to park automobiles over permeable surfaces (e.g. gravel, or porous cement).
- Limit vehicle parking to covered areas.



DISPOSAL OF PET WASTES

Pet wastes left in the environment may introduce solids, bacteria, and nutrients to the storm sewer during periods of runoff. The type and quantity of waste will dictate the proper disposal method. Small quantities of waste are best disposed with regular trash or flushed down a toilet. Large quantities of wastes from herbivore animals may be composted for subsequent use or disposal to landfill. Pick up after your pet! It's as easy as 1-2-3. 1) Bring a bag. 2) Clean it up. 3) Dispose of it properly (toilet or trash).

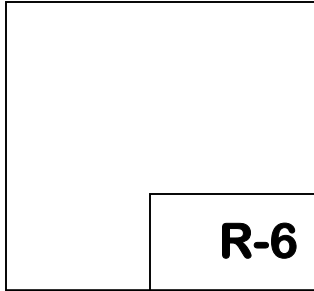
Think before leaving anything in the storm drain. The ocean starts at your front door.

Designated BMPs

- Pet wastes should not be deposited in storm drains, or in a manner allowing pollutants in pet waste to be carried to the storm drain during periods of runoff. Pet waste should be disposed of in the regular trash, flushed down a toilet, or composted as type and quantities dictate.
- All pet wastes should be picked up and properly disposed regardless of whether it is deposited on pervious or impervious areas.
- Properly dispose of unused flea control products (shampoo, sprays, or collars).
- Manure produced by livestock in uncovered areas should be removed at least daily for composting, or storage in water-tight container prior to disposal. Never hose down to stream or storm drain. Composting or storage areas should be configured and maintained so as not to allow contact with runoff. Compost may be donated to greenhouses, nurseries, and botanical parks. Topsoil companies and composting centers may accept composted manure.
- Line waste pits or trenches with an impermeable layer, such as thick plastic sheeting.
- When possible, allow wash water to infiltrate into the ground, or collect in an area that is routed to the sanitary sewer.
- Confine livestock in fenced in areas except during exercise and grazing times.
- Restrict animal access to creeks and streams, preferably by fencing.
- Install gutters that will divert roof runoff away from livestock areas.

Optional BMPs

- Increase educational and outreach component of program to promote:
 - Flushing pet wastes down toilet, for treatment in the wastewater treatment facility.
 - Do not flush kitty litter down toilet, as the litter will clog toilets and the sanitary sewer system.
- Require carrying bags, pooper-scooper, or equivalent to safely pick up pet wastes while walking with pets. Dispose of collected wastes properly in trash or into toilet.
- Bathe pets indoors and use less toxic shampoos, when possible have pets professionally groomed.
- Implement pet stations complete with plastic bags and waste receptacles.
- Post signs to encourage others to pick up pet wastes.
- Require proper inoculations to maintain health of pets, and reduce possibility of pathogens in pet wastes.
- Maintain healthy and vigorous pastures with at least three inches of leafy material.
- Consider indoor feeding of livestock during heavy rainfall, to minimize manure exposed to potential runoff.
- Locate barns, corrals, and other high use areas on portions of property that either drain away from or are located distant from nearby creeks or storm drains.
- Development of parks specifically designed to control the impacts of dog waste on receiving waters. This includes use of vegetated buffers, pooper-scooper stations, and the siting of parks out of drainageways, streams, and steep slopes.



DISPOSAL OF GREEN WASTES

Green wastes entering the storm drain may clog the system creating flooding problems. Green wastes washed into receiving waters create an oxygen demand as they are decomposed, reducing the available oxygen for aquatic life. Pesticide and nutrient residues may be carried to the receiving water with the green wastes.

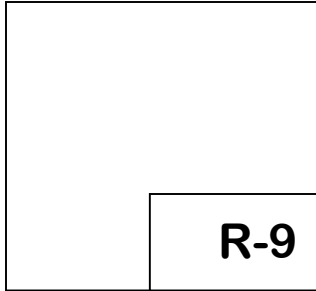
Think before leaving anything in the storm drain. The ocean starts at your front door.

Designated BMPs

- Prohibit the disposal of green wastes to the street, gutter, public right-of-way, storm drain, or receiving water.

Optional BMPs

- Implement a city wide green waste collection service as a department of the regular waste removal operations.



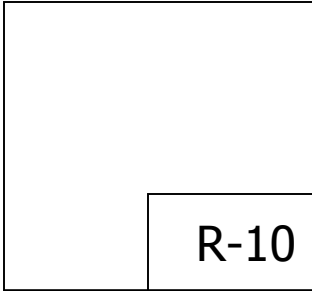
WALKWAYS AND DRIVEWAYS

The cleaning of walkways and driveways have the potential to contribute directly to storm drain systems primarily through the removal of spilled fluids such as oils, greases, and solvents along with dirt and other sediments which increases the sediment load on the storm drain system.

Think before letting anything but rainwater into the storm drains.

Designated BMPs

- A. Do not discharge wash water from cleaning or hosing of impervious surfaces to the storm water drainage system.
- B. Use dry methods (e.g. sweeping, backpack blowers, vacuuming) whenever practical to clean sidewalks and driveways rather than hosing, pressure washing, or steam cleaning. DO NOT sweep or blow material into curb gutters or street. Pick up and dispose into trash.
- C. To remove pet or wildlife feces, scoop, sweep or wipe it up and dispose in trash, sanitary sewer or compost pile. If still needed, direct any hose down water to landscaped areas, (BACT)
- D. Parking facilities should be swept/vacuumed on a regular basis.
- E. Use absorbents to pick up oil; then dry sweep.



POOLS AND FOUNTAINS

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures. Pool and fountain maintenance activities have the potential to contribute directly to the storm drain system. This is done through draining these structures, along with spills of pool and fountain maintenance chemicals, which are allowed to enter the storm water system.

Think before leaving anything but rainwater get into the storm drains. The ocean starts at your front door.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement – Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce storm water flow across facility site.
- Move or cover potential pollution from storm water contact.

Designated BMPs

- A. Do not use copper-based algacides. Control algae with chlorine or other alternatives, such as sodium bromide. Manage pH and water hardness to minimize corrosion of copper pipes.
- B. Discharge pool and fountain water properly. When draining fountains, never discharge water to a street or storm drain; discharge to the sanitary sewer or to the landscaping.
 1. When draining pools or fountains avoid discharging water to a street or storm draining, if feasible; discharge to the sanitary sewer if permitted to do so.
 2. If draining a pool to the sanitary sewer, prevent back flow by maintaining an “air gap” between the discharge line and the sewer line (do not seal the connection between the hose and sewer line). Be sure to call the local sewer authority for guidance on flow rate restrictions, back flow prevention, and

handling special cleaning waste (such as acid wash). Keep discharge flows to the low levels. Higher flow rates may be prohibited by local ordinance.

3. If water is de-chlorinated with a neutralizing chemical or by allowing chlorine to dissipate for a few days (do not use the facility during this time), the water may be recycled/reused by draining it gradually onto a landscaped area, or discharged to the street if gutters are swept clean beforehand from the discharge point to the storm drain inlet if practical. Water should be tested prior to discharge to ensure that chlorine is less than 0.1mg/l.
- C. If discharging to landscaping, allow chlorine to dissipate for a few days and then recycle/reuse water by draining it gradually onto a landscaped area. Water must be tested prior to discharge to ensure that chlorine is not present (concentration must be less than 0.1ppm).
- D. Properly clean and/or dispose of filters.
1. Never clean a filter into the street or so that rinse water enters a storm drain.
 2. Rinse cartridge filters onto a dirt area, and work filter residue into soil.
 3. Dispose of spent diatomaceous earth in the garbage. Diatomaceous earth cannot be discharged to surface waters, storm drainage systems, septic systems, or on the ground. Backwash diatomaceous earth filters onto dirt.
 4. If there is not a suitable dirt area, discharge filter backwash or rinse-water to the sanitary sewer if permitted to do so by the local sewer agency.

EXHIBIT 9.3

Best Management Practices Inspection Forms





CITY OF RANCHO SANTA MARGARITA
DEPARTMENT OF PUBLIC WORKS
22112 EL PASEO
RANCHO SANTA MARGARITA, CALIFORNIA 92688
949-635-1800 EXT. 6501
james@cityofrsm.org

BEST MANAGEMENT PRACTICES FOR POLLUTION PREVENTION ASSESSMENT SHEET

BUILDING MAINTENANCE-IC3		COMMENTS
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Outside areas kept neat and clean?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Does pavement sweeping occur?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are storm drain inlets labeled and maintained?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are employees trained on an ongoing basis?		
CONTAMINATED OR ERODIBLE SURFACE AREAS-IC6		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are unpaved outdoor areas protected from water and wind erosion?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Is area designed to prevent run-on of stormwater and run-off of spills?		
LANDSCAPE MAINTENANCE-IC7		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Efficient irrigation (i.e., no site run-off)?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Is the dirt/debris from landscaped areas contained?		
OUTDOOR DRAINAGE FROM INDOOR AREAS-IC9		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Materials prevented from being tracked from inside areas?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are materials/wastes stored away from doors/docks?		
OUTDOOR LOADING/UNLOADING OF MATERIALS-IC10		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are loading dock areas maintained?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Is exposure of activities to rain limited?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are drip pans available to catch potential leaks?		
OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND CONTAINERS-IC12		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are exposed materials covered?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are materials stored off the ground (i.e., palletized)?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Do materials/containers have secondary containment?		
PARKING AND STORAGE AREA MAINTENANCE-IC15		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are parking/storage areas maintained?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Excessive oil stains prevented?		
SPILL PREVENTION AND CONTROL-IC17		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are spill containment and clean-up materials readily available?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are absorbent materials removed and properly disposed of in a timely manner?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are spill response personnel identified?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are NO DUMPING signs posted?		
VEHICLE/EQUIPMENT FUELING, MAINTENANCE, REPAIR, WASHING AND STEAM CLEANING-IC18, IC19, IC20		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are leaks and drips cleaned in a timely manner?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Are fueling, maintenance, repair and washing areas designated and contained?		
WASTE HANDLING AND DISPOSAL-IC21		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Is wash water contained and disposed of?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Is trash enclosure clean and maintained?		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Do materials/containers have secondary containment?		
OTHER ACTIVITIES (FACT SHEET)		
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>
Y <input type="checkbox"/>	N <input type="checkbox"/>	N/A <input type="checkbox"/>

Indicate the principle pollutant threat(s) abated as a result of this inspection:

- ☐ Bacteria ☐ Nutrients ☐ Organics ☐ Sediment ☐ Other (please specify: _____)
☐ Metals ☐ Oils and Grease ☐ Pesticides ☐ Trash

Inspector: _____

Date: _____



**CITY OF RANCHO SANTA MARGARITA
STORM WATER QUALITY
INSPECTION FORM FOR RESTAURANTS**

BUSINESS NAME: _____	CONTACT PERSON: _____
ADDRESS: _____	PHONE NO.: _____ SIZE: _____ SQ FT
POLLUTANT DISCHARGE POTENTIAL: <input type="checkbox"/> TRASH <input type="checkbox"/> BACTERIA <input type="checkbox"/> OIL <input type="checkbox"/> GREASE <input type="checkbox"/> SEDIMENTS <input type="checkbox"/> ORGANICS	
REASON FOR INSPECTION: <input type="checkbox"/> ANNUAL: (DATE) _____ <input type="checkbox"/> FOLLOW-UP: (DATE) _____	
<input type="checkbox"/> OTHER: _____	

BMP IMPLEMENTATION

	N/A	ADEQUATE	NOT ADEQUATE	COMMENTS
TRAINING				
ANNUAL EMPLOYEE TRAINING				
DOCUMENTATION OF TRAINING				
ADEQUATE TRAINING PROVIDED				
CONNECTIONS				
STORM DRAIN INLET LABELING				
REVIEW FACILITIES FOR ILLEGAL CONNECTIONS AND ILLEGAL DISCHARGES				
STORM DRAIN CONVEYANCE SYSTEM/STRUCTURES MAINTAINED				
MATERIALS AT HAND AND EMPLOYEES TRAINED IN SPILL CLEANUP SOPs				
TRASH STORAGE/DISPOSAL AREAS				
TRASH STORAGE/DISPOSAL AREAS KEPT CLEAN AND REGULARLY INSPECTED				
TRASH RECEPTACLES IN GOOD CONDITION AND CLOSED				
MATERIALS AT HAND FOR TRASH CLEANUP				
GREASE CONTROL/COLLECTIVE DEVICES MAINTAINED				
LOADING/UNLOADING AREAS				
WASHING OF MATS IN PROPER AREAS				
PROTECTION OF STORM DRAIN INLETS DOWNHILL OF LOADING/UNLOADING AREAS				
PERIODIC INSPECTION/CLEANING OF LOADING/UNLOADING AREAS				
OUTDOOR AREAS				
DRAIN WASH AREAS TO SANITARY SEWER				
CONTAINMENT AND PROPER DISPOSAL OF WASH WATER				
BERM AND COVER EQUIPMENT STORAGE				
INSPECT AND MAINTAIN EQUIPMENT ON ROOFTOP				
INSPECT AND CLEAN ROOFTOP OF MATERIALS AND SUBSTANCES				
ROUTE ROOF DOWNSPOUTS TO PVIOUS AREAS AND AWAY FROM WORK AREAS				
PARKING LOTS				
LOCATE TRASH CONTAINERS IN CONVENIENT LOCATIONS				
NO STORAGE OF OTHER MATERIALS/EQUIPMENT IN PARKING AREA				
ROUTINE CLEANING OF PARKING AND OUTSIDE AREAS				
LANDSCAPING				
PREVENT SPILLS, LEAKS, OVER-APPLICATION OF CHEMICAL LANDSCAPING PRODUCTS				
PREVENT OVER-IRRIGATION				
IMPLEMENT NON-CHEMICAL PEST CONTROL METHODS				
PROPER USE/DISPOSAL OF CHEMICAL LANDSCAPING PRODUCTS				
PERIODIC INSPECTION/CLEANING OF GROUNDS AND LANDSCAPED AREAS				
OTHER BEST MANAGEMENT PRACTICES				
REPORT SIGNIFICANT SPILLS TO CITY AND/OR OTHER AGENCIES				

ADDITIONAL COMMENTS

MANAGER'S AND/OR OWNER'S SIGNATURE: _____	DATE: _____
INSPECTOR'S SIGNATURE: _____	DATE: _____ TIME: _____

WHITE – RESTAURANT COPY

CANARY – CITY COPY



CITY OF RANCHO SANTA MARGARITA
DEPARTMENT OF PUBLIC WORKS
22112 EL PASEO
RANCHO SANTA MARGARITA, CALIFORNIA 92688
949-635-1800 EXT. 6501
james@cityofrsm.org

INDUSTRIAL/COMMERCIAL FACILITIES WATER QUALITY INSPECTION

INSPECTOR NAME: _____ INSPECTION DATE: _____ TIME: _____ ☐ AM ☐ PM

FACILITY NAME: _____
CONTACT NAME: _____
ADDRESS: _____
PHONE: _____

BUSINESS TYPE: ☐ INDUSTRIAL
☐ COMMERCIAL

☐ ROUTINE INSPECTION
☐ RESPONSE TO COMPLAINT
☐ FOLLOW-UP INSPECTION

PRIORITIZATION VERIFICATION:

PERCENT OF ACTIVITIES OUTDOORS AND UNCOVERED: ☐ <25% ☐ 25-50% ☐ 50-75% ☐ >75%

APPROXIMATE IMPERVIOUS AREA: ☐ <5,000 SF ☐ 5,000-100,000 SF ☐ >100,000 SF

AMOUNT OF RAW MATERIAL KEPT INDOORS OR PROPERLY COVERED OUTDOORS: ☐ ALL ☐ SOME ☐ NONE

WATERSHED: _____

SIC CODE: _____

SIC DESCRIPTION: _____

IS FACILITY COVERED UNDER A STATE PERMIT? (CHECK ALL THAT APPLY)

☐ INDUSTRIAL GENERAL PERMIT ☐ NON-EXPOSURE CERTIFICATION

☐ NOTICE OF INTENT ☐ SWPPP ON-SITE

☐ WQID: _____

ENFORCEMENT ACTIONS ISSUED:

☐ NONE ☐ ADMINISTRATIVE CITATION

☐ EDUCATIONAL MATERIALS

☐ COURTESY LETTER

☐ OTHER: _____

☐ STOP WORK ORDER

☐ CEASE & DESIST ORDER

ACTIVITIES (FACT SHEET)

COMMENTS AND CORRECTIVE ACTIONS REQUIRED

1. LANDSCAPE MAINTENANCE—IC 7 _____
2. OUTDOOR DRAINAGE FROM INDOOR AREAS—IC9 _____
3. OUTDOOR LOADING/UNLOADING OF MATERIALS—IC10 _____
4. OUTDOOR PROCESS EQUIPMENT OPERATIONS AND MAINTENANCE—IC11 _____
5. OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND CONTAINERS—IC12 _____
6. PARKING AND STORAGE AREA MAINTENANCE—IC15 _____
7. SPILL PREVENTION AND CONTROL—IC17 _____
8. VEHICLE AND EQUIPMENT FUELING—IC18 _____
9. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR—IC19 _____
10. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING—IC20 _____
11. WASTE HANDLING AND DISPOSAL—IC21 _____
12. OTHER COMMENTS: ☐ PHOTOS TAKEN
☐ BMP INFORMATION PROVIDED _____

CORRECTIVE ACTION(S) ☐ NONE ☐ CORRECT DEFICIENCIES: _____
FOLLOW-UP INSPECTION REQUIRED ☐ NO ☐ YES BY: _____
DEFICIENCIES CORRECTED ☐ YES ☐ NO RESULT: _____

This report is furnished to the facility representative as a measure to evaluate the implemented BMPs at your facility to prevent stormwater pollution. Your facility may be subject to an enforcement action if the noted deficiencies are not corrected by _____. To review and discuss the correction of deficiencies noted above, please contact the Department of Public Works at 949-470-3056.

Facility Representative's Signature* _____

Printed Name: _____

Date: _____

*Signature indicates that the above items were discussed and a copy of the inspection report was received.

WHITE - CITY COPY YELLOW - FACILITY COPY

10.0 ILLEGAL DISCHARGES/ILLICIT CONNECTIONS COMPONENT

10.1 INTRODUCTION

Since illegal discharges and illicit connections (ID/ICs) are potential significant sources of pollutants for the municipal storm drain system, the City is implementing a comprehensive program for detecting, responding to, investigating and eliminating ID/ICs in an efficient and timely manner. Abating ID/IC directly supports both the principal requirements of the Fifth Term Permit and effectively addresses two of the HPWQCs identified in the WQIP – specifically, unnatural water balance in dry weather and pathogen health risk.

10.1.1 Program Overview

The ID/IC Program provides guidance for City staff when identifying, responding, mitigating and enforcing the ID/ICs for the protection of public health and the environment. In addition, it provides the framework and a process for conducting the following NPDES permit compliance activities for the ID/IC Program:

- Program administration
- Detection of illegal discharges and illicit connections
- Responding to water pollution incidents and complaints
- Inspections/investigations
- Education/Enforcement
- Training

10.1.2 Program Commitments

The major program commitments and the subsections in which they are described in detail include:

- Investigation and abatement of ID/ICs **(10.2)**;
- Education and Enforcement **(10.3)**; and
- Training **(10.4)** and Outreach.

10.1.3 Regulatory Requirements

The program described in this section was developed pursuant to Section E.2 of the Fifth Term Permit and **Section 10** of the DAMP.

Provision E.2 requires each Co-Permittee to implement a program to actively detect and eliminate discharges and improper disposal into the MS4, or otherwise require the discharger to apply for and obtain a separate NPDES permit. The City's ID/IC program conforms with the strategies in the WQIP and addresses non-stormwater discharges as illicit discharges unless the non-stormwater discharge is identified as a discharge authorized by a separate NPDES permit.

Provision E.6 requires the City to implement an Enforcement Response Plan as part of its

LIP/JRMP. The Enforcement Response Plan describes the applicable approaches and options to enforce the City's legal authority pursuant to Provision E.1, as necessary, to achieve compliance with the requirements of the Fifth Term Permit.

10.2 ILLEGAL DISCHARGES/ILLCIT CONNECTIONS PROGRAM

10.2.1 Program Introduction

The ID/IC Program establishes a process through which illegal discharges and illicit connections to the MS4 are actively detected and eliminated. In order to be effective, the ID/IC Program has been integrated with the municipal, industrial, commercial, residential, and construction inspection programs so that if an illegal discharge or illicit connection is discovered during an inspection, it can be properly addressed and eliminated. In addition, on behalf of the Permittees, the Principal Permittee implements the water quality monitoring programs, which can also assist in identifying illegal discharges and illicit connections. Illegal discharges and illicit connections that are discovered as a result of integrated efforts will be addressed pursuant to this Section. ~~The program must be in accordance with the strategies in the Water Quality Improvement Plan (WQIP) described pursuant to Provision B.3.b.(1) and must include all requirements outline by the Fifth Term Permit.~~

10.2.2 Program Administration and Implementation

Assigning roles and responsibilities reduces the duplication of efforts and increases program efficiency and effectiveness.

Roles and Responsibilities

The key roles and assigned staff for the ID/IC Program include the following:

Authorized Inspectors

The Authorized Inspector(s) (AI) are assigned to investigate compliance with and detect incidences of violations of the Ordinance. The designated authorized inspectors are:

Title: Public Works Superintendent
Telephone: 949/635-1800 x 6102
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Title: Storm Water Program Manager
Telephone: 949/635-1800 x 6503
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Spill Responder

The Spill Responder (SR) can be an AI or other authorized personnel responsible for coordinating with the fire department for the immediate response to any accidental spills, leak or prohibited discharge of pollutants requiring clean-up. The designated spill responders are:

Title: Public Works Superintendent
Telephone: 949/635-1800 x 6102

Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688
Title: Storm Water Program Manager
Telephone: 949/635-1800 x 6503
Address: 22112 El Paseo, Rancho Santa Margarita, CA 92688

Enforcing Attorney

The Enforcing Attorney is the City Attorney acting as counsel for the Permittee, and their appointee. For purposes of criminal prosecution, only the District Attorney or designee should act as the Enforcing Attorney.

For a more detailed discussion regarding the primary roles and responsibilities, the City's Water Quality Ordinance (**Section 4**), *Enforcement Response Plan* and/or the *Investigative Guidance Manual* should be referenced.

Although the City is responsible for responding to water pollution complaints and incidents within its jurisdiction, the City entered into an agreement, Agreement No. D07-085, with the OCFCD which allows the City to utilize the OCFCD Authorized Inspectors to provide scientific, technical, and enforcement services to the City. While the City has entered into the agreement for OCFCD to provide Authorized Inspector services, there may be instances when there are multiple incidents and OCFCD Authorized Inspectors are not available to respond. If this occurs, the city has designated Authorized Inspectors to respond. The list of designated Authorized Inspectors is above. The City of Rancho Santa Margarita has available resources to implement the spill response and Ordinance enforcement portions of the stormwater program. The City provides 24-hour in-house response to Ordinance violations and spill incidents: [through the countywide water pollution reporting hotline number 1-877-89SPILL or https://myoceservices.ocgov.com.](#)

10.2.3 Detection and Elimination of Illegal Discharges

The City of Rancho Santa Margarita has a number of programs that facilitate the proactive detection of sources of illegal discharges and illicit connections. These programs include the following:

- **Municipal Activities (DAMP Section 5)**—field inspectors and facility managers assist in the identification of illegal discharges and illicit connections during their daily activities. For example, during the routine maintenance of a drainage facility, a field inspector will report any dumped materials and/or undocumented connections to the NPDES representative.
- **Public Education (DAMP Section 6)**—assists with the distribution of public education materials that provide phone numbers and encourage the reporting of spills.
- **Construction Activities (DAMP Section 8)**—assists with the identification of illegal discharges from construction sites.
- **Existing Development Programs (DAMP Section 9)**—assists with the identification of actual or threatened illegal discharges from industrial, commercial and residential areas.

- **Water Quality Monitoring Program (DAMP Section 11)**—assists with the identification of problem areas through the collection of water quality data.
- Active participation in the Orange County Hazardous Materials Strike Force.
- Encourage the public to report water pollution problems to the reporting hotline at 1-877-89-SPILL.

10.2.4 Model Spill Response Procedures

In addition to the proactive detection and elimination of threatened or occurring discharges, a large portion of the City of Rancho Santa Margarita ID/IC Program is responding to water pollution complaints and incidents.

While all spills to municipal storm drain system are important and responses are often the same, sewage spills have merited special regulatory attention as coordination with other public agencies as well as private owners is often involved; for this reason sewage spill response procedures are covered separately in **Section 10.2.5**.

The response procedures consist of the following elements:

- Record Keeping
- Notifications and Response Requests
- Response
- Investigations
- Clean-Up
 - Trauma Scene Cleanup
 - Cleanup Costs
 - Follow-up
 - Decontamination
 - Waste Storage and Disposal
- Reporting
- Education and Enforcement
- Program Effectiveness Evaluation

The *Investigative Guidance Manual* (Manual) was developed for the Authorized Inspectors to specifically address the investigative portion of an ID/IC response. The Manual outlines the fundamental techniques that should be followed during investigations in order to collect legally defensible data. The Manual addresses record keeping, site entry, interviewing, photographs, sample collection, and report writing.

10.2.4.1 Record Keeping

To ensure that the necessary information from a complaint, notification, or response request is accurately documented throughout the entire process, the City uses a form similar to the County's Pollution Notification and Investigation Request (PNIR) form in the *Investigative Guidance Manual*.

This form collects information on the:

- Initial notification/response request;
- The location and specific details about the complaint or spill;
- Information about the alleged responsible party;
- The results of the investigation; and
- The actions that were taken as a result.

Documentation may also include photographs, the collection of samples, detailed notes on observations, witness interviews, discussions on decisions made and other information relevant to the investigation.

After the initial entry of the information on the PNIR or related form, the information is entered into a database so that the data can be analyzed and future enforcement activities focused on either problematic responsible parties, locations or constituents. In addition, the use of the database allows the City to quickly and accurately provide the information that is necessary for the annual progress reports.

10.2.4.2 Notifications and Response Requests

In order to have a successful ID/IC program, the City of Rancho Santa Margarita needs to obtain information about potential or existing complaints and spills as soon as possible so that the problem can be mitigated as quickly as possible.

In order to facilitate the reporting of problems by the general public, the City advertises the County's 24-hour water pollution problem reporting hotline number (1-877-89-SPILL), the website reporting form (www.ocwatersheds.com) and the City reporting number and the City's local hotline number 949-635-1800 on all public education brochures and posters.

The County's 24-hour hotline number and web address are included in all Pacific Bell Regional Phone Directories. The hotline number is located in the Government Section of the White Pages while the web address can be found in the Internet Section of the Yellow Pages.

The City also coordinates with internal staff and other agency and emergency response personnel so that they understand how to identify a problem and to whom to report it.

10.2.4.3 Response

After receiving notification of a water pollution problem or spill, the City either refers the problem to its internal Authorized Inspector and/or Spill Responder or to the OCFCD's

Authorized Inspector and/or Spill Responder. Each complaint or spill is investigated as soon as possible and according to **DAMP Section 10** to ensure that valuable information is not lost and to minimize any potential human health and environmental impact.

The response typically consists of:

- On-Scene Assessment;
- Notifications; and
- Containment.

After conducting an on-scene assessment, several notifications may be necessary.

Notifications may include:

- Notification to Other Agencies – Notifications need to be made to any agencies or entities that may be affected by or have jurisdiction over the pollutant or discharge.
- Requesting Assistance – If it is determined that the incident requires a multi-agency response, it may be necessary to request additional assistance from the other agencies.

10.2.4.4 Investigations

The City of Rancho Santa Margarita's Inspector or Responder will try to determine why the incident occurred and whether the discharge or release was deliberate or accidental and if the incident is a repeat occurrence and carefully document the investigation to ensure that accurate information is obtained and all evidentiary requirements are met. The types of equipment, supplies and forms that may be used in the field during the investigations are listed in the *Investigative Guidance Manual*. The investigation may include collection of samples, photographic documentation, interviews and/or an incident report, per **DAMP Section 10.2.4.5**.

The *Investigative Guidance Manual* (Manual) was developed for the Authorized Inspectors to specifically address the investigative portion of an ID/IC response. The Manual outlines the fundamental techniques that should be followed during investigations in order to collect legally defensible data. The Manual addresses record keeping, site entry, interviewing, photographs, sample collection, and report writing. Each Copermittee must submit a summary of the non-stormwater discharges and illicit discharges and connections investigated and eliminated within its jurisdiction with each Water Quality Improvement Plan Annual Report under the Provision F.3.b.(3) of the Fifth Term Permit.

10.2.4.5 Clean-Up

The main objective in the clean-up operation is to restore the impacted area back to its original state (to the maximum extent practicable) and prevent further environmental degradation in the surrounding area of the incident. It is important that the clean-up is completed in a timely and cost-effective manner.

During this phase of the response, the Inspector or Responder is generally overseeing and directing the clean-up and should re-evaluate the resources necessary to perform the clean-up and ensure that they are being prepared and sent to the site. The general responsibilities are:

- Provide list of clean-up companies for the RP to contact;
- Oversee clean-up – Provide clean-up directions and verify pollutant removal;
- Document clean-up company's activities (proper and safe procedures) to verify appropriate clean-up charges; and
- Document amount of waste or pollutant removed to verify disposal costs.

The Authorized Inspector may also deliver to the owner or occupant of any property, or any other Person who becomes subject to an Administrative Remedy such as a Notice of Non-compliance or Administrative Order, an Invoice for Costs. The Invoice for Costs is immediately due and payable to the City of Rancho Santa Margarita for the actual costs incurred by the City in responding to, overseeing the clean-up of and issuing and enforcing any notice or order.

10.2.4.5.1 Trauma Scene Clean-Up

Trauma scene wastes (i.e., blood and human tissue) may be encountered at various incidents including crime and/or accident scenes. Since trauma scene wastes require the implementation of special procedures in addition to the general clean-up procedures that are followed, the City implements the procedures that are outlined in **DAMP Section 10.2.4.6**.

10.2.4.6 Reporting

The ID/IC program has a number of reporting requirements. The requirements include:

- **Proposition 65 Notification** – Health and Safety Code 25180.7 provides that:

“Any designated government employee who obtains information in the course of his official duties revealing the illegal discharge or threatened illegal discharge of a hazardous waste within the geographical area of his jurisdiction, and who knows that such discharge or threatened discharge is likely to cause substantial injury to public health or safety, must, within 72 hours, disclose such information to the local health officer.”

The Proposition 65 Hotline telephone number in Orange County is (714) 433-6403 and the fax number is (714) 754-1768.

- **Regional Board Notifications** – If a spill, leak or illegal dumping is determined to pose a threat to human or environmental health, the Permittees provide oral notification to the Regional Board by phone or e-mail within 24 hours of the discovery followed by a written report within five days.

10.2.5 Sewage Spill Response Procedures

The Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Resources Control Board, Order No. 2006-0003) and other orders promulgated by the State Water

Resources Control Board and Regional Water Quality Control Boards assign responsibilities relative to sanitary sewer overflows to the owners and operators of sanitary sewer systems. These orders influence sewage spill/incident response.

10.2.5.1 Program Responsibilities

Santa Margarita Water District and Trabuco Canyon Water District (independent special districts), operate and maintain the public wastewater and sanitary sewer system within the City. These districts are responsible for monitoring, inspection, maintenance, operation, and cleaning of the wastewater and sanitary sewer systems within their service boundaries. The districts are also responsible for activities necessary to prevent, respond to, contain, and clean-up sewage spills/incidents originating from their wastewater and sanitary systems, including systems that collect and convey wastewater to publicly-owned treatment facilities. It is each of the districts' standard operating policy to respond to all sewage spills/incidents from private systems, as well. The City cooperates with these districts in order to maximize water quality protection.

10.2.5.2 Management Measures

The City and each water district maintain a cooperative partnership and a shared commitment to water quality protection. Management measures implemented by the City that relate to sewage spills/incidents, include:

- The water districts' sewage spill/incident response procedures include notifying the City's Code Enforcement Department of sewage spills (including from private laterals and failing septic systems) that occur in the City within 24-hours. City staff are available for on-scene coordination, as necessary.
- Providing the water districts with 24-hour contact information for the City Manager, Public Works Director, Emergency/NPDES Program Manager.
- The City conditions approval of projects that involve sanitary sewer facilities on conformance with plumbing codes and approval by the water districts.
- The City conditions approval of food service establishment projects (as defined in compliance with the districts' Fats, Oils, and Grease Regulations, which are intended to prevent blockages of sewer lines resulting from discharges of fats, oils, and grease.
- As applicable, the City will support the implementation of essential elements of the Countywide Area Spill Control Program or other equally effective programs to control and mitigate sanitary sewer overflows.

10.2.5.3 Response

Pursuant to the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, the water districts are responsible for responding to, containing, and cleaning up sewage spills/incidents originating from their wastewater and sanitary systems, including systems that collect and convey wastewater to publicly-owned treatment facilities. It is each of the districts' standard operating policy to respond to all sewage spills/incidents from private systems, as well. The districts have implemented an overflow emergency response plan that is used during sewage spills/incidents.

In the event that notification of a sewage spill/incident within the City's boundaries is received by the City, staff will notify the appropriate water district immediately.

10.2.6 Illicit Connection Investigations

As part of the municipal stormwater program, the City of Rancho Santa Margarita detects and eliminates illicit connections within its municipal storm drain system.

Any illicit connection identified by the City of Rancho Santa Margarita during routine inspections is investigated. Appropriate actions are then taken to approve undocumented connections by permit procedure and/or pursue removal of those connections that are determined to be illicit connections and not permissible.

If evidence of an illegal discharge is detected and the source does not appear to be evident, a source investigation may be conducted as described in **Section 10.2.7** and **DAMP Section 10.2.7** to determine if the discharge is being conveyed through an illicit connection.

10.2.7 Source Investigations

Source investigations may be conducted when an ID/IC is detected or suspected, and the source is not readily identifiable. The purpose of the investigation is to locate the source so that measures to eliminate the ID/IC can be implemented. Source investigations will be initiated when appropriate information suggests evidence of an ID/IC, including:

- Reports made by City staff, government agencies, or the general public
- Triggers established by the data from the water quality monitoring program
- Professional judgment of water quality monitoring personnel

In order to facilitate the determination of when source investigation studies are warranted, the Dry Weather Monitoring Program (**DAMP Section 10.0**) includes a set of criteria that will trigger focused ID/IC studies by the City when the monitoring data indicate the presence of a problem.

When data from the routine Dry Weather Monitoring Program exceeds these criteria, this triggers a consideration that follow-up investigations are necessary. With this trigger, the County Dry Weather Monitoring Program will have identified a storm drain that exceeded the criteria, and the City will be notified that a follow-up ID/IC investigation may be necessary. For extreme conditions that represent a clear and immediate risk to human health or receiving water quality then the appropriate Inspector will be notified immediately. This situation may require a hazardous materials response.

In instances, where the monitored site is near a jurisdictional boundary and the upstream drainage network for the site extends into a neighboring jurisdiction(s), all appropriate jurisdictions will be notified.

10.2.7.1 Tracking a Pollutant Upstream

Once the City Authorized Inspector is notified of the potential problem and it is determined that a source investigation is warranted, the approach used for tracking a pollutant source upstream

or identifying an illicit connection will primarily involve the steps as outlined in the **DAMP Section 10.2.7** including:

- Step One – Initial Screening
- Step Two – Source Evaluations and Inspections
- Step Three – Monitoring
- Step Four – Document, Notify and Report

10.2.7.2 Documentation

Thorough and accurate documentation will be maintained by the Authorized Inspector throughout the investigation process to ensure that an accurate record is maintained and legal/evidentiary requirements are met. Documentation is also intended to ensure that the required regulatory reporting is completed, enforcement and cost recovery actions can be justified, repeat offenders and other areas of concern can be identified, program improvements can be made, and program effectiveness assessments can be prepared.

Investigative documentation includes:

- Initial notification or investigation/response request
- The location and specific details about the complaint
- Information about the alleged responsible party
- The results of the investigation
- The actions that were taken as a result

Additional documentation may include interviews, photographs, samples, observation notes, and other information relevant to the investigation.

10.2.7.3 Elimination of ID/ICs

Depending on the type of ID/IC detected, the City will eliminate any discharge or connection by means of appropriate legal procedures. ID/ICs will be eliminated by contacting the appropriate supervisor who oversees the activities resulting in the discharge and notifying the individual of necessary actions.

In the event that the City determines that the individual responsible for the ID/IC is incapable of performing the actions by the compliance date, or if the individual chooses not to perform the activities, the City may conduct the necessary measures, and charge the resulting costs to the individual.

Follow-up will be conducted to ensure that abatement activities have been successfully and adequately implemented. A summary of the non-stormwater discharges and illicit discharges and connections investigated and eliminated must be included in the WQIP Annual Report as required by Provision F.3.b.(3) for the Fifth Term Permit.

10.3 EDUCATION AND ENFORCEMENT

10.3.1 Introduction

Enforcement activities within the City of Rancho Santa Margarita are undertaken according to the adopted Water Quality Ordinance and accompanying Enforcement Response Plan (**Exhibit 4.1**). Water pollution cases may be handled administratively or, in more serious instances, be prepared for prosecution.

The City of Rancho Santa Margarita has formally designated the staff responsible for carrying out the enforcement services according to the Enforcement Response Plan and updates these designations every year as a part of Program Effectiveness Assessment.

10.3.2 Choosing the Type of Enforcement

The Enforcement Response Plan provides a framework to the Permittees for selecting the type of enforcement that should be pursued. Some of the factors that influence this decision include the duration and significance of the violation of threat, the cooperativeness and willingness of the responsible party to remedy the conditions, whether the incident is isolated or re-occurring and whether the violation or threat will affect or harm human health or the environment.

In order to be consistent countywide, the City of Rancho Santa Margarita staff use the Enforcement Response Plan (**Exhibit 4.1**) to assist them in determining which type of enforcement action should be used for any given incident.

Although the discussion below provides some guidelines on the use of various enforcement tools, the Enforcement Response Plan is the primary document for the enforcement procedures and processes and is consulted when enforcement options are being considered or appeals of enforcement remedies are initiated.

10.3.2.1 Educational Letters

Although the Authorized Inspectors primarily rely on the administrative remedies as discussed below, there are still a few occasions when the City of Rancho Santa Margarita uses enforcement letters.

These situations may occur when:

- An authorized inspector believes that the water pollution complaint may be valid, but does not have evidence to substantiate it; and/or
- A second party, or resident, hires a contractor who causes an incident. In this case the contractor should receive the administrative remedy and the resident should receive an educational letter.

10.3.2.2 Administrative Remedies

Administrative remedies available to the City, the order in which they are used, and a summary of each are outlined in **Exhibit 4.1**.

10.3.2.3 Criminal Remedies

Criminal enforcement is appropriate when evidence indicates that the responsible party has acted willfully with intent to cause, allow continuing, or concealing a discharge in violation of the Ordinance.

Criminal enforcement options available to the City, the order in which they are used, and a summary of each are outlined in **Exhibit 4.1**.

10.3.2.4 Administrative Hearings

The ordinance provides for appeals of the Authorized Inspector's decisions to a designated Hearing Officer. The final decisions of Hearing Officers are appealable to the court with proper jurisdiction under statutory review procedures. For further information on the administrative hearing process, see the Enforcement Consistency Guide, **Exhibit 4.1**.

10.4 TRAINING

For an effective stormwater program to be efficiently implemented, its staff must have sufficient knowledge, experience, and skills. The Principal Permittee will coordinate, develop and present a number of different training modules in accordance with the *The Orange County Stormwater Program Training Program Framework: Core Competencies*. The City will support this effort by requiring the appropriate employees to attend training sessions, and conduct applicable train-the-trainer sessions, if necessary.

10.4.1 Training Records

The City maintains records of training provided to staff.