

CITY OF MISSION VIEJO

Stormwater Program

Local Implementation Plan (LIP)

April 1, 2017 Revised January 14, 2019

Certified Statement

City of Mission Viejo

Local Implementation Plan

Prepared for the

California Regional Water Quality Control Board

San Diego Region

April 1, 2017 Revised January 14, 2019

I certify under penalty of law that this document and all attachments (City of Mission Viejo'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: 01/14/2019

By: Use Ames, P.E.

Assistant City Engineer
City of Mission Viejo

City of Mission Viejo Stormwater Program Local Implementation Plan

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1.0 INTRODUCTION

This document constitutes the City of Mission Viejo'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 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

¹Christopher J. Walsh,1,* Allison H. Roy,2,† Jack W. Feminella,3,‡ Peter D. Cottingham,4,§ Peter M. Groffman,5,∥ and Raymond P. Morgan II6,#, "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.

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 Mission Viejo, 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 Mission Viejo 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 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."

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

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 WQIMP strategies.

- DAMP/LIP strategies—these strategies are the baseline programs developed on a countywide or regional basis and which are focused on reducing pollutant discharges form 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 Haighest Ppriority Wwater Qquality Ceonditions (HPWQC).

This LIP is includes the following programs in subsequent sections:

- Framework for program management activities and future plan development (Section 2.0 and Section 3.0);
- 4.2. Future plan development (Section 3.0);
- 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 nonstormwater 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
- 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.

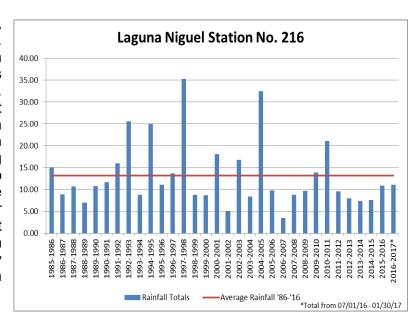
1.5 DAMP/LIP COVERAGE

This LIP is applicable to the area of the City of Mission Viejo 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 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 Mission Viejo is located within the San Juan Creek watershed.

Figure 1.1 Regional Map—City of Mission Viejo



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 Mission Viejo

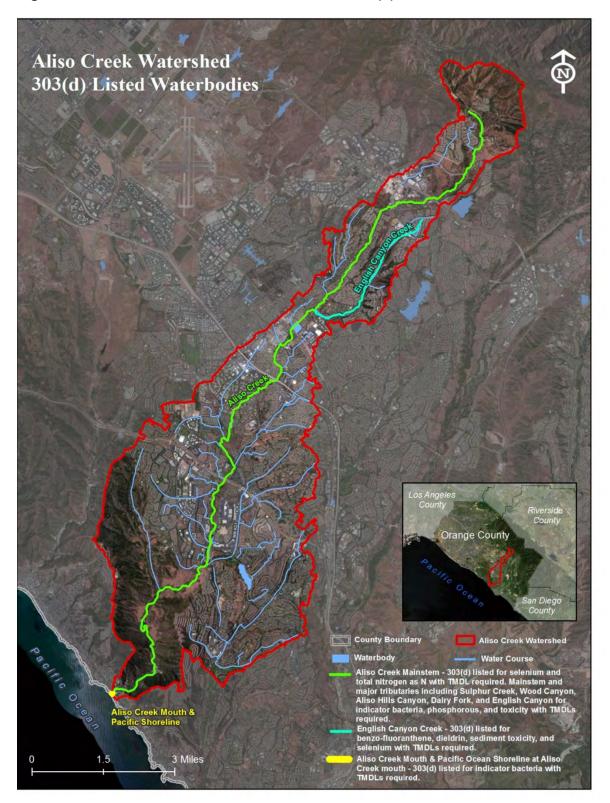
Watershed	ESA	303(d) Pollutant/Stressor
Aliso Creek	Aliso Creek	Indicator Bacteria, Phosphorous, Selenium, Total Nitrogen as N, Toxicity
Aliso Creek	Aliso Creek Mouth (Estuary)	Indicator Bacteria
Aliso Creek	Pacific Ocean Shoreline at Aliso Creek Mouth	Total Coliform ¹ , Fecal Coliform & Enterococcus
Aliso Creek	Pacific Ocean Shoreline at Aliso Beach—Middle	Total Coliform ¹ , Enterococcus
Aliso Creek	English Canyon Creek	Benzo(b) Fluoranthene, Dieldrin, Sediment Toxicity, Selenium
San Juan Creek	Oso Creek @ Mission Viejo Country Club Golf Course	Chloride, Sulfates, Total Dissolved Solids
San Juan Creek	Lower San Juan Creek (approx. 1 mile of stream beginning at shoreline)	DDE, Indicator Bacteria, Phosphorous, Selenium, Total Nitrogen as N, Toxicity
San Juan Creek	Oso Creek (lower 4 miles)	Selenium, Toxicity
San Juan Creek	Arroyo Trabuco Creek	Diazinon, Phosphorus, Total Nitrogen as N & Toxicity
San Juan Creek	San Juan Creek Mouth (Estuary)	Indicator Bacteria
San Juan Creek	Pacific Ocean Shoreline at North Beach Creek	Total Coliform ¹ , Fecal Coliform & Enterococcus
San Juan Creek	Pacific Ocean Shoreline at San Juan Creek	Total Coliform ¹ , Fecal Coliform & Enterococcus
San Juan Creek	Pacific Ocean Shoreline at North Doheny State Beach Campground	Total Coliform ¹ & Enterococcus
San Juan Creek	Pacific Ocean Shoreline at South Doheny State Beach Campground	Enterococcus

¹ 303(d) listing is for shellfish harvesting Total Coliform objective and not for water contact recreation.

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



Figure 1.3 Aliso 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 Mission Viejo 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:
 - Legal/Regulatory Authority Task Force
 - Local Implementation Plan/Program Effectiveness Assessment (LIP/PEA) Sub-Committee
 - Public Education Sub-Committee
 - Trash and Debris Task Force
 - 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 Mission Viejo 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
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
Trash and Debris Task Force	Public Works

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

Table 2.2
City of Mission Viejo 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 Services	Operates and maintains storm drains and flood control facilities	Implements applicable model BMPs, reports actions taken to LIP Management
			Reports to LIP Manager with changes in flood control maintenance program and facilities
	Public Services	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 Services	Maintains catch basin stenciling program	Implements stenciling program, reports actions taken to LIP Management
			Reports to LIP Manager with changes in stenciling program
	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

Table 2.2
City of Mission Viejo Internal Implementation of the LIP

Program Element	Department	Activity	Responsibility Under the Order/2003 DAMP
	Recreation & 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
	Public Services	Operates and maintains parking lots	in police facilities operated Implements applicable model BMPs, reports actions taken to LIP Management
	Public Services	Maintains City facilities	Implements applicable model BMPs, reports actions taken to LIP Management
			Updates LIP Management with changes to City-owned facilities
	Public Services	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 Services	Manages and implements street sweeping	Implements applicable model BMPs, reports actions taken to LIP Management
			Updates LIP Management with changes to street sweeping
	Public Services	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
	Public Services	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

Table 2.2
City of Mission Viejo Internal Implementation of the LIP

Program Element	Department	Activity	Responsibility Under the Order/2003 DAMP
			Develops City versions of countywide education materials as appropriate
			Participates in one or more City events per year
	Community Development, Public Works, Library, Recreation & Community Services	Distribution of public education materials	Provides information to public at City counters
Section 7 New Development	Community Development	Manages General Plan	Reviews the General Plan for water quality protection
	Community Development	Manages environmental planning review	Implements use of CEQA checklist to review water quality issues on proposed projects
			Reviews development for water quality issues
	Community Development	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
			Verifies plan compliance with water quality requirements
	Community Development, 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

Table 2.2
City of Mission Viejo Internal Implementation of the LIP

Program Element	Department	Activity	Responsibility Under the Order/2003 DAMP
	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	Public Works	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
	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	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 during the annual reporting period. Each Annual Report verifies and documents compliance with the Fifth Term Permit.

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;
- o 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 Mission Viejo	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)Public Projects - BMPs REQUIRING NEW DEVELOPMENT BMPS (Supportive of Planning, etc.)Construction BMPs for Public Construction Projects Other Capital Projects/Major Equipment PurchasesREQUIRING CONSTRUCTION BMPS (Supportive of Plan Check & Inspection) TOTALS	This information will be collected annually	This information will be collected annually	

Table 2.4
Fiscal Analysis for City Operations and Maintenance Costs

City of Mission Viejo Fiscal Analysis Summary DAMP Program Elements		OPERATIONS AND MAINTENANCE		
			GRAM ADMINISTRATION ection 2.0)	
	Litter Control			
	Recycling			
	Drainage Facility Maintenance	This information will be collected annually	This information will be collected annually	
MUNICIPAL ACTIVITIES (DAMP Section 5.0)	Catch Basin Stenciling			
	Street Sweeping			
	Environmental Performance			
	Public Property & Street Chemical Spill Response			
	Pesticide & Fertilizer Management			
PUBLIC INFORMATION	Nonpoint Source Pollution Awareness			
(DAMP Section 6.0)	Household Hazardous Waste Collection			
REQUIRING NEW DEVELOPMENT BMPS (Supportive of Planning, etc.)				
REQUIRING CONSTRUCTION BMPS (Supportive of Plan Check & Inspection)				
ILLICIT CONNECTION/ DISCHARGE ID &	Facility Inspection			
ELIMINATION (DAMP Sec. 10.0)	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 Mission Viejo	FUNDING SOURCES		
Fiscal Analysis Summary			
DAMP FUNDING SOURCES	FUNDING PERCENTAGES		
DAMP I UNDING SOUNGES	Current FISCAL YEAR	Next FISCAL YEAR	
GENERAL FUND			
UTILITY TAX/CHARGES			
SEPARATE UTILITY BILLING ITEM			
GAS TAX			
SPECIAL DISTRICT FUND			
OTHERS (Specify)			
Sanitation Fee	This information will be	This information will be	
Benefit assessment	collected annually	collected annually	
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

Copermittee Primary Contact Name: Joe Ames Copermittee Primary Contact Information: Address: 200 Civic Center City: Mission Viejo County: Orange State: CA Zip: 92691 Email: James@cityofmissionviejo.org It leson Vieto Fax: Email: James@cityofmissionviejo.org It leson Fax: Email: James@cityofmissionviejo.org It leson Vieto Fax: Email: James@cityofmissionviejo.org It leson Vieto Fax: Vieto Vieto Vieto Vieto Vieto Vieto Vieto Vieto Vieto V	I. COPERMITTEE INFORMATION			
Copermittee Primary Contact Information: Address: 200 CWic Center City: Mission Viejo County: Orange State: CA Zip: 92691 Telephone: 949-470-8419 Fax: Fax: Email: james@ctyofmissionwiejo.org Fax: Telephone: 949-470-8419 Telep	Copermittee Name: City of Mission Viejo			
Address: 200 Civic Center City: Mission Viejo County: Orange State: CA Zip: 92691 Telephone: 949-470-8419 Fax: Email: james@cityofmissionviejo.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. R8-2013-0001, as amended by Order No. R8-2015-0001? NO □ A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority? NO □ III. JURISDICTIONAL BUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATES Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Regional Water Beard? NO □ III. JURISDICTIONAL BUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATES Was an update of the jurisdictional runoff management program document and make it available on the Regional Clearinghost? NO □ IF YES to the question above, did the Copermittee update its jurisdictional runoff management program YES □ IV. LILICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM Has the Copermitee implemented a program to actively detect and eliminate illicit discharges and connections YES □ Number of non-storm water discharges reported by the public No □ Number of non-storm water discharges eleminated 90 Number of non-storm water discharges investigated by the Copermittee staff or contractors (and other agencies) 75 Number of non-storm water discharges eleminated 90 Number of sources of fillicit discharges of connections identified 90 Number of sources of fillicit discharges eleminated 90 Number of sources of fillicit discharges of connections issued 90 Number of sources of fillicit discharges of connections illininated 90 Number of proposed development projects in review (as of June 30, 2016) 90 Number of proposed development projects in review (as of June 30, 2016) 90 Number of Priority Development Projects in re	Copermittee Primary Contact Name: Joe Am	nes		
Address: 200 Civic Center City: Mission Viejo County: Orange State: CA Zip: 92691 Telephone: 949-470-8419 Fax: Email: james@cityofmissionviejo.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. R8-2013-0001, as amended by Order No. R8-2015-0001? NO □ A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority? NO □ III. JURISDICTIONAL BUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATES Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Regional Water Beard? NO □ III. JURISDICTIONAL BUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATES Was an update of the jurisdictional runoff management program document and make it available on the Regional Clearinghost? NO □ IF YES to the question above, did the Copermittee update its jurisdictional runoff management program YES □ IV. LILICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM Has the Copermitee implemented a program to actively detect and eliminate illicit discharges and connections YES □ Number of non-storm water discharges reported by the public No □ Number of non-storm water discharges eleminated 90 Number of non-storm water discharges investigated by the Copermittee staff or contractors (and other agencies) 75 Number of non-storm water discharges eleminated 90 Number of sources of fillicit discharges of connections identified 90 Number of sources of fillicit discharges eleminated 90 Number of sources of fillicit discharges of connections issued 90 Number of sources of fillicit discharges of connections illininated 90 Number of proposed development projects in review (as of June 30, 2016) 90 Number of proposed development projects in review (as of June 30, 2016) 90 Number of Priority Development Projects in re	Copermittee Primary Contact Information:			
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ATTACHMENT D: JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT FORM

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT FORM FY 2015-2016

VI. CONSTRUCTION				
Has the Copermittee implemented a construction management		es with Order		YES 🗵
No. R9-2013-0001, as amended by Order No. R9-2015-0001	?			NO [
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				C
Number of construction sites closed/completed during repo	orting period (inventory o	f sites minus ac	tive 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		nat complies wi	th Order	YES 🗵
No. R9-2013-0001, as amended by Order No. R9-2015-0001	?			NO 🗆
	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	(
Number of enforcement actions issued	3	87	0	(
Number of escalated enforcement actions issued	0	0	0	(
VIII. PUBLIC EDUCATION AND PARTICIPATION				
Has the Copermitee implemented a public education progra	im component that comp	lies with Order	No. R9-	YES 🗵
2013-0001, as amended by Order No. R9-2015-0001?				NO 🗆
Has the Copermitee implemented a public participation pro	gram component that co	mplies with Ord	der No. R9-	YES 🗵
2013-0001, as amended by Order No. R9-2015-0001?	and the second			NO 🗆
IX. FISCAL ANALYSIS				
Has the Copermittee attached to this form a summary of its	fiscal analysis that comp	lies with Order	No. R9-	YES 🗵
2013-0001, as amended by Order No. R9-2015-0001?				NO 🗆
X. CERTIFICATION				
I [Principal Executive Officer Ranking Elected Official	M Duly Avalorated Des		are made a	e de la contract
law that I have personally examined and am familiar with th			The second secon	
and that, based on my inquiry of those individuals immediat				
information is true, accurate, and complete. I am aware that including the possibility of fine and imprisonment.	t triefe are significant per	larties for subfr	ittirig iaise iri	iormation,
including the possibility of fine and imprisonment.				
	10/21/2015			
Cina shave		10/31/2016		
Signature	Date			
Joe Ames	Assistant City E	Assistant City Engineer		
Print Name	Title			
040.470.0410	Granto de Leono de	andreas in the		
949-470-8419 james@cityofmissionviejo.org				
Telephone Number	Email			

Page 2 of 2
ATTACHMENT D: JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT FORM

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 <u>Hhighest Ppriority Wwater Qquality issues and Ceonditions (HPWQC)</u> 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 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

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

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)
- <u>Drinking Water State Revolving Fund (DWSRF) (Through partnership with local water agencies)</u>

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



Exhibit 3.I City of Mission Viejo – 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 STRATEG	IES		
Municipal Activities	Trash and Debris Control Drainage Facility Maintenance— MS4 Inspections/Cleaning Street Sweeping Structural BMP Maintenance at Municipal Projects Pesticide & Fertilizer Management Municipal Staff Training and Education	Pathogen Health Risk Unnatural Water Balance/Flow Regime	WQIP Priority Pollutants Bacteria/Pathogens Non-stormwater discharges Nutrients Trash Pesticides Turbidity Toxicity Other Pollutants Metals Oil & Grease Sediment	Citywide	LIP Section 5
Public Education	Nonpoint Source Pollution Awareness Household Hazardous Waste Collection	 Pathogen Health Risk Unnatural Water Balance/ Flow Regime Channel Erosion/Geomorphic Impacts 	WQIP Priority Pollutants Bacteria/Pathogens Non-stormwater discharges Nutrients Trash Pesticides Turbidity Toxicity Other Pollutants Metals Oil & Grease Sediment	Citywide	LIP Section 6
New Development/ Significant Redevelopment	Water Quality Management Plan Review & Post-Construction BMP Inspection	 Pathogen Health Risk Unnatural Water Balance/ Flow Regime Channel Erosion/Geomorphic Impacts 	WQIP Priority Pollutants Bacteria/Pathogens Non-stormwater discharges Nutrients Trash Pesticides Turbidity Toxicity Other Pollutants Metals Oil & Grease Sediment	Citywide	LIP Section 7

Exhibit 3.I City of Mission Viejo – Summary of Water Quality Improvement Plan Strategies

		HIGH PRIORITY WATER		GEOGRAPHIC	
		QUALITY CONDITIONS	TARGET	EXTENT OF	LOCATION IN
S	TRATEGY	(HPWQC) TARGETED	POLLUTANTS	IMPLEMENTATION	LIP OR WQIP
Construction	Construction BMPs—Plan Check & Inspection	 Pathogen Health Risk Unnatural Water Balance/ Flow Regime Channel Erosion/Geomorphic Impacts 	WQIP Priority Pollutants Bacteria/Pathogens Non-stormwater discharges Nutrients Trash Turbidity Other Pollutants Metals Oil & Grease Sediment	Citywide	LIP Section 8
	Industrial Facility Inspections	Unnatural Water Balance/ Flow Regime	WQIP Priority Pollutants Non-stormwater discharges Nutrients Trash Toxicity Other Pollutants Metals Oil & Grease	Industrial Facilities within the City	LIP Section 9
Frieting Development	Commercial/Food Facility Inspections	 Pathogen Health Risk Unnatural Water Balance/ Flow Regime 	WQIP Priority Pollutants Bacteria/Pathogens Non-stormwater discharges Nutrients Trash Pesticides Toxicity Other Pollutants Metals Oil & Grease	Commercial/Food Facilities within the City	LIP Section 9
Existing Development	Mobile Business Program	Unnatural Water Balance/ Flow Regime	WQIP Priority Pollutants Non-stormwater discharges Nutrients Toxicity Other Pollutants Metals Oil & Grease	Citywide	LIP Section 9
	Residential/HOA Inspections	 Pathogen Health Risk Unnatural Water Balance/Flow Regime 	WQIP Priority Pollutants Bacteria/Pathogens Non-stormwater discharges Nutrients Trash Pesticides Turbidity Toxicity Other Pollutants Metals Oil & Grease	City Residential Management Areas	LIP Section 9

Exhibit 3.I City of Mission Viejo – Summary of Water Quality Improvement Plan Strategies

			Sediment		
s.	TRATEGY	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 Illegal Discharge Investigations, Spill Response	Pathogen Health Risk Unnatural Water Balance/ Flow Regime	WQIP Priority Pollutants Bacteria/Pathogens Non-stormwater discharges Nutrients Trash Pesticides Turbidity Toxicity Other Pollutants Metals Oil & Grease Sediment	Citywide	LIP Section 10

Exhibit 3.I City of Mission Viejo – 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	
WQIP STRATEGIES						
	Control Activities for Pathogen Health Risk Comprehensive Human Waste Source Reduction Program	Pathogen Health Risk	WQIP Priority Pollutants Bacteria/Pathogens Non-stormwater discharges Nutrients	South Orange County Watershed Management Area	WQIP Section B.3	
	Control Activities for Unnatural Water Balance 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	Unnatural Water Balance/ Flow Regime	WQIP Priority Pollutants Bacteria/Pathogens Non-stormwater discharges Nutrients Trash Pesticides Turbidity Toxicity Other Pollutants Metals Oil & Grease Sediment	South Orange County Watershed Management Area	WQIP Section B.3	
Regional WQIP Strategies	Control Activities for Channel Erosion 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	Channel Erosion/Geomorphic Impacts	WQIP Priority Pollutants Bacteria/Pathogens Nutrients Turbidity Toxicity Other Pollutants Sediment	South Orange County Watershed Management Area	WQIP Section B.3	

Exhibit 3.I City of Mission Viejo – 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
Proposed Unauthorized Encampment Waste Management Program		Pathogen Health Risk	WQIP Priority PollutantsBacteria/PathogensTrash	Targeted Areas When Observed	LIP Section 5
Jurisdictional Non-structural WQIP Strategies	Proposed Recreational Vehicle Waste Disposal Education Program	Pathogen Health Risk	• Bacteria/Pathogens	Citywide- Residential RV Permit Parking Applicants	LIP Section 6
	Permitted discharge and water impoundment inventories	 Unnatural Water Balance/ Flow Regime 	WQIP Priority Pollutants Non-stormwater discharges	Citywide	LIP Section 10
Jurisdictional Structural WQIP	Citywide Catch Basin Inlet Debris Screens	Pathogen Health Risk	WQIP Priority Pollutants Bacteria/Pathogens Trash Other Pollutants Nutrients Sediment	Citywide	LIP Section 5
Strategies	Water District "Smart Landscape" Rebate Programs	 Pathogen Health Risk Unnatural Water Balance/Flow Regime 	WQIP Priority Pollutants Bacteria/Pathogens Non-stormwater discharges Nutrients Other Pollutants Sediment	Citywide, as programs/funding exist	LIP Section 3

4.0 LEGAL AUTHORITY

4.1 INTRODUCTION

The City of Mission Viejo establishes, maintains and enforces adequate legal authority within its jurisdiction to control pollutant discharges into and from its storm drain system. Municipal Code, Chapter 6.65, 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, 10-285, was adopted on December 6, 2010. The most current and up-to-date version of the Ordinance and the entire Mission Viejo Municipal Code is available online at https://www.municode.com/library/ca/mission_viejo/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, statue, 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).

4.3.1 Other City of Mission Viejo 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 Mission Viejo Pollution Prevention-Related Codes

Ordinance No. 16-312	Water-Efficient Landscape Ordinance for new and redevelopment projects
Ordinance No. 04-225	Diversion requirements for construction and demolition projects
Ordinance No. 10-286	Grading and Excavation 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
El Toro Water District	Fats, Oils & Grease Program Resolution 06-8-1	08/24/2006	www.etwd.com	Sewer spill prevention
El Toro Water District	Water Conservation Program	06/09/2015	www.etwd.com	Irrigation runoff controlWash water control
Moulton Niguel Water District	Fats, Oils & Grease Program	01/01/2010	www.mnwd.com	Sewer spill prevention
Moulton Niguel Water District	Water Conservation Program	12/2009	www.mnwd.com	Irrigation runoff controlWash water control
Santa Margarita Water District	Water Conservation Ordinance 2014-10-03	10/17/2014	www.smwd.com	Irrigation runoff controlWash water 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	Irrigation runoff controlWash water 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 Mission Viejo has key departments and staff responsible for overseeing, implementing, and enforcing City ordinances. These departments and staff members are identified in **Table 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 Mission Viejo 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 Mission Viejo
Water Quality-Related Department Functions

Function City Department Department Function Water Quality Functions Performed by this Department	Ordinances Department Enforces
	Water Quality Ordinance Grading Ordinance Water Efficient Landscape Ordinance

Table 4.3
City of Mission Viejo
Water Quality-Related Department Functions

Function	City Department	Description of Department Function	Water Quality Functions Performed by this Department		Ordinances Department Enforces
With assistant of the Development Services Department	Development/Planning/ Enforcement/Building and Safety		 With Public Works, administers and enforces the Grading Ordinance No. 10-286, Section 8.10 of the Municipal Code 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)	•	Water Quality Ordinance Grading Ordinance Water Efficient Landscape Ordinance
City Clerk	City Clerk		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.		

Table 4.3
City of Mission Viejo
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		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		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 MISSION VIEJO

STORM WATER MANAGEMENT AND URBAN RUNOFF ENFORCEMENT RESPONSE PLAN

I. INTRODUCTION

The City of Mission Viejo (City) controls pollutant discharges into and from its storm drain system within its jurisdiction through enforcement of its Water Quality Ordinance, Municipal Code, Chapter 6.65, its Grading Ordinance, Municipal Code, Chapter 8.10, and certain other complementary 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 stormwater 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 stormwater 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 noncompliance.
- 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 Noncompliance. 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 five (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 five (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 <u>not</u> 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 noncompliance, 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 noncompliance. 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 1.03.008 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 noncompliance 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.

Civil Injunction/Nuisance Abatement Action 1.

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.

Overview A.

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 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 stormwater 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.

Exhibit 4-1

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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 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-bycase 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, Moulton Niguel Water District, El Toro 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 noncompliance 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	 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	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	 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. 	Require immediate containment of spilled materials or Illegal Discharges, with a goal of completion of correction/cleanup within 24 hours. 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.

Enforcement Action	Use	Time Schedule to Achieve Compliance
Administrative Compliance Order	 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. 	Require immediate containment of spilled materials or Illegal Discharges, with a goal of completion of correction/cleanup within 24 hours. 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.

Enforcement Action	Use	Time Schedule to Achieve Compliance
Cease and Desist Order	 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. 	Generally, immediate. 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.
Nuisance Abatement/ Spill Response	 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	 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. 	Time schedule for compliance will vary based on the severity of the violation and will be determined on a case-by-case basis. 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.

Enforcement Action	Use	Time Schedule to Achieve Compliance
Enforcement of Contracts	 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	 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 noncompliant situation, must cease.
Permit Revocation/Denial	Use in severe cases of non- compliance or significant Illegal Discharges relating to development and/or construction activities.	NA
Civil Action	 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	 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	 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, and the City's New Development/Significant Redevelopment Program. In conjunction with the 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 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 are 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 five (5) days, as required by the NPDES Permit.

As required by the NPDES Permit, the City seeks to resolve incidents of observed noncompliance 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	 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	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	 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	 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.

		Time Schedule to Achieve
Enforcement Action	Use	Compliance
Cease and Desist Order	 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	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.
Administrative Citation Civil Action	 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. 	Time schedule for compliance will vary based on the severity of the violation and will be determined on a case-by-case basis. 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. Time schedule for compliance
GIVII ACIION	 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. 	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	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	 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 8 of the LIP.

Construction sites that are subject to the Construction General Permit are required to prepare and implement a Stormwater 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		PUBLIC WORKS CONSTRUCTION PROJECTS
Verbal Warning		Verbal Warning
Written Warning Notice of Non-Compliance Administrative Compliance Order Administrative Citations or Fines	PROGRESSION	Written Warning Notice of Non-Compliance
Cease and Desist Order	Z	
Stop Work Order	EME	Enforcement of Contract
Revocation of Permit(s) and/or Denial of Future Permits	← ENFORCEMENT	 Stop Work Order Withholding of Payment Bond Fines Revocation of Contract
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 noncompliance. 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 noncompliance 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

		ACTIONS		CRIMINAL ACTIONS	
ENFORCEMENT		ADMINISTRATIVE COMPLIANCE	CEASE & DESIST		
OPTIONS	NOTICE OF NONCOMPLIANCE	ORDER/ ADMINISTRATIVE CITATION	STOP WORK ORDER REVOCATION OF PERMIT(S)	INFRACTIONS AND MISDEMEANORS	
COMPLIANCE STRATEGY	EDUCA	TOP INS	ITHORIZED SPECTORS UDGMENT	CRIMINAL PROSECUTION	
Threat Level	Insignificant	No: Significant	May be Significant	Significant	
Environmental Harm					
	None	No: Immediate	Potential/Immediate	Actual Immediate	
Event Duration	None Short	No: Immediate Short	Potential/Immediate Long/Continuous	Actual Immediate Long/Continuous	
Event Duration	Short	Short	Long/Continuous	Long/Continuous	

Enforcement of Noncompliance for Public Works Construction Projects

ENFORCEMENT		ACTIONS		CRIMINAL ACTIONS	
OPTIONS	NOTICE OF NONCOMPLIANCE	CONTRAC	CT REMEDIES	INFRACTIONS AND MISDEMEANORS	
COMPLIANCE STRATEGY	INFOR		CRIMINAL PROSECUTION Significant		
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 Uncooperative/S Comply 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 noncompliance 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 noncompliance 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 5 and 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 on 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 noncompliant, the City 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 focus primarily on areas where a facility was deemed to be noncompliant 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 noncompliance 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





William P. Curley III Attorney at Law

E-mail: weurley@lozanosmith.com

January 16, 2019

By U.S. Mail & E-Mail:

David Gibson
Executive Officer
Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

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

Dear Mr. Gibson:

The City of Mission Viejo (the "City"), by and through its City Attorney, hereby submits the following certification, pursuant to Directive E.1.a of Order No. R9-2013-0001 and as amended by Orders R9-2015-0001 and R9-2015-0100, NPDES Permit No. CAS0109266, issued by the California Regional Water Quality Control Board ("RWQCB"), San Diego Region on November 18, 2015, and titled "National Pollutant Discharge Elimination System (NPDES) Permit and Water Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region" (the "Permit").

The City is one of the Co-Permittees under the Permit. Section E.1.a requires the City to provide the RWQCB with a statement by its legal counsel, certifying that the City has the adequate legal authority to implement and enforce each of the current requirements contained in 40 CFR 122.26(d)(2)(i)(A-F) and the Permit. The purpose of this letter is to describe the City's compliance with Section E.1.a of the Permit. As discussed in further detail herein, it is our opinion that the City has the necessary legal authority to implement the Permit and to control and prohibit discharges of pollutants into the Municipal Separate Storm Sewer System ("MS4").

This Statement is being submitted on behalf of the City to comply with the requirements of Section E.1.a of the Permit. However, as you are aware, the City and many of the Co-Permittees submitted Petitions for Review to the State Water Resources Control Board for certain portions of the Order, but requested the petitions be held in abeyance. The outcome of those petitions to the State Water Resources Control Board may alter the terms and conditions of the Permit. 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 to raise any factual or legal issues as part of any such challenge. The City hereby reserves any and all such rights.

1. Legal Authority Statement

In our opinion, the City has adequate legal authority to comply with the legal requirements imposed upon the City under the Permit, consistent with the requirements set forth in the U.S. Environmental Protection Agency's regulations promulgated under to the Clean Water Act, and. specifically, 40 Code of Federal Regulations ("CFR") 122.26(d)(2)(i)(A-F), and to the extent permitted by State and Federal law and subject to the limitations on municipal action under the California and United States Constitutions, except as noted herein:

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

2. Status of Implementation

The City has, or will have within the schedule set forth in the Permit, adequate legal authority, as envisioned by the Clean Water Act and applicable regulations, to implement the requirements of the Permit by the mandated dates, and to enforce such additional requirements after they have been implemented, all 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.

3. City Departments

The City has included with this letter a table identifying the City departments involved with the City's regulation of urban runoff, along with a brief description of the particular department's urban runoff-related functions and responsibilities (Attachment 1).

4. Ordinances

The City has adopted the following ordinances related to the regulation of urban runoff to control and prohibit discharges of pollutants into and from the MS4 and to comply with the requirements of the Permit applicable to the City, as well as, to the extent practicable, 40 CFR 122.26(d)(2)(i)(A-F), and the terms of Section E.2 of the Permit. The City has included with this letter a table summarizing the ordinance name, citation number, and the City departments responsible for enforcing the ordinances (Attachment 2).

List of Ordinances

1) Ordinance No. 10-285 (Effective Date is January 5, 2011): "An Ordinance of the City of Mission Viejo Amending the Municipal Code by Amending Chapter 6.65 of Title 6 Relating to Water Quality" (LIP Exhibit 4.1)

- 2) Ordinance No. 10-286 (Effective Date is January 5, 2011): "An Ordinance by the City Council of the City of Mission Viejo Amending the Municipal Code by Repealing Chapter 8.10 of Title 8 and Adding a New Chapter 8.10 Relating to Grading and Excavations" (LIP Exhibit 4.2)
- 3) Ordinance No. 01-207: "An Ordinance of the City Council of the City of Mission Viejo Amending Section 14.01.10 of the Mission Viejo Municipal Code and Adding Sections 14.01.305, 14,01.310, and 14.01.315 Prohibiting the Discharge of Material and Pollutants upon Public Streets, Public Property and Rights-of-Way and Prohibiting the Placing of Objects Upon Public Streets and Rights-of-Way"
- 4) Ordinance No. 96-155: Municipal Code Section 6.10.638 and 6.10.639 and 6.10.600, et seq. Unlawful Dumping Prohibited.

a. Enforceability

The City, as a general law city, has broad general police powers under the Constitution of the State of California to enact legislation for health and public welfare of the community to the extent not preempted by Federal or State Law. In addition to the provisions of the Municipal Code which provide various enforcement zones, the City adopted the foregoing Ordinances for the purpose of ensuring that it has adequate legal authority to implement and enforce its stormwater control program. The City has the authority under the Constitution and statutes of the State of California to enact and enforce these ordinances, and these ordinances were duly enacted. These ordinances contain specific enforcement provisions under the generally applicable enforcement provisions of the City Code, Section 1.01.200 (Misdemeanors; Infractions), Section 1.02 (Administrative Penalties – Compliance Orders), and Section 1.03 (Administrative Penalties – Citations).

b. Implementation

Some of these 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 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, to take enforcement action, etc.).

The City's Water Quality Ordinance No. 10-285, which is codified in Section 6.65.100 of the Municipal Code, is the principal City ordinance addressing urban runoff and control. This ordinance is regulatory and applies to all development projects and to all new and existing facilities within the boundaries of the City and within its regulatory jurisdiction, whether or not a City permit or approval is required. The Water Quality Ordinance contains discharge prohibitions and BMP requirements. This ordinance also authorizes the County to require the submission of stormwater pollution prevention plans in connection with certain developments. Because Ordinance No. 10-285 defines "discharge" to mean "any release, spill, leap, pump, flow, escape, leaching (including subsurface migration or deposition to groundwater), dumping or disposal of any liquid, semi-solid or solid substance," the definition of "discharge" in Section 6.65.110 of the Municipal Code includes irrigation run-off, and is subject to enforcement under Section 6.65.200(a) of the Municipal Code.

David Gibson January 16, 2019 Page 4

Other City ordinances require compliance with the Water Quality Ordinance as a condition for issuance of a City permit. For example, the Public Works and Community Development departments require proof of compliance with the Water Quality Ordinance before discretionary approvals are given or recommended. These departments may also impose specific conditions of approval consistent with the Water Quality Ordinance.

All City environmental ordinances are also implemented, in part, through the application of the California Environmental Quality Act ("CEQA") process to proposed projects. This would include the impacts of the proposed project on water quality, including runoff.

Although proposed City ordinances are not subject to appeals, they are subject to a public notice and comment process prior to enactment. Enacted City ordinances can be challenged by timely filing writs of mandate in Superior Court. The referendum and initiative process can also be used to challenge enacted ordinances. The imposition of administrative penalties and fines under these ordinances (where applicable) can be appealed to the courts. Trial court decisions to impose civil penalties or to grant injunctive or other relief can also be appealed.

5. 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 runoff related ordinances:

a. Administrative Remedies

Chapters 1.02 and 1.03 of the Mission Viejo Municipal Code provides for administrative remedies for violations of the Code, including the following:

- Notice of Non-Compliance/Notice of Violation
- Administrative Compliance Orders
- Cease and Desist Orders
- Stop Work Orders (for work requiring a City permit)
- Administrative penalties
- Permit revocation or withdrawal

b. Nuisance Remedies

- Public nuisance under State law
- City nuisance abatement procedures (See Chapters 1.01 and 9.59 of the Mission Viejo Municipal Code)

c. Criminal Remedies

 Infraction citations/prosecution (See Chapters 1.03 and 1.08 of the Mission Viejo Municipal Code) David Gibson January 16, 2019 Page 5

- Misdemeanor citations/prosecution (explicitly authorized for grading violations and stormwater violations)
- Restitution

d. Equitable Remedies

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

e. Other Civil Remedies

- Federal law remedies (e.g., Clean Water Act and RCRA Citizen Suits)
- Government Code

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

Sincerely,

LOZANO SMITH

William P. Curley III
William P. Curley III

WPC/kh

cc: Dennis Wilberg, City Manager

Mark Chagnon, Director of Public Works

Rich Schlesinger, City Engineer Joe Ames, Assistant City Engineer

Hazel McIntosh, Assistant Engineer

Grant Sharp, Orange County Public Works, OC Watersheds

Candice K. Lee, Esq.

Attachment 1

Exhibit 4.3.1				
		CITY OF N WATER QU	CITY OF MISSION VIEJO DEPARTMENTS WATER QUALITY-RELATED FUNCTIONS	
FUNCTION	CITY DEPARTMENT	DEPARTMENT FUNCTION DESCRIPTION	WATER QUALITY FUNCTIONS PERFORMED BY THIS DEPARTMENT	ORDINANCES DEPARTMENT ENFORCES
			• Administers and enforces the Grading Ordinance found at Chapter 8.10 (Ordinance No. 10-286)	• Ch 8.10; • Ch 6.65 • Ch 14.01.100,
			• Administers and enforces the Water Quality Ordinance ("Water Quality Code") found at Chapter 6.65 with the City Manager, the City Attorney and the Community	Ch 6.10.600 et. seq. and 610.638-639
			Development Department (Ordinance No. 10-285)	
			nisters	Ord 88-12, 92-
			ing but	82, 97-171, 96- 155, 01-207, 10-
				286
Darblic Wonle	Public Works/	Design and	Use/Zoning Regulations) initially adopted under Ordinance No. 98-193 the City Zoning Ordinance; and the City	
rubiic works	Engineering	construction; Administrative	Subdivision Ordinance, City Code Section res. 98-160 et seq. ("Subdivision Ordinance")	
			• With Community Development Department, issues grading	
			and constructions 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 the Community Development Department and through	
			contracts with other agencies provides training and guidance	
			materials to private developers and City employees and	
			managers	
			Reviews proposed designs for certain City projects	

Exhibit 4.3.1

		CITY OF N WATER OI	CITY OF MISSION VIEJO DEPARTMENTS WATER QUALITY-RELATED FUNCTIONS	
FUNCTION	CITY DEPARTMENT	DEPARTMENT FUNCTION DESCRIPTION	WATER QUALITY FUNCTIONS PERFORMED BY THIS DEPARTMENT	ORDINANCES DEPARTMENT ENFORCES
			 Coordinates with other City departments to develop and implement City stormwater programs Staffs the City's functions as Co-permittee Representative under the Order 	

Exhibit 4.3.1

Tien alound				
		CITY OF N WATER QU	CITY OF MISSION VIEJO DEPARTMENTS WATER QUALITY-RELATED FUNCTIONS	
FUNCTION	CITY DEPARTMENT	DEPARTMENT FUNCTION DESCRIPTION	S PERFORMED BY THIS ENT	ORDINANCES DEPARTMENT ENFORCES
			Cleans City streets and highways and related culverts	
	Public Services/		Cleans and maintains the City portion of MS4	
Maintenance Services	Maintenance Services	Maintenance Services	 Manages various City facilities and parks Reviews development agreements related to parks 	
			Performs environmental audits at City facilities and provides compliance assistance and advice to other City.	
			departments	
			Reviews certain applications for clearing and grading	
			permits or for exemptions from the requirement to obtain	
	;		Darticinates in City Manager Water Onality Committee:	
Public Works	Public Works/		City Engineers Technical Advisory Committee: Permittee	
	giiilaaiiigiila		Committee; Public Education Committee; Program	
			Effectiveness Assessment/Local Implementation Plan	
			Committee; Existing Development Task Force; Water	
			Quality Monitoring and Science Task Force	
			With Public Works, administers and enforces the Grading	97-171; 2001-
				207; 10-286
			• With Public Works and contractually with the County of	
			Orange Public Works, administers and enforces the Water	
	Commingity	Develonment and	Quality Ordinance	
Development	Development	Planning	ng,	Ch 9
	4)	and resource protection ordinances and plans and related	
			state laws, including but not limited to General Plans, the	
			Zoning Ordinance, the Subdivision Ordinance, City Code	
			Sections 9.70.025 and the California Building Code	
			Sections 8.02 et seq. ("Building Code")	

Exhibit 4.3.1

DEPARTMENT	DESCRIPTION
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 Commission, and to the City Council concerning potential project impacts and means to mitigate those impacts Reviews proposed designs for certain City projects	
 Issues building permits for development projects and imposes conditions on such permits Conducts inspections of private projects and activities that require a permit under a Planning Department-administered program 	Building & Safety
 Inspects, evaluates and issues notices of violation for infractions of the ordinances above Participates in the committees such as Authorized Inspections Sub-Committee 	Code Enforcement
The City Clerk is responsible for administering the agenda of the City Council meetings and is responsible for posting notices for public hearings including public hearings required by CEQA	Legislative Services
 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 	Legislative Services
 Participates in Legal Authority and Existing Development Committees 	

Exhibit 4.3.1

THE PARTY				
		CITY OF M	CITY OF MISSION VIEJO DEPARTMENTS	CONTRACTOR OF THE PARTY OF THE
		WATER QU	JALITY-RELATED FUNCTIONS	
FUNCTION	CITY DEPARTMENT	DEPARTMENT FUNCTION DESCRIPTION	S PERFORMED BY THIS ENT	ORDINANCES DEPARTMENT ENFORCES
City Manager	City Manager	Administrative	 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 	
Other City Functions			Other City departments administer certain City facilities and parts thereof, and /or provide training and distribute guidance materials related to urban runoff	

Attachment 2

Exhibit 4.3.2

City of Mission Viejo Ordinance Description

The following urban runoff-related ordinances of the City of Mission Viejo are currently in effect:

DESCRIPTION	CITY DEPARTMENT(S) RESPONSIBLE FOR ENFORCEMENT	CITATIONS		
Grading Ordinance	Public Works	Ordinance No. 10-286		
Water Quality Ordinance	Public Works/ Community Development	Ordinance No. 10-285		
Erosion Control Ordinance	Public Works	Ordinance No. 10-286		
CEQA Guidelines	Community Development	General Plan/ Development Code		
Litter Ordinance	Public Works	Ordinance No. 10-285		
Ordinance Prohibiting Discharge of Pollutants	Public Works/ Community Development	Ordinance No. 2001-207		
Unlawful Dumping Prohibition	Public Works/ Community Development	Ordinance No. 96-155		

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 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 Services Operations Manager

Telephone: 949-470-3095

Address: 27204 E. La Paz Road, Mission Viejo, California 92692

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 Services Operations Manager

Telephone: 949-470-3095

Address: 27204 E. La Paz Road, Mission Viejo, California 92692

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

IPM Pesticide and Fertilizer Maintenance

Title: Public Services Operations Manager

Telephone: 949-470-3095

Address: 27204 E. La Paz Road, Mission Viejo, California 92692

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

Solid Waste

Title: Environmental Program Administrator

Telephone: 949-470-3010

Address: 200 Civic Center, Mission Viejo, California 92691

Responsible for waste management of facilities.

Street Sweeping

Title: Public Services Operations Manager

Telephone: 949-470-3095

Address: 27204 E. La Paz Road, Mission Viejo, California 92692

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

Street and Median Maintenance

Title: Public Services Operations Manager

Telephone: 949-470-3095

Address: 27204 E. La Paz Road, Mission Viejo, California 92692

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 Services Operations Manager

Telephone: 949-470-3095

Address: 27204 E. La Paz Road, Mission Viejo, California 92692

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

Engineering Division

Title: Assistant City Engineer

Telephone: 949-470-8419

Address: 200 Civic Center, Mission Viejo, California 92691

Responsible for the administration of public improvement projects.

Parking Lots/Enforcement

Title: Public Services Operations Manager

Telephone: 949-470-3095

Address: 27204 E. La Paz Road, Mission Viejo, California 92692

Responsible for the operation of public parking lots.

Fleet Management

Title: Public Services Operations Manager

Telephone: 949-470-3095

Address: 27204 E. La Paz Road, Mission Viejo, California 92692

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

Water & Wastewater Utilities—El Toro Water District

Title: Chief Engineer Telephone: 949-837-0660

Address: 24251 El Toro Road, Lake Forest, California 92630

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—Moulton Niguel Water District

Title: Chief Engineer Telephone: 949-831-2500

Address: 27500 La Paz Road, Laguna Niguel, California 92677

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—Santa Margarita Water District

Title: Chief Engineer 749-459-6400

Address: 26111 Antonio Parkway, Las Flores, California 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, California 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 24

Title: Fire Captain 7elephone: 949-837-9333

Address: 25862 Marguerite Parkway, Mission Viejo, California 92692

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

5-3

Recreation & Community Services Department

Title: Community Services Supervisor

Telephone: 949-470-3061

Address: 200 Civic Center, Mission Viejo, California 92691

Manages the City recreational facilities.

Police Department

Title: Lieutenant, Orange County Sheriff's Department

Telephone: 949-770-6011

Address: 200 Civic Center, Mission Viejo, California 92691

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).

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, the City of Mission Viejo 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.

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 5.1**. 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
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.
- <u>Activity Specific Inspection Forms</u>. 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 5.4.

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



City of Mission Viejo Municipal Facility Inventory

Facility Name	Street Number	Street Name	Facility Contact	24 Hour Contact	Facility Size	Facility Type	Description	Watershed	Latitude	Longitude	Proximity to receiving water (feet)	Receiving Water	Is Facility within Adjacent to, or Discharge Directly to an ESA?
Abanico Open Space	27587	Abanico Road	R. Villalobos	(949) 470-3000	9.8 ac	Open Space		J			1500	English Channel	No
Activity Committee Storage Building	28951	Melinda Rd	W. Mackey	(949) 470-3000		Storage Building	Storage Building next to Melinda Park used to store supplies and other articles by the City Activity Committee	ь	33.64568	-117.86280	3200	Trabuco Creek	No
Aegean Hills Park	25362	Maximus St	W. Mackey	(949) 470-3000	.50 ac	Park	Playground: 2-5 years	1	33.60411	-117,67438	2100	Aliso Creek	No
Alicia Park	23650	Via Linda	B. Zahn	(949) 470-3000	16.7 ac	Park	4 Lighted softball fields, 2 Batting cages, 2 Lighted sand volleyball courts, Playground (2 – 5 years), Restrooms, Picnic structure, 10 Picnic tables, and 4 Barbeques.	L.	33.62056	-117.62879	2200	Aliso Creek/ Oso Creek	No
Animal Shelter	28095	Hillcrest	B. Zahn	(949) 470-3000	10.39 ac	Animal Shelter	Storage for cages, road signs, rocks, tails, sand bags and clinic and emergency for animals. Close to creek.	L	33.62001	-117.63565	300	Trabuço Creek	No
Applegate Park	22760	Olympiad Rd	R. Villalobos	(949) 470-3000	8.22 ac	Park		- L	33.63161	-117.63565	840	Trabuco Creek	No
Aurora Park	23202	Via Gaudix	W. Mackey	(949) 470-3000	8.93 ac	Park	Softball field, Soccer/football field, Basketball court, Sand volleyball court, Playground 15 - 12 years), 3 Picnic tables, and a Walking trail.	L	33.63179	-117.63565	1000	Oso Creek	No
Barbadanes Park	26462	Barbadanes	W. Mackey	(949) 470-3000	3.62 ac	Park	Soccer/football field, Basketball court, Playground (2 - 5 years), 4 Picnic tables, and 2 Barbeques.	L	33.57872	-117.63565	3200	Trabuco Creek	No
Barcelona Park	22800	Via Santa Maria	W. Mackey	(949) 470-3000	5.24 ac	Park	Soccer/football field, Sand volleyball court, Playground (2 - 5 years), Playground (5 - 12 years), and 4 Picnic tables.	ű	33.63149	-117.63565	1800	English Channel	No
Bart Spendlove Park	25801	Delta Ave	W. Mackey	(949) 470-3000	7.5 ac	Park	Sand volleyball court, Playground (2 - 5 years), Playground (5 - 12 years), 10 Picnic tables, 6 Barbeques	L	33.6868	-117.63565	150	English Channel/ Oso Creek	No
Bebee Park	24190	Olympiad Rd	B. Zahn	(949) 470-3000	11.69 ac	Park	Skateboard facility, Lighted baseball field, Lighted soccer/football field, Playground (5 -12 years), Restrooms, 2 Picnic tables, and a Walking trail.	L	33.6114	-117.63565	730	Trabuco Creek	No
Birchwood Park	21992	Birchwood	W. Mackey	(949) 470-3000	1.16 ac	Park	2 Picnic tables and a Walking trail.	T.	33.64403	-117.63565	420	Oso Creek	No
Matt Davis Park	26210	Camino Largo	W. Mackey	(949) 470-3000	2.75 ac	Park	Rolling land with natural vegetation cover bushes, no facilities inside, no running water	L	33.58122	-117.63565	870	Trabuco Creek	No
Castille Park	27032	Via Oviedo	W. Mackey	(949) 470-3000	6.01 ac	Park	Softball field, Soccer/football field, 3 Sand volleyball courts, Playground (2 - 5 years), Playground (5 - 12 years), 7 Picnic tables, and 2 Barbeques.	L	33.61714	-117.63565	2200	Oso Creek	No
Castlewood Park	22126	Castlewood	W. Mackey	(949) 470-3000	.95 ac	Park	Just a green area, no facilities.	L.	33.64211	-117.63565	500	Oso Creek	No
Christopher Park	26801	Valpariso	W. Mackey	(949) 470-3000	2.80 ac	Park	Softball field, Soccer/football field, Basketball court, Playground (2 - 5 years), and 3 Picnic tables.	ı	33.61688	-117.63565	3900	Gso Creek	No
Civic Center	200	Civic Center Drive	B. Zahn	(949) 470-3000	9.1 ac	City Hall/Library	City Hall, library, uncovered storage for sand bags and traffic control signs, transformer meters.	1	33.61634	-117.63565	900	Trabuco Creek	No
Colinas/Escorial Open Space	23361	Trabuco Road	N. Ratanabhoka	(949) 470-3000	15.1 ac	Open Space		H.			150	English Channel/ Oso Creek	No
Cordova Park	26931	El Retiro	W. Mackey	(949) 470-3000	12.72 ac	Park	Softball field, Soccer/football field, Turf volleyball court, Playground (2 - 5 years), 7 Picnic tables, and 7 Barbeques.	L	33.57153	-117.63565	1000	Trabuco Creek	No

City of Mission Viejo Municipal Facility Inventory

Facility Name	Street Number	Street Name	Facility Contact	24 Hour Contact	Facility Size	Facility Type	Description	Watershed	Latitude	Longitude	Proximity to receiving water (feet)	Receiving Water	is Facility within Adjacent to, or Discharge Directly to an ESA?
Coronado Park	26652	Los Ondas Dr	W. Mackey	(949) 470-3000	2.24 ac	Park	Playground (2 - 5 years), 3 Picnic tables, 2 Barbeques	L	33.54551	-117.63565	670	Oso Creek	No
Corporate Yard	27204	La Paz Rd	B. Zahn	(949) 470-3000	3.8 ac	Corporate Yard	Several closed storages containers, offices, traffic signs, next to creek, old water sanitation facilities, not operating as of 6 months ago	L	33,59463	-117.63565	0	Oso Creek	No
Crucero Park	27672	Crucero	W. Mackey	(949) 470-3000	5.53 ac	Park	Basketball court, Playground (5 - 12 years), 4 Picnic tables	J.	33.64787	-117.63565	440	English Channel	No
Curtis Park	24460	Olympiad Rd	B. Zahn	(949) 470-3000	9.69 ac	Park	6 acres, 3 Lighted softball fields, 3 Batting cages, Lighted soccer/football field, Basketball court, Playground (5 - 12 years), Restrooms, 3 Picnic tables, Walking trail	t	61197	-117.63565	1400	Trabuco Creek	No
Doria Park	24692	Doria Ave	W. Mackey	(949) 470-3000	2.1 ac	Park	Basketball court, Playground (2 - 5 years), 4	1,1	33.61116	-117.63565	2000	Aliso Creek	No
Eastbrook Park	21530	Eastbrook	W. Mackey	(949) 470-3000	2.40 ac	Park	Soccer/football field, Playground (5 - 12 years), 4 Picnic tables, 2 Barbeques, Walking trail	t	33,64886	-117,63565	1600	Oso Creek	No
El Dorado Park	24335	Cartillo Dr	W. Mackey	(949) 470-3000	4.90 ac	Park	Playground (5 - 12 years), 3 Picnic tables	L	33.60987	-117.63565	470	Oso Creek	No
Emergency Response/ Contractor Yard		Marguerite Parkway	1, HIII.	(949) 470-3000	0.5 ac	Leased Storage Area		L				Oso Creek	No
Felipe Tennis	27161	Nogal	W. Mackey	(949) 470-3000	.98.ac	Rec Ctr	Several tennis courts, two volleyball courts, no storage, a small office, dumpster at the parking lot.	i.	33.60795	-117.63565	2640	Trabuco Creek	No
Flamenco Open Space	28097	La Barca	W. Mackey	(949) 470-3000	19.67 ac	Open Space		L			300	Oso Creek	No
Gilleran Park	24960	Olympiad Rd	B. Zahn	(949) 470-3000	17.92 ac	Park	2 Lighted baseball fields, 2 Lighted soccer/football fields, Playground [5 - 12 years), Restrooms, 2 Picnic structures, 12 Picnic tables, 4 Barbeques	L	33.6079	-117.63565	740	Trabuco Creek	No
Granada Park	27122	Via Grande	W. Mackey	(949) 470-3000	3.90 ac	Park	Softball field, Playground (2 - 5 years), 4 Picnic tables	L	33.56881	-117.63565	750	Osó Creek	No
Jeronimo Greenbelt Open Space	28072	Jeronimo Road	B. Zahn	(949) 470-3000	18 ac	Open Space	Picitic diplos	E			150	Oso Creek	No
La Mancha Park	26482	Country Club Drive	W. Mackey	(949) 470-3000	5.2 ac	Park	Just green area, no facilities, no garbage cans, no running water	t -	33.57838	-117.63565	1400	Oso Creek/ Trabuco Creek	No
Lakeside Promenade		Alicia Pkwy	R. Villalobos	(949) 470-3000	3.0 ac	Park	Lans, no running water A strip planting area located at the south part of Mission Viejo Lake, and north of Alicia Park. A few benches and garbage cans, no facilities.	I.L			σ	Oso Creek	No
La Paws Park	25100	Felipe Rd	W. Mackey	(949) 470-3000	5.54 ac	Park	Dog Park with 3 separate dog runs, trails	1	33.59694	-117.63823	740	Trabuco Creek	Na
Linda Vista Park	26601	Pepita	W. Mackey	(949) 470-3000	3.4 ac	Park	Soccer/football field, Playground (2 - 5 years), Playground (5 - 12 years), 2 Picnic tables	ı	33.59416	-117.63565	1800	Oso Creek	No
Loyola Park Open Space	22621	Via Santa Maria	N. Ratanabhoka	(949) 470-3000	5 ac	Open Space		1			200	English Channel	No
Madrid Fore Park	26182	Via Oceano	W. Mackey	(949) 470-3000	4.51 ac	Park	Basketball court, Playground (5 - 12 years), 3 Picnic tables	L	33.58228	-117,63565	1200	Oso Creek	No
Marg. M. O'Neill Park	24771	San Doval Lane	W. Mackey	(949) 470-3000	3,28 ac	Park	Basketball court, Playground (2 - 5 years), 2 Picnic tables	1	33.60232	-117,63565	740	Oso Creek	No
Marguerite Rec Center	27341	Trabuco Circle	B. Zahn	(949) 470-3000	4.0 ac	Rec Ctr	Parking lots, close to creek.	T.	33.60145	-117.63565	850	Trabuco Creek	No
Marguerite Tennis Ctr	23840	Marguerite Parkway	B. Zahn	(949) 470-3000	4.0 ac	Rec Ctr	Several tennis courts	- L	33.6161	-117.63565	850	Oso Creek	No
Marguerite Aquatics Complex	27474	Casta Del Sol Rd.	B. Zahn	(949) 470-3000	4.0 ac	Rec Ctr	A big pool, YMCA facility	L	33.6161	-117.63565	850	Oso Creek	No

City of Mission Viejo Municipal Facility Inventory

Facility Name	Street Number	Street Name	Facility Contact	24 Hour Contact	Facility Size	Facility Type	Description	Watershed	Latitude	Longitude	Proximity to receiving water (feet)	Receiving Water	Is Facility within Adjacent to, or Discharge Directly to an ESA?
Melinda Park	28951	Melinda Rd	W. Mackey	(949) 470-3000	8.82 ac	Park	Softball field, Soccer/Football field, Basketball court, Playground (2 - 5 years), Playground (5 - 12 years), Picnic structure, 6 Picnic tables, 1 Barbeque	L	33.64559	-117.63565	3500	Oso Creek	No
Minaya Park	27552	Minaya	W. Mackey	(949) 470-3000	6.53 ac	Park	Turf volleyball court, Playground (2 - 5 years), Playground (5 - 12 years), A Picnic tables	L.	33,63894	-117.63565	2400	English Channel/ Oso Creek	No
Mojave Open Space	22561	Mojave Lane	W. Mackey	(949) 470-3000	38 ac	Open Space		1			200	Alisa Creek	No
Montanoso Rec Center	25800	Montanoso Drive	W. Mackey	(949) 470-3000	1.01 ac	Rec Ctr	Several tennis court, gym, pools, basketball courts, two dumpsters in parking lots, next to a natural creek with more than 100 gpm flow.	L	33.63449	-117.63565	0	Oso Creek	No
Napoli Park	27682	Napoli Way	W. Mackey	(949) 470-3000	3.80 ac	Park	Soccer/football field, 4 Picnic tables	L	33,57989	-117.64778	2200	Trabuco Creek	No
Norman P. Murray Community and Senior Center	24932	Veterans Way	B. Zahn	(949) 470-3000	0.39 ac	Community and Senior Center	Next to Oso Viejo Park, a building to take care of senior people.	L	33,60111	-117.66116	1200	Trabuco Creek	No
Olympiad Park	22760	Olympiad Rd	R. Villalobos	(949) 470-3000	15.41 ac	Park	19.91 acres, Baseball field, 2 Soccer/football fields, Playground (2 - 5 years), Playground (5 - 12 years), Restrooms, Picnic structure, 25 Picnic tables, 4 Barbegues, Walking trail	ι	33,6318	-117.63573	1100	Trabuco Creek	No
Olympiad Road Open Space	24474	Olympiad Rd	R. Villalobos	(949) 470-3000	100 ac	Open Space		L			1600	Trabuca Creek	No
Oso Viejo Park	24932	Veterans Way	B, Zahn	(949) 470-3000	52.14 ac	Park/Comm Ctr	Horseshoe pit, 2 Lighted softball fields, 2 Softball fields, 3 Lighted soccer/football fields, 3 soccer/football fields, Playground (2 - 5 years), Playground (5 - 12 years), Restrooms, 21 Picnic tables, 4 Barbeques, Walking trail	į.	33.60111	-117.66116	0	Oso Creek	No
Pacific Hills Park	28050	Fieldcrest	W. Mackey	(949) 470-3000	7.81 ac	Park	Soccer/football field, Basketball court, Playground (5 - 12 years), 8 Picnic tables, 5 Barbeques	L	33.60772	-117.63248	1050	Osá Creek	No
Pavion Park	24051	Pavion	B. Zahn	(949) 470-3000	5.34 ac	Park	Soccer/football field, Playground (2 - 5 years), Playground (5 - 12 years), Restroom, 9 Picnic tables, 3 Barbeques, Walking trail	Ļ	33.61549	-117.63274	2100	Oso Creek/ Trabuco Creek	No
Pinecrest Park	21310	Pinecrest	W. Mackey	(949) 470-3000	26.2 ac	Park	Softball field, Soccer/football field, Playground (2 - 5 years), Playground (5 - 12 years), 4 Picnic tables, 2 Barbeques, Walking trail	ı	33.65226	-117.63806	0	Osa Creek	No
Potocki Conference Center	27301	La Paz Rd	B, Zahn	(949) 470-3000	8.0 ac	Conference Ctr	Baseball court, soccer fields, conference building, close to Oso Creek, no storage facilities, no running water.	r	33,59843	-117,65400	900	Osa Creek	No
Preciados Park	27033	Preciados	W. Mackey	(949) 470-3000	2.45 ac	Park	Soccer/football field, Playground (2 - 5 years), Playground (5 - 12 years), 6 Picnic tables	ι	33.60108	-117.65826	1290	Osa Creek	No
San Gabriel Open Space	22996	Via San Gabriel	N. Ratanabhoka	(949) 470-3000	12 ac	Open Space		4			150	English Channel	No
Santa Lucia Open Space	26850	Via Santa Lucia	N. Ratanabhoka	(949) 470-3000	4.6 ac	Open Space		Y.			150	English Channel	No
Santa Maria Open Space	22602	Via Santa Maria	N. Ratanabhoka	(949) 470-3000	3.1 ac	Open Space		1			1200	English Channel	No
Seville Park	22832	Alturas	W. Mackey	(949) 470-3000	.95 ac	Park	Playground (5 - 12 years), 2 Picnic tables, 2 Barbeques	1	33.6309	-117,66576	260	English Channel	No
Sierra Rec Center	26887	Recodo	W. Mackey	(949) 470-3000	40 ac	Rec Ctr	2 Tennis Courts, swimming pool, volleyball court, office, dumpster at the parking lot, no running water.	Ĭ.	33,6303	-117.66667	3300	Trabuco Creek	No

Facility Name	Street Number	Street Name	Facility Contact	24 Hour Contact	Facility Size	Facility Type	Description	Watershed	Latitude	Longitude	Proximity to receiving water (feet)	Receiving Water	Is Facility within Adjacent to, or Discharge Directly to an ESA?
Sycamore Park	25101	Charlinda Dr	W. Mackey	(949) 470-3000	6.2 ac	Park	Sand volleyball court, Playground (2 - 5 years), Playground (5 - 12 years), 3 Picnic tables, 3 Barbeques	į	33.60924	-117.69182	0	Aliso Creek	No
Valyermo Park	24091	Valyermo	W. Mackey	(949) 470-3000	1.95 ac	Park	Softball field, Basketball court, Playground (2 - 5 years), Playground (5 - 12 years), 4 Picnic tables	L	33.61319	-117.66176	3400	Oso Creek	No
Vista Del Lago Open Space	27062	Vista Del Lago	W. Mackey	(949) 470-3000	61.89 ac	Open Space		1			400	Oso Creek	No
Vista Del Lago Park	27642	Vista Del Lago	W. Mackey	(949) 470-3000	5.70 ac	Park	Baseball field, Softball field, Basketball court, Playground (2 - 5 years), Playground (5 - 12 years), 3 Picnic tables	L.	33.63379	-117.64798	1000	Oso Creek	No
Wilderness Glen Park	22500	Los Alisos Blvd.	W. Mackey	(949) 470-3000	82 ac	Park	A big park with natural vegetation cover around a creek along west side of Los Alisos Blvd. No facilities were seen, several trails were visible.	1	33.63631	-117.66140	ò	English Channel	No
Youth Athletic Park	22056	Olympiad Rd	R. Villalobos	(949) 170-3000	11.25 ac	Park	3 Lighted baseball fields, 5 Baseball fields, 4 Batting cages, 2 Lighted soccer/football fields, 3 Soccer/football fields, Restrooms, 2 Picnic sturctures, 15 Picnic tables, 2 Barbeques	Ľ	33,63981	-117.64241	120	Oso Creek	No

WATERSHED IDs J = ALISO CREEK L = SAN JUAN CREEK

POTENTIAL POLLUTANTS

1 = SEDIMENT

2 = NUTRIENTS

3 = PESTICIDES

4 = TRASH

5 = BACTERIA

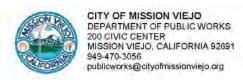
6 = METALS

7 = OIL & GREASE

8 = ORGANICS

EXHIBIT 5.2 Municipal Facility Inspection Form





MUNICIPAL FACILITY INSPECTION STORMWAER PROGRAM

INSPECTOR NAME:	INSPECT	TION DATE:	TIME:	□ PM		
FACILITY NAME: CONTACT NAME: SITE ADDRESS: PHONE:	☐ ROUTINE INSPECTION ☐ RESPONSE TO COMPLAINT ☐ FOLLOW-UP INSPECTION					
all state in the least state and the state of the state o	J <25% □ 25-50% □ 50 I <5,000 SF □ 5,000-100,000 S OVERED OUTDOORS: □ AU. □		WATERSHED: SIC CODE: SIC DESCRIPTION: OBSERVED BUSINESS TYPE:			
THE TAX AND ADDRESS OF THE PROPERTY OF TAXABLE PARTY.		IDIVIDUAL NPDES PERM	nt ☐ General Industr iness License #:	IAL PERMIT (FILED NOT)		
ACTIVITIES (FACT SHEET)	0	COMMENTS	AND CORRECTIVE ACTIONS R	EQUIRED		
2. OUTDOOR DRAINAGE FROM INDOOR AREAS—ICS 3. OUTDOOR LOADING/UNLOADING OF MATERIALS- 4. OUTDOOR PROCESS EQUIPMENT OPERATIONS AN 5. OUTDOOR STORAGE OF RAW MATERIALS, PRODU 6. PARKING AND STORAGE AREA MAINTENANCE—IC 7. SPILL PREVENTION AND CONTROL—IC17 8. VEHICLE AND EQUIPMENT FUELING—IC18 9. VEHICLE AND EQUIPMENT MAINTENANCE AND RE 10. VEHICLE AND EQUIPMENT WASHING AND STEAM 11. WASTE HANDLING AND DISPOSAL—IC21 12. OTHER ACTIVITIES	—IC10 D MAINTENANCE—IC11 CTS, AND CONTAINERS—IC12 C15 BAIR—IC19					
 □ Additional Info Provided on Supplemental Page □ Photos Taken □ BMP Information Provided 	CORRECTIVE ACTION(s) FOLLOW-UP INSPECTION REQUIRED DEFICIENCIES CORRECTED		F. 40' 17			
This report is furnished to the facility representa Your facility may be subject to an enforcement ac review the correction of deficiencies noted above	tion if the noted deficiencies are	not corrected by	To reques	st a re-inspection to		
Facility Representative's Signature*	Printed Nam	e;		Date:		
Inspector's Signature	Inspector's P	hone No.		Date		

*Signature indicates that the above items were discussed and a copy of the inspection report was received.

EXHIBIT 5.3

[Reserved]



EXHIBIT 5.4 Fixed Facility, Field Program, and Drainage Facility Inspection Forms



FIXED FACILITY GENERAL INSPECTION FORM (FORM A)

COVER SHEET (Required for all inspections) Inspection Performed by: Time of Inspection: Date: Weather at Time of Inspection: **Fixed Facility Information** Name of Facility Contact Name: Address: Phone Number: Number of Employees at Facility Days of Operation per Week: Leased Facility Information Is this Fixed Facility leased? Lessor Contact Information: Yes No Contact Name: 0 0 Title: Is this a lessor self-inspection? Company Name: Yes No Phone Number: Address: Type of Fixed Facility (choose one): Municipal Waste Facilities Other Owned/Operated Facilities ☐ Municipal Landfill ☐ Municipal Air Field ☐ Publicly Owned Treatment Works ☐ Parks/Cemetery ☐ Public Building (Police, Fire, Libraries) ☐ Incinerator ☐Solid Waste Transfer Facility ☐ Stadium □Land Application Site ☐ Stable ☐ Boat/Shipping Yard ☐Site for Disposing/Treating Sewage Sludge ☐ Animal Shelter/Services ☐Hazardous Waste Treatment, Disposal Site ☐Sanitary Landfill ☐ Public Parking Facility Other: Corporation Yards ☐ Corporate Yard ☐ Maintenance Yard ☐ Storage Yard for Materials Identification of Activities That Occur at this Fixed Facility (For each identified activity - complete the attached activity specific inspection form) ☐ Building Maintenance and Repair ☐ Vehicle and Equipment Cleaning ☐ Parking Lot Maintenance ☐ Vehicle and Equipment Storage ☐ Landscape Maintenance ☐ Material Loading and Unloading ☐ Waste Handling, Storage, Disposal ☐ Minor Construction ☐ Material Handling, Storage, Disposal ☐ Bay / Harbor Activities ☐ Fueling (Spill Prevention and Control is incorporated within other forms) Reason for Inspection: ☐ Routine (Annual) Inspection ☐ First Inspection Routine (Quarterly) Corporate Yard Inspection ☐ Follow-up Inspection ☐ Facility Moved/Changed ☐ Complaint Inspection Outcome of Inspection: ☐ Disciplinary Action ☐ No Corrective Action Necessary ☐ Verbal Warning Other: ☐ Written Warning ☐ NOV - Notice of Violation

Bay/Harbor Activities				
Complete this form or	ly if related	activities are conducted at this Fixed Facility		
Question	Answer Yes/No	If Answered Yes, Suggested Corrective Action Plan (See Model Maintenance Procedures for further Suggested Corrective Action Plans)		
On Board and General Maintena	nce	Concessive Action Flams)		
If non-stormwater discharge occurs, can sediment, trash, or other materials potentially wash into storm drains or waterbodies? Has fuel or other fluids entered waterbodies from leaks or spills within the last reporting period?	☐ Yes☐ No☐ Yes☐ No☐ Yes☐ No☐ No☐ No☐ No☐ No☐ No☐ No☐ No☐ No☐ No	 ☐ Sweep surfaces or use other dry methods to clean objects. ☐ If water or liquids must be used, wash away from drainage facilities or water courses. ☐ Place a barrier around perimeter of washing area (sandbags, silt fence). ☐ Place sandbags around inlets, drainage facilities and water courses. ☐ If a sprayer must be used, consider a high pressure sprayer. ☐ Other: ☐ Designate maintenance areas away from drainage systems and water courses. ☐ Use extreme care when fueling adjacent to water. ☐ Place a barrier around perimeter of maintenance area (sandbags, silt fence). ☐ Place sandbags around inlets, drainage facilities and water courses. ☐ Use absorbent materials on small spills rather than hosing down or burying the spill. 		
		Remove absorbent materials promptly and dispose of properly. Other:		
Disposal of Wastewater and Ball	ast Water			
Is direct discharge of wastewater and ballast water occuring?	☐ Yes	☐ Properly dispose of such water in an approved marine sanitation devise (MSD) ☐ Other:		
Cleaning, Chipping, and Painting		1 other.		
Does discharge into a storm drain or waterbody occur when washing, chipping, or painting boats, piers, etc.?	□ Yes □ No	□ Perform activities away from drainage facilities or water courses. □ Place a barrier around perimeter of activity (sandbags, silt fence). □ If a hose is used, consider a high pressure sprayer. □ Use environmentally friendly products. □ Use dry methods to clean objects and surfaces. □ Limit over hull maintenance to minor sanding and painting. □ Conduct major hull resurfacing on land. □ Do not mix paint or chemiclas on docks. □ Shelter blasting and painting with tarps. □ Other:		

Building Maintenance and Repair Complete this form only if related activities are conducted at this Fixed Facility If Answered Yes. Answer Suggested Corrective Action Plan Question Yes/No (See Model Maintenance Procedures for further Suggested Corrective Action Plans) **Building Maintenance** ☐ Wash the gutter and place geofabric over gutter outlet. ☐ Yes Sweep gutter and dispose of particles properly. When using liquids to repair roofs, do ☐ If the downspout is tight lined, place a temporary plug at first small particles in the gutter have the □ No available point and pump out water with vactor truck. Clean potential to leave the jobsite? inlet where plug was placed. Other: Mix paint and liquids indoors or in a containment area. \square Use recycled and less hazardous products when possible. ☐ Perform activities away from drainage facilities or water Do exterior painting activities ☐ Yes contribute liquids or other materials to ☐ Place a barrier around perimeter of activity (sandbags, silt storm drains? □ No ☐ Place sandbags around inlets, drainage facilities and water courses. Other: Material Storage ☐ Yes ☐ Store materials in a covered area. Do maintenance and repair materials ☐ Place a barrier around perimeter of the storage area □ No have the potential to travel beyond the (sandbags, silt fence). property? Other: **Building Cleaning** \square Use the minimum amount of water and/or detergent possible ☐ Use recycled, biodegradable and less hazardous products Do exterior cleaning activities such as ☐ Yes when possible window cleaning have the potential to ☐ Perform activities away from drainage facilities or water □ No travel behond the property? courses. Dry surface as soon as possible (sponge or blower). Other: Graffiti Cleaning ☐ Yes ☐ Postpone cleaning activities until after rain event. Are graffiti abatement activities performed during rain events? П No ☐ Other: ☐ Plug nearby storm drains and vacuum/pump wash water to ☐ Yes Does graffiti cleaning require wash sanitary sewer. water that may carry pollutants? Other: ☐ No Painting Rinse paint brushes, etc. in sink connected to a sanitary ☐ Yes Does cleaning of paint brushes, etc. sewer system. occur in the street, gutter, or near a ☐ Never clean brushes, etc. in the street, gutter, or near a □ No storm drain? storm drain Other:

Miscellaneous		
Do any other non-stormwater discharges occur, such as floor washing, water leakage from		☐ Perform activity away from drainage facilities or water courses.
	☐ Yes	Place sandbags around inlets, drainage facilities and water courses.
equipment/vehicles, or possible illicit	□ No	☐ Use less water during activity.
connections?		☐ Divert wash water into a treatment basin.
		☐ Other:
Does this Fixed Facility have an inadequate spill prevention and containment plan?		☐ Develop a comprehensive spill prevention plan.
	□Yes	Use absorbent materials on small spills rather than hosing down or burying the spill.
	□ No	☐ Remove absorbent materials promptly and dispose of properly.
	- 6	☐ Stock appropriate clean-up materials.
	,	Other:

Equipment Maintenance and Repair			
Complete this form on	ly if related	activities are conducted at this Fixed Facility	
Question	Answer Yes/No	If Answered Yes, Suggested Corrective Action Plan (See Model Maintenance Procedures for further Suggested Corrective Action Plans)	
General Maintenance and Repail			
Are vehicles and/or equipment stored in an uncovered area?	□ Yes	 ☐ Store vehicles and equipment in covered areas. ☐ If covered areas for storage are unavailable, inspect storage areas frequently for leaks and damage. ☐ Store vehicles and equipment away from drainage systems and waterbodies. ☐ Other: 	
Vehicle and Machine Repair		☐ Other:	
Do vehicles and/or equipment leak oil, or any other fluids?	☐ Yes ☐ No	□ Use absorbent materials on small leaks rather than hosing down or burying. Remove absorbent materials promptly and dispose of properly. □ Use drip pan underneath equipment/vehicle. □ Stock appropriate clean-up materials. □ Inspect vehicles and equipment frequently for leaks. □ Other:	
Is vehicle and/or equipment repair/maintenance performed near a drain not connected to the sanitary sewer system?	□ Yes	 □ Designate maintenance areas away from drainage systems and water courses. □ Protect maintenance areas by placing a barrier around perimeter. □ Consider using portable tents or covers over maintenance areas. □ Do not dispose oil in dumpster, storm drain or waterbody. □ Other: 	
Waste Handling/Disposal			
Do non-stormwater discharges occur, such as shop floor washing, or water leakage from equipment?	□ Yes □ _{No}	□ Store equipment away from drainage facilities or water courses. □ Place sandbags around inlets, drainage facilities and water courses. □ Clean area with mechanical sweeper, rather than hosing. □ Contain water and haul for treatment.	

Fueling			
Complete this form on	ly if related	activities are conducted at this Fixed Facility	
Question	Answer Yes/No	If Answered Yes, Suggested Corrective Action Plan (See Model Maintenance Procedures for further Suggested Corrective Action Plans)	
		☐Designate a fueling area away from drainage facilities and water courses.	
Can fueling activities impact area	Yes	Protect fueling areas by placing a barrier around perimeter.	
storm drains?	□ No	☐Use drain pans or drop cloths to catch spills or leaks while fueling.	
		□Do not top-off fuel tanks. □Other:	
		□Designate a fueling area away from drainage facilities and water courses.	
	Yes	Protect fueling areas by placing a barrier around perimeter.	
Can overflow occur when fueling vehicles and/or equipment on-site?	□ No	☐Use drain pans or drop cloths to catch spills or leaks while fueling.	
productive and a superior of the superior of t		☐Do not top-off fuel tanks.	
-4		☐Use absorbent materials to clean-up spills rather than hosing down or burying.	
		□Other:	
-		☐ Designate a fueling area away from drainage facilities and water courses.	
	Yes	Protect fueling areas by placing a barrier around perimeter.	
Can stormwater run on to fueling areas?	□ No	☐Use drain pans or drop cloths to catch spills or leaks while fueling.	
		☐Do not top-off fuel tanks.	
		☐Use absorbent materials to clean-up spills rather than hosing down or burying.	
		□Other:	
Is the fueling area uncovered?	☐ Yes	☐Place a canopy over fueling area.	
	☐ No	□Other:	

Landscape Maintenance		
Complete this form on	y if related	activities are conducted at this Fixed Facility
Question	Answer Yes/No	If Answered Yes, Suggested Corrective Action Plan (See Model maintenance Procedures for further Suggested Corrective Action Plans)
Mowing, Trimming/Weeding and F	Planting	
Do green waste trimmings or clippings enter storm drains, gutters, or travel off site?	☐ Yes ☐ No	□ Perform landscaping activities away from drainage facilities or water courses. □ Place a barrier around perimeter of landscape activity area (sandbags, silt fence). □ Install baggage for clippings on mowers. □ Train staff to improve dry clean-up of green waste from gutters and drain systems. □ Other:
Irrigation		
Does excess irrigation runoff have the potential to carry pollutants into the stormdrain?	□ Yes □ No	□ Berm the irrigation area to prevent run-on and runoff. □ Place sandbags around inlets, drainage facilities and water courses. □ Ensure sprinklers are spraying appropriately. □ Reduce the amount of water being applied or modify sprinkler heads to spray more efficiently. □ Other:
Fertilizer and Pesticide Manageme	ent	LI Ollid
Are fertilizers and pesticides mixed or prepared near a storm drain?	☐ Yes ☐ No	
Are fertilizers and pesticides spilled accidentally or discarded onto the surface?	□ Yes	Work fertilizers and pesticides into the soil rather than dumping. □ Other:
Are fertilizers and pesticides over applied?	□ Yes □ No	☐ Train staff to use proper fertilizer and pesticide application procedures. ☐ Use the minimal amount of fertilizers and pesticides. ☐ Other:
Are fertilizers and pesticides applied when there is a 25% or more chance of rain?	□ Yes	Apply fertilizers and pesticides when there is a 75% or more chance of no rain. Other:
Are more fertilizers and pesticides stored on site than needed?	☐ Yes ☐ No	☐ Only purchase and store what is needed. ☐ Other: ☐ Rinse containers with fertilizer/pesticide and use rinse as
Have fertilizers and pesticides been disposed of improperly?	□ Yes	product. Dispose of unused fertilizer/pesticide as hazardous waste.
Managing Landscape Waste	1 - 203	1 1000
Are compost leaves, sticks, or other collected vegetation disposed near a waterway or storm drain system?	□ Yes □ No	□ Dispose of materials at a permitted landfill □ Place vegetation piles away from drainage facilities or water courses. □ Install baggage for clippings on mowers. □ Train staff to improve dry clean-up of green waste from gutters and drain systems. □ Other:
Erosion Control		- S.I.W.
Is discing used as a means of vegetative management?	☐ Yes ☐ No	☐ Use other methods for vegetative management. ☐ Train staff to improve erosion control on-site. ☐ Other.

Material Loading and Unloading Complete this form only if related activities are conducted at this Fixed Facility If Answered Yes. Answer Suggested Corrective Action Plan Question Yes/No (See Model Maintenance Procedures for further Suggested Corrective Action Plans) ☐ Regularly clean work areas to remove materials. Is debris present around the loading ☐ Yes Avoid loading or exposing materials during rain events. / unloading area that has the No Direct stormwater to minimize contact with waste materials. potential to enter storm drains or drainage facilities? □ Load / unload only during dry weather. ☐ Other: ☐ Designate storage areas away from drainage system or water course. ■ Load / unload in covered or enclosed areas. ☐ Direct stormwater with sloping pavement to minimize contact ☐ Yes Can handled materials come into with waste materials. □ No contact with stormwater? □ Pave area where transfers occur. Place a barrier around perimeter of loading/unloading area. □ Load / unload only during dry weather. ☐ Other: □ Develop a emergency spill cleanup plan. Use drip pans or comparable devices during transfers. Remove absorbent materials promptly and dispose of properly. Does the Fixed Facility have an ☐ Yes inadequate spill prevention and □ No ☐ Place spill kits near the loading / unloading area. cleanup program? ☐ Stock appropriate clean-up materials. ☐ Know who to contact if large or hazardous spills occur. ☐ Other: Properly train forklift operators. ☐ Determine roles and responsibilities of employees and ☐ Yes Are staff unaware of their roles and supervisors and train accordingly ☐ Provide "refreshers" training for existing employees. responsibilities during spills (with emphasis on new employees)? ☐ Train new employees. □ No ☐ Develop procedures for loading and unloading. ☐ Other:

Material Storage, Handling, and Disposal Complete this form only if related activities are conducted at this Fixed Facility If Answered Yes, Answer Suggested Corrective Action Plan Question Yes/No (See Model Maintenance Procedures for further Suggested Corrective Action Plans) General Material Storage, Handling, and Disposal ☐ Designate secured storage areas away from storm drain system and water courses. ☐ Store materials indoors if possible, or cover with a roof. ☐ Inspect storage areas before and after rainfall events, and at least weekly all other times. ☐ If materials are stockpiled, place a barrier around perimeter ☐ Yes (berm, sandbags, silt fence). Place sandbags around inlets, drainage facilities and water Can stored materials come in □ No contact with stormwater? ☐ Keep an accurate and up-to-date inventory of materials delivered and stored on-site. ☐ Place plastic cover over stored material, especially those treated with amendments. ☐ Train employees in proper storage measures. ☐ Minimize the amount of material stored on-site. Other: ☐ Inspect storage areas before and after rainfall events, and at least weekly all other times. ☐ If materials are stockpiled, place a barrier around perimeter (berms, sandbags, silt fence) ☐ Yes ■ Place plastic cover over stored material. Are materials able to escape ☐ Place sandbags around inlets, drainage facilities and water ☐ No containment and litter or run off the courses Fixed Facility? ☐ Store materials in a shed. ☐ Store liquids in a designated area on an impervious surface within secondary containment. ☐ Slope the area inside a curb to a drain with appropriate best management practice in place to treat waste. ☐ Other: ☐ Designate storage areas away from storm drain system and water courses. ☐ If material is stockpiled, place a barrier around perimeter (sandbags, silt fence) Is debris allowed to litter the work ☐ Sweep parking lots or other surfaces near storage areas ☐ Yes regularly. site, enter storm drains, or travel ☐ Place sandbags around inlets, drainage facilities and water beyond the site? □ No courses. ☐ Store materials in a shed. ☐ Minimize the amount of material stored on-site. Other:

		Develop a spill prevention plan.
		☐ Inspect storage areas regularly for leaks or spills.
		Inspect waste containers routinely for structural damage and repair or replace damaged containers as needed.
Have any spills occurred within the	☐ Yes	Check for leaks or spills during material loading and unloading.
last year at the material storage area(s) that contributed pollutants to	□ No	☐ Use absorbent materials on small spills rather than hosing down or burying the spill.
stormwater?		Remove absorbent materials promptly and dispose of properly.
		☐ If a large spill occurs, notify manager immediately and contain spread of spill.
		☐ Stock appropriate clean-up materials.
		Other:
Chemical Material Handling and D	isposal	
		☐ Place materials in secondary containers.
		 Designate covered areas with impervious surfaces for chemical storage.
Are chemical materials being stored	☐ Yes	☐ Keep chemicals in original well-labeled containers.
improperly without safeguards	□ No	Store materials in covered dumpsters or waste containers with secure lids.
against accidental spills?		☐ Surround liquid material containers with a curb or dike.
		☐ Install overflow protection devices.
		☐ Post restricted access warnings.
		Other:
Hazardous Material Handling		
		☐ Contact the local HAZMAT office or Fire Department for hazardous waste labeling regulations.
		Develop hazardous waste storage and handling procedures.
Are staff unaware of their roles and	□Yes	 Develop spill prevention control and countermeasure and emergency preparedness plans.
responsibilities for hazardous waste handling or during a hazardous waste spill?	□ No	 Determine roles and responsibilities of employees and supervisors.
		 Designate authorized hazardous waste collection areas on- site.
		☐ Obtain permit for hazardous waste storage for more than 90 days.
		Minimize the amount of hazardous material stored on-site.
	4	Other:

Minor Construction			
Complete this form onl	y if related	activities are conducted at this Fixed Facility	
Question	Answer Yes/No	If Answered Yes, Suggested Corrective Action Plan (See Model Maintenance Procedures for further Suggested Corrective Action Plans)	
General Construction			
Is uncontolled construction debris present on site, or can debris escape from the site?	□ Yes	□ Prevent debris from entering storm drains. □ Do not rinse or wash materials into gutters or storm drains. □ Place sandbags around inlets, drainage facilities, and water courses. □ Use prompt, dry clean-up methods. □ Other:	
Is water used for consturction or dust control purposes?	□ Yes	☐ Use water without causing non-stormwater discharge. ☐ Protect drain inlets where necessary. ☐ Use appropriate amount of water to provide dust control without causing a discahrge. ☐ Other:	
Have spills occurred at the construction site within the last reporting period?	☐ Yes	 □ Develop a spill prevention plan. □ Use absorbent materials on small spills rather than hosing down or burying the spill. □ Remove absorbent materials promptly and dispose of properly. □ If large spill occurs, notify manager immediately and contain 	
	□ No	spread of spill. Stock appropriate clean-up materials. Other:	
Do non-stormwater discharges occur from on-site construction activites?	□ Yes □ No	 □ Perform activity away from drainage facilities or water courses. □ Place sandbags around inlets, drainage facilities and water courses. □ Use less water during activity. □ Collect water and hual for treatment. □ Other: 	
Is staff unaware of who to notify when potentially hazardous spills occur? Is staff unaware of their roles during a hazardous spill?	□ Yes	□ Contact the local HAZMAT office and ask who should be contacted in case of a hazardous spill. □ Develop a spill prevention plan. □ Designate and Haz-Mat certify employee(s). □ Determine roles and responsibilities of employees and supervisors. □ Other:	

Interim Material Storage		
Can stormwater run through or directly contact stored materials and carry pollutants into drainage ways?	□ Yes	 □ Designate storage areas away from drainage system or water course. □ Place a barrier around perimeter of storage area (sandbags, silt fence). □ Place plastic cover over stored waste. □ Promptly remove and properly dispose waste materials. □ Inspect storage areas before and after rainfall events, and at least weekly all other times. □ Place sandbags around inlets, drainage facilities, and water courses. □ Store hazardous waste materials on pallets or in secondary containment. □ Minimize the amount of waste stored on-site.
Concrete Work		☐ Other:
Do materails from concrete work have the potential to enter strom drains? Can saw cutting result in non-stormwater discharges? Does truck wash-out have the potential to enter storm drains?	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No	□ Prevent debris from entering storm drains. □ Do not rinse or wash materials into gutters or storm drains. □ Designate and properly maintain a wash-out area. □ Place sandbags around inlets, drainage facilities, and water courses. □ Other: □ Use as little water during saw cutting as possible. □ Place sandbags around inlets, drainage facilities, and water courses. □ Other: □ Establish an on site wash-out area. □ Place sandbags around inlets, drainage facilities, and water courses. □ Properly maintain wash-out area. □ Properly maintain wash-out area. □ Other:
Can demolition debris travel off-site or enter storm drains?	□ Yes	 □ Prevent debris from entering storm drains. □ Do not rinse or wash materials into gutters or storm drains. □ Place sandbags around inlets, drainage facilities, and water courses. □ Use prompt, dry clean-up methods. □ Cover debris to extent practicable.

Parking Lot Maintenance				
Complete this form on	ly if related	d activities are conducted at this Fixed Facility		
Question	Answer Yes/No	If Answered Yes, Suggested Corrective Action Plan (See Model Maintenance Procedures for further Suggested Corrective Action Plans)		
Sweeping and Cleaning				
Are storm drain inlets or catch	□Yes	☐ Inspect, maintain, and/or clean storm drain inlets as required.		
basins in need of maintenance and/or cleaning?	□ No	Other:		
		☐ Place sandbags around inlets, drainage facilities and water courses.		
Can sediment, trash, or other materials potentially enter a storm	Yes	☐ Train contractors to avoid discharge into drainage facilities.		
drain during parking lot sweeping?	□No	Use the most advanced equipment to perform lot sweeping.		
		☐ Other:		
		Use dry cleaning methods such as a street sweeper instead.		
	□ Yes	☐ Perform hosing/washing away from drainage facilities or water courses.		
Is the parking lot cleaned by using water?		☐ Place a barrier around perimeter of area (sandbags, etc). Vacuum water and dispose of properly.		
		☐ Use cold water, not hot. ☐ Minimize containment area by only cleaning spot areas with water as needed and then dispose of properly.		
		☐ Other: ☐ Provide waste containers in convenient places for employees and		
		the public.		
Can litter potentially enter storm	☐ Yes	Use enclosed trash containers to limit contact with wind and rain.		
drains, or travel off of the property?	□ No	☐ Place trash containers away from inlets, drainage facilities and water courses.		
		☐ Other:		
Surface Repair		T-		
Are any materials prepared or	☐ Yes	Perform these activities away from storm drain inlets.		
transferred near storm drain inlets?	□No	☐ Cover storm drain inlets during repair.		
		☐ Other:		
Are concrete, asphalt or seal coating activities performed during	□Yes	☐ Perform these activities during dry weather.		
wet weather?	□ No	□ Other:		
Control Spills				
Do spills remain on facility soils?	☐ Yes	☐ Always excavate and remove contaminated soil.		
Do spins remain on lability sons.	□ No	☐ Other:		
Are spilled materials and absorbents ever been disposed of	Yes	☐ Dispose of spill material and absorbent pads in proper location and in accordance with Haz-Waste regulations if applicable.		
improperly?	□ No	□ Other:		

Spill Prevention and Control Complete this form only if related activities are conducted at this Fixed Facility If Answered Yes. Answer Suggested Corrective Action Plan Question Yes/No (See Model Maintenance Procedures for further Suggested Corrective Action Plans) Preparation and Prevention □ Place materials in secondary containers. □ Designate covered areas with impervious surfaces for chemical storage. ☐ Yes ☐ Keep chemicals in original well-labeled containers. Are chemical materials being stored ☐ Store materials in covered dumpsters or waste containers with improperly without safeguards □ No secure lids. against accidental spills? ☐ Surround liquid material containers with a curb or dike. Install overflow protection devices. □ Post restricted access warnings. Other: ☐ Identify staff members responsible for developing a spill prevention program. ☐ Research other Fixed Facilities with spill prevention programs Does the Fixed Facility lack a spill ☐ Yes and use as a guideline. prevention program? □ No ■ Know who to contact if large or hazardous spills occur. Other: Spill Response Develop a spill prevention plan. Inspect storage areas regularly for leaks or spills. ☐ Inspect waste containers routinely for structural damage and repair or replace damaged containers as needed. ☐ Yes Check for leaks or spills during material loading and unloading. Have any spills occurred within the last year in th area(s) that ☐ Use absorbent materials on small spills rather than hosing □ No contributed pollutants to down or burying the spill. stormwater? Remove absorbent materials promptly and dispose of properly. ☐ If a large spill occurs, notify manager immediately and contain spread of spill. ☐ Stock appropriate clean-up materials. Other: Reporting and Training ☐ Contact the local HAZMAT office or Fire Department for hazardous waste labeling regulations. Develop hazardous waste storage and handling procedures. □ Develop spill prevention control and countermeasure and ☐ Yes emergency preparedness plans. Are staff unaware of their roles and ☐ Determine roles and responsibilities of employees and responsibilities for hazardous waste ☐ No supervisors handling or during a hazardous Designate authorized hazardous waste collection areas onwaste spill? ☐ Obtain permit for hazardous waste storage for more than 90 Minimize the amount of hazardous material stored on-site.

Vehicle and Equipment Cleaning Complete this form only if related activities are conducted at this Fixed Facility If Answered Yes. Answer Suggested Corrective Action Plan Question Yes/No (See Model Maintenance Procedures for further Suggested Corrective Action Plans) ☐ Wash away from drainage facilities or water courses. Berm the wash area to prevent run-on and runoff. If vehicle and/or equipment ☐ Discharge wash water to sanitary sewer. ☐ Yes washing takes place, does wash □ No Use less water, consider a high pressure sprayer. water enter an on site storm ☐ Construct a wash rack for the washing area. drain? ☐ Do not use solvents to clean. Other: ☐ Construct a wash rack for the washing area. If vehicle and/or equipment ☐ Yes Berm the wash area to prevent run-on and runoff. washing takes place, does the □ No Discharge wash water to sanitary sewer. wash water run off-site? Divert wash water to a treatment basin. Other: ☐ Perform steam cleaning and engine degreasing at a more Does steam cleaning or engine appropriate location, off-site degreasing take place on-site that ☐ Yes ☐ Berm the wash area to prevent run-on and runoff. ☐ Discharge wash water to sanitary sewer. has the potential to affect □ No ☐ Divert wash water to a treatment basin. stormwater quality? Other: ☐ Construct a wash rack for the washing area. ☐ Berm the wash area to prevent run-on and runoff. ☐ Wash away from drainage facilities or water courses. ☐ Yes Is a mobile washer used that □ No Discharge wash water to sanitary sewer. results in wash water runoff? ☐ Divert wash water to a treatment basin ☐ Make certain wash water runoff is clear. Other: ☐ Construct a wash rack for the washing area. ☐ Berm the wash area to prevent run-on and runoff. Is a mobile washer used that ☐ Wash away from drainage facilities or water courses. ☐ Yes results in discharge to an on-site □ No ☐ Discharge wash water to sanitary sewer. storm drain? ☐ Make certain wash water runoff is clear. ☐ Divert wash water to a treatment basin. Other: ☐ Construct a wash rack for the washing area. ☐ Berm the wash area to prevent run-on and runoff. Does any other washing take ☐ Yes Discharge wash water to sanitary sewer. place that may enter storm drains □ No ☐ Wash away from drainage facilities or water courses. or affect stormwater quality? ☐ Divert wash water to a treatment basin. Other: ☐ Construct a wash rack for the washing area. Berm the wash area to prevent run-on and runoff. Does any other washing take ☐ Yes ☐ Wash away from drainage facilities or water courses. place that may run off-site? □ No Discharge wash water to sanitary sewer. Divert wash water to a treatment basin. Other: If an oil/water separator is on site. ☐ Yes ☐ Inspect, maintain, and/or clean the oil/water separator. is it in need of maintenance and/or □ No Other: cleaning?

Vehicles and Equipment Storage		
Complete this form onl	y if related	activities are conducted at this Fixed Facility
Question	Answer Yes/No	If Answered Yes, Suggested Corrective Action Plan (See Model Maintenance Procedures for further Suggested Corrective Action Plans)
Storing Vehicles and Equipment	Ľ	
Are vehicles and/or equipment stored in an uncovered area with the potential to affect stormwater quality?	□ Yes	□ Store vehicles and equipment in covered areas. □ If covered areas for storage are unavailable, inspect storage areas frequently for leaks and damage. □ Store vehicles and equipment away from drainage systems and waterbodies. □ Other:
Do vehicles and/or equipment leak oil, or any other fluids?	☐ Yes ☐ No	☐ Use absorbent materials on small leaks rather than hosing down or burying. Remove absorbent materials promptly and dispose of properly. ☐ Use drip pan underneath equipment/vehicle. ☐ Stock appropriate clean-up materials. ☐ Inspect vehicles and equipment frequently for leaks.
Is vehicle and/or equipment repair/maintenance performed near a storm drain?	□ Yes	 □ Designate maintenance areas away from drainage systems and water courses. □ Protect maintenance areas by placing a barrier around perimeter. □ Consider using portable tents or covers over maintenance areas. □ Do not dispose oil in dumpster, storm drain or waterbody. □ Other:
Wrecked Vehicle Storage		
Are wrecked vehicles stored near storm drain inlets?	☐ Yes ☐ No	□ Store vehicles away from drainage facilities or water courses. □ Place drip pans under vehicles immediately. □ Drain all fluids, including air conditioner coolant. □ Cover vehicles with plastic and secure firmly. □ Dispose of and transfer fluids properly. □ Other:
Cleaning Vehicle Storage Areas		
Do non-stormwater discharges occur, such as shop floor washing, or water leakage from equipment?	☐ Yes ☐ No	□ Store equipment away from drainage facilities or water courses. □ Place sandbags around inlets, drainage facilities and water courses. □ Clean area with mechanical sweeper, rather than hosing. □ Post water quality awareness signage for employees. □ Contain water and haul for treatment. □ Other:

Waste Handling and Disposal			
Complete this form only	if related	activities are conducted at this Fixed Facility	
Question	Answer Yes/No	If Answered Yes, Suggested Corrective Action Plan (See Model Maintenance Procedures for further Suggested Corrective Action Plans)	
Controlling Litter			
Have self generated solid wastes been allowed to litter the Fixed Facility?	□ Yes	 □ Provide waste containers in convenient places, such as transit stops, for employees and the public. □ Use enclosed trash containers to limit contact with wind and rain and prevent spillage. □ Collect trash regularly to prevent spillage, especially during rainy and windy conditions. □ Post "No Littering" signs. □ Other: 	
Waste Collection		- Oulet.	
Is the waste area littered and/or not well maintained?	□ Yes	Regularly inspect solid waste containers for structural damage and repair or replace damaged containers as necessary. Designate separate waste containers for wastes that can cause chemical reactions and complicate recycling or disposal. Prevent any wastes other than solid wastes from being disposed of in the waste container. Sweep and clean up spills in the waste management area immediately, using dry methods when possible.	
Are staff unaware of their roles and responsibilities for hazardous waste handling or during a hazardous waste spill?	□ Yes	 □ Contact the local HAZMAT office or Fire Department for hazardous waste labeling regulations. □ Contact the local HAZMAT office or Fire Department ask who should be contacted in case of a hazardous spill. □ Develop hazardous waste storage and handling procedures. □ Determine roles and responsibilities of employees and supervisors. 	
		Designate authorized hazardous waste collection areas on-site. Obtain permit for hazardous waste storage for more than 90 days. Stencil storm drains on the Fixed Facility. Other:	
Is the amount of waste generated more than necessary, and is waste not being recycled?	□ Yes	□ Recycle materials whenever possible. □ Establish source controls. □ Establish a material usage tracking system to increase awareness. □ Other:	

Spill/Leak Control		
		 Identify staff members responsible for developing a spill prevention program.
Does the Fixed Facility lack a spill prevention program?	☐ Yes	Research other Fixed Facilities with spill prevention programs and use as a guideline.
Janes	□ No	☐ Know who to contact if large or hazardous spills occur.
6		Other:
		 Develop a spill prevention plan for loading and unloading and transporting waste.
		Repair or replace leaking containers or equipment and transfer waste from damaged containers to safe containers.
Have any spills occurred at the waste loading area over the past year that contributed pollutants to	☐ Yes	Regularly inspect and replace faulty pumps or hoses on solid waste containers that utilize a hydraulic fluid pump system.
stormwater?	□ No	Remove absorbent materials promptly and dispose of properly.
		☐ If large spill occurs, notify manager immediately and contain spread of spill.
		☐ Stock appropriate clean-up materials.
		☐ Other:
De per etermweter disebarges		Perform activity away from drainage facilities or water courses.
Do non-stormwater discharges occur in this area, such as water	☐ Yes	☐ Place sandbags around inlets, drainage facilities and water courses.
draining from stored wastes?	□ No	☐ Contain and haul drainage for proper disposal.
		☐ Other:
Runon/Runoff Prevention		
		 Designate storage areas away from drainage system or water course.
		☐ Place a barrier around perimeter of waste management area (berm, sandbags, silt fence).
		☐ Place plastic cover over stored waste.
		☐ Store waste materials in a shed.
Can stormwater run through stored	☐ Yes	☐ Cover dumpsters.
wastes and carry pollutants into drainage ways?	□ No	Inspect storage areas before and after rainfall events, and at least weekly all other times.
		☐ Place sandbags around inlets, drainage facilities and water courses.
		☐ Store hazardous waste materials on pallet or in secondary containment and cover.
		☐ Minimize the amount of waste stored on-site.
		□ Other:

EXHIBIT 5.5 Integrated Pest Management Plan



INTEGRATED PEST MANAGEMENT (IPM) POLICY & IMPLEMENTATION GUIDELINES FOR THE CITY OF MISSION VIEJO

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 preventive, 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 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.

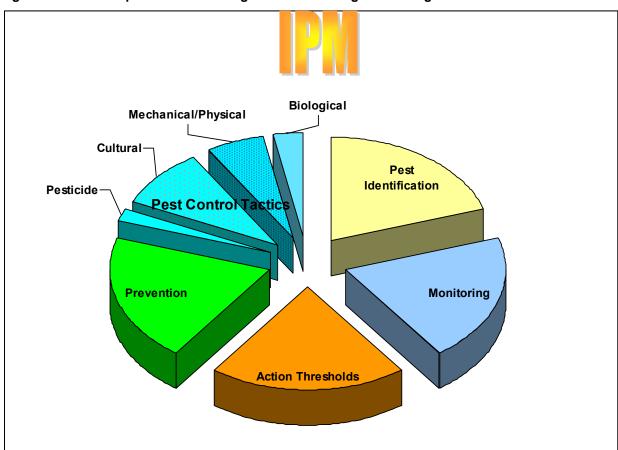


Figure 1 Components of an Integrated Pest Management Program

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, 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

PESTICIDE-BASEI	D PEST CONTROL	IPM-BASED PI	EST CONTROL
ADVANTAGES	DISADVANTAGES	ADVANTAGES	DISADVANTAGES
 Quick suppression of pests Labor is only for spraying Not much preparation or follow-up needed 	 Not long-term Pest control is reactive Loss of natural controls Often get outbreaks of other pests Extra work in cleanup Need a PCA recommendation Pesticide safety issues for applicators, public, animals More pesticides in environment Contamination of water bodies from runoff 	 Long-term control Can be proactive in pest control actions Reduces disruption of natural enemies Pesticides can be used (only used as last resort) Staff becomes more knowledgeable of pests and injury symptoms Pest management is more organized Less exposure to pesticides Safer to the environment Reduces contamination from runoff 	 It may take longer to see results Must establish thresholds Must have knowledge of pesticides and their effects on other organisms Labor is required for monitoring and regular scouting Training is required to identify pests and natural enemies Must maintain a record-keeping system

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 <u>long-term</u>, <u>multi-faceted system</u> 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 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 birds 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.

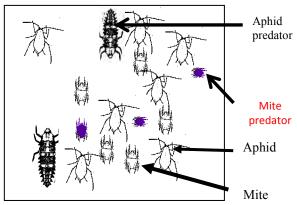
The most common organisms used for biological control in landscapes are predators, parasites, pathogens and herbivores.

- <u>Predators</u> are organisms that eat their prey (e.g., ladybugs).
- <u>Parasites</u> 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).
- <u>Pathogens</u> 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).

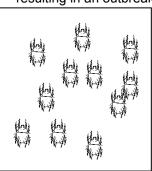
In order to conserve naturally-occurring beneficials, broad-spectrum pesticides should not be used since the use of these types of pesticides may result in secondary pest outbreak due to the mortality of natural enemies that may be keeping other pests under control (Figure 2).

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:

Responsible Person:

Jerry Hill

Public Services Operations Manager City of Mission Viejo, California

949-470-3095

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:

- 1. Prevention
- 2. Pest and Symptom Identification
- 3. Monitoring for Pests and Problems
- 4. Action Thresholds and Guidelines
- 5. 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. The selected methods from each of the five main components may vary from time to time based on dynamic situations and available resources but at to time be less than the required minimum quantity for each section.

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.
\boxtimes	Adequate space is allowed for root growth, especially trees. Nursery stock is inspected and rejected if not healthy (injuries, diseased, circling roots/pot-bound, 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
\boxtimes	shallow. Nursery tree stakes are removed at planting and replaced with staking that allows trunk to flex; removing these stakes after 1 to 1½ years.
\boxtimes	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.
	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 onto 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).
\boxtimes	Over-fertilization, especially of trees and shrubs, is avoided to ensure plant growth is not
\boxtimes	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.
\boxtimes	A licensed Pest Control Adviser is on staff or hired to properly identify a pest and the symptoms
\boxtimes	caused by the pest. Field personnel are trained to utilize disease life cycles to apply treatments when the organism can
\boxtimes	be controlled most effectively. Field personnel are trained to distinguish between beneficial insects and actual pests found in the
\boxtimes	landscape (e.g., parasitizing wasps). Unknown samples are submitted to the Orange County Agricultural Commissioner for identification by the county enterpologist or plant pathologist.
	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
\boxtimes	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 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. \boxtimes 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. \boxtimes The amount of honeydew (aphids) and frass (caterpillars) present is utilized as an indicator of population levels. В. **Weed Monitoring Procedures** (a minimum of two must be selected) \boxtimes 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. Keep records of monitoring results including the location, date, and severity of weed problem. For example, a scale of 0-10 can be created where 0 = no weeds and 10 = almost all weeds or 0-3 = acceptable, 4-7 = control if warranted, 8-10 = control immediately. \boxtimes Use a recorded rating as a threshold for weed control actions. For example, apply herbicide when rating scale is at 4 or more. (Note: Thresholds should be adjusted based on use. A threshold of 3 may be needed near a city hall but 6 or more along a walking path). Count and record the number of weeds encountered at periodic intervals (e.g., every 1 to 2 feet) along a straight line transecting a landscaped area or within a selected area; for example, 4-squarefoot samples done in random places in a bed or turf area. **Disease Monitoring Procedures** (a minimum of two must be selected) C. \boxtimes Landscapes are regularly checked for conditions, such as overwatering and injuries, which promote disease. \boxtimes 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. **Vertebrate Monitoring Procedures** (a minimum of two must be selected) D. \boxtimes Landscapes are regularly inspected for vertebrate presence either by damage caused by animal, actual animal sightings, and/or droppings. \boxtimes 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** Insect/Mollusk Thresholds and Guidelines (a minimum of one must be selected) \boxtimes 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. \boxtimes Thresholds are based on levels where reasonable control of the pest can be achieved with minimum impact on the environment.

low, while in a native shrub border it might be considerably higher.

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

	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
٠.	CELEGION OF ALL NOT MALE MANAGEMENT METHODS
	Insect/Mollusk Management Methods
A.	

Pest	ticide Control Methods (a minimum of five methods from must be selected)
\boxtimes	The most selective, rather than broad-spectrum, pesticide is used.
	If available for controlling a particular insect, biological and botanical pesticides are selected.
$\overline{\boxtimes}$	Insecticidal soaps are utilized to control infestations of soft-bodied insects such as aphids, thrips,
	and immature scales.
\boxtimes	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.
\boxtimes	Pesticides are only utilized when the potential for impacts to the environment, especially water
_	quality, are minimized.
\boxtimes	Equipment is calibrated prior to the application of the insecticide to avoid excess material being
_	applied to the landscape environment.
\boxtimes	Applicators are trained not to apply pesticides to hard surfaces and not to allow any pesticide to
	enter the storm drain system.
	Spot treatments are utilized rather than broadcast methods.
一百	Insecticide/fertilizer combinations are not utilized by the municipality and/or its contractors.
$\overline{\boxtimes}$	If insecticide/fertilizer combinations are considered, they are only used if the timing is appropriate
	for <u>BOTH</u> the insecticide application and the fertilizer application.
B. W	/eed Management Methods
Cult	ural, Mechanical, and Physical Control Methods (a minimum of three methods must be selected)
\boxtimes	Timers are set to avoid overwatering, as weeds establish in areas where soil moisture is excessive.
\boxtimes	Drainage is managed to avoid wet areas.
	Weeds are removed from a site prior to planting.
\boxtimes	Mower height is adjusted to turf species and time of year.
\boxtimes	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.
\boxtimes	Bare soil areas are covered with a thick layer of mulch to suppress weeds and conserve soil
	moisture.
\boxtimes	Soil, mulch, and plant material is weed-free before it is introduced into the landscape.
Pest	ticide Control Methods (a minimum of three methods must be selected)
\boxtimes	Spot treatments are utilized rather than broadcast methods.
\boxtimes	Herbicide/fertilizer combinations are only used if appropriate timing for BOTH the herbicide
	application and the fertilizer application.
\square	Herbicides are utilized according to established thresholds (see Appendix A).
	Organically acceptable herbicides (shown to be effective through science-based research) are
	Organically acceptable herbicides (shown to be effective through science-based research) are used where appropriate.
\boxtimes	
\boxtimes	used where appropriate.

C. Disease Management Methods

	II, Mechanical, and Physical Control Methods (a minimum of three methods must be selected)
\square	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).
\boxtimes	Pruning tools are sterilized (e.g., a diluted bleach solution) between plants to prevent the spread of
	pathogen to other plants.
\boxtimes	Proper irrigation and fertilization are maintained to prevent plant stress, water-logging, and
	subsequent susceptibility to disease.
\square	Soil solarization is utilized to control soil pathogens in annual beds where it is most effective.
\boxtimes	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".
\boxtimes	Replace disease-prone plants with non-susceptible species.
Pestici	de Control Methods (a minimum of two methods must be selected)
	Preventive fungicides and bactericides are only used where diseases can be predicted from
	environmental conditions and applied prior to infection or the appearance of symptoms.
\boxtimes	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.
\boxtimes	Fungicides classes are rotated to avoid resistance.
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D. vert	ebrate Management Methods
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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.

SECTION 6 PUBLIC EDUCATION

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 H_2OC , 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: Assistant City Engineer

Telephone: 949-470-8419

Address: 200 Civic Center, Mission Viejo, CA 92691

Secondary

Title: City Engineer P49-470-3079

Address: 200 Civic Center, Mission Viejo, CA 92691

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 E.7 of the Fifth Term Permit.

6.3 MODEL PUBLIC EDUCATION PROGRAM

The City supports H_2OC , the dynamic countywide outreach campaign. This campaign is built upon a foundation of cooperative Permittee development of programs and materials, 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 H_2OC 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.

SECTION 6 PUBLIC EDUCATION

The NPDES Public Education Sub-Committee (Committee) comprised of Copermittee representatives meets monthly to collaboratively direct H_2OC . 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 H_2OC 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 H_2OC .

6.3.1.1 School Outreach

 H_2OC 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.

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 H_2OC 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 H_2OC 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**.

6.3.2 Action Campaigns

To document sustainable behavior change, H_2OC 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.

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)

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, H_2OC 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 H_2OC 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, Mission Viejo Public Library, Norman P. Murray Community Center, and on the City website.

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 H_2OC 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
- 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.

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.
- Maintaining a supply of brochures and promotional materials at public buildings including City Hall, the Mission Viejo Library, and the Norman P. Murray 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.

Community Development Department

Title: Community Development Director

Telephone: 949-470-3029

Address: 200 Civic Center, Mission Viejo, California 92691

The Community Development 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: 949-470-8419

Address: 200 Civic Center, Mission Viejo, California 92691

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:
 - o Fall under the planning and building authority of the City;
 - o 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.

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:

- (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).

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:

- (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:

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.

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

- Prior to the issuance of any grading or building permits <u>or</u> 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:
 - o 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,
 - o 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.

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 <u>approved</u> 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 <u>approved</u> 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 <u>approved Project WQMP</u>. 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:

- Determine discretionary permits and WQ conditions that may apply—Model WQMP Section 2.1
- 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
- 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 Mission Viejo on receiving water bodies.

The City of Mission Viejo 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: Assistant City Engineer

Telephone: 949-470-8419

Address: 200 Civic Center, Mission Viejo, California 92691

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.

Community Development Department—Planning Division

Title: Community Development Director

Telephone: 949-470-3029

Address: 200 Civic Center, Mission Viejo, California 92691

The Community Development 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.

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Engineering Division

Title: Assistant City Engineer

Telephone: 949-470-8419

Address: 200 Civic Center, Mission Viejo, California 92691

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: 949-470-3028

Address: 200 Civic Center, Mission Viejo, California 92691

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.

El Toro Water District (non-City entity)

Title: Chief Engineer 749-837-0660

Address: 24251 El Toro Road, Lake Forest, California 92630

Moulton Niguel Water District (non-City entity)

Title: Chief Engineer 749-831-2500

Address: 27500 La Paz Road, Laguna Niguel, California 92677

Santa Margarita Water District (non-City entity)

Title: Chief Engineer 749-459-6400

Address: 26111 Antonio Parkway, Las Flores, California 92688

Trabuco Canyon Water District (non-City entity)

Title: General Manager Telephone: 949-858-0277

Address: 32003 Dove Canyon Drive, Trabuco Canyon, California 92679

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

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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.

City of Mission Viejo Local Implementation Plan (LIP)

Construction 8-3 April 1, 2017

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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

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 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	i. Pollution prevention where appropriate;
Measures	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 reseeding 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;

CATEGORY	MIN	IIMUM REQUIREMENTS
	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	i.	Erosion prevention is to be used as the most important measure for keeping sediment on site during construction;
Controls	ii.	Sediment controls are to be used as a supplement to erosion prevention for keeping sediment on-site during construction;
	iii.	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
	iv.	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:

- 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			
Licolon Control Bin C	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	Reserved			
	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	NS-1	Water Conservation Practices			
BMPs	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 &	WM-1	Material Delivery and Storage				
Materials Pollution Control BMPs	WM-2	Material Use				
Control Divil 3	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: • Any site 30 acres or larger.	Biweekly	Annually in August or September
 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. 		
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		PUBLIC WORKS CONSTRUCTION PROJECTS
Verbal Warning	_	Verbal Warning
Written Warning Notice of Non-Compliance Administrative Compliance Order Administrative Citations or Fines Cease and Desist Order	PROGRESSION	Written Warning Notice of Non-Compliance
Stop Work Order	N	Enforcement of Contract
Revocation of Permit(s) and/or Denial of Future Permits	← WARNING	 Stop Work Order Withholding of Payment Bond Fines Revocation of Contract
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 *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.

8-11

EXHIBIT 8.1 Active Construction Projects

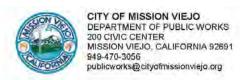


City of Mission Viejo Active Grading Permits

	Grading Permit	Project	Street Number	Street Name	Date Issued	Watershed
1	13-12	LEO HOTELIER GROUP, INC.	28682	MARGUERITE PKWY.	8/14/2014	San Juan Creek
2	13-10	STANDARD PACIFIC HOMES		EL TORO RD. & GLENN RANCH RD.	10/24/2014	Aliso Creek
3	15-09	STANDARD PACIFIC HOMES		EL TORO RD. & GLENN RANCH RD.	3/8/2016	Aliso Creek
4	15-10	CAL ATLANTIC GROUP		EL TORO RD. & GLENN RANCH RD.	3/30/2016	Aliso Creek
5	16-02	GREENSTREET RETAIL	28662	MARGUERITE PKWY.	11/3/2016	San Juan Creek
6	16-05	POPEYE'S RESTAURANT	23462	LOS ALISOS BOULEVARD	10/19/2016	Aliso Creek
7	16-06	POPEYE'S RESTAURANT	23463	LOS ALISOS BOULEVARD	10/20/2016	Aliso Creek

EXHIBIT 8.2 Construction Site Inspection Form





CONSTRUCTION SITE INSPECTION STORMWATER PROGRAM

IN	SPECTOR NAME: INSPECTION	DATE:	-		TIME:	D PM
Pi	ROJECT ID:				TRACT:	
A	DDRESS:					
W	/EATHER CONDITIONS:					
Sr	TE SUPERVISOR/REPRESENTATIVE:					
D	eveloper/Contractor Name:					
Ty	PE OF CONSTRUCTION: HIGH PRIORITY MEDIUM PRIORITY	OL	ow Pric	RITY		
St	FORMWATER POLLUTION PREVENTION PLAN (SWPPP) AT THE CONSTRUCTION SITE?	□Y	ES 🗆	No		
C	ONSTRUCTION SITE STORMWATER BMPS	YES	NO	N/A	COMMENTS/OBSERVA	TION
ī	EROSION CONTROL PRA	CTICES	5			
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 PR	ACTICE	S			
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 CONTRO	LS				
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 MAN	IAGEN	MENT			
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	_	1	1	i -	
9	Is there evidence of past illegal discharges?					
	ENFORCEMENT ACTI	ONS				
E	I No Action Required ☐ Notice of Noncompliance I Verbal Warning ☐ Stop Work Order I Educational Letter ☐ Administrative Compliance Order	□ Ce	ease & I dminist ther			
A	dditional Comments:				Any photographs take	n? ☐ Yes ☐ No
FA	ACILITY REPRESENTATIVE SIGNATURE			3	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 Services Operations Manager

Telephone: 949-470-3095

Address: 200 Civic Center, Mission Viejo, California 92691

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: Director of Community Development

Telephone: 949-470-3053

Address: 200 Civic Center, Mission Viejo, California 92691

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

Economic Development

Title: Director of Community Development

Telephone: 949-470-3053

Address: 200 Civic Center, Mission Viejo, California 92691

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

Code Enforcement

Title: Code Enforcement Officer

Telephone: 949-470-3055

Address: 200 Civic Center, Mission Viejo, California 92691

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—El Toro Water District

Contact Name: Dennis Cafferty
Title: Chief Engineer
Telephone: 949-837-7050 x 223

Address: 24251 Los Alisos Boulevard, Lake Forest, California 92630

Water & Wastewater Utilities—Moulton Niguel Water District

Contact Name: Marc Serna

Title: Director of Operations & Engineering

Telephone: 949-425-3552

Address: 27500 La Paz Road, Laguna Niguel, California 92677

Water & Wastewater Utilities—Santa Margarita Water District

Contact Name: Don Bunts Title: Chief Engineer Telephone: 949-459-6400

Address: 26111 Antonio Parkway, Las Flores, California 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, California 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 24

Title: Fire Captain 749-837-9333

Address: 25862 Marguerite Parkway, Mission Viejo, California 92692

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 to 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;
- 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			
IC2	Animal Handling Areas			
IC3	Building Maintenance			
IC4	Carpet Cleaning			
IC5	Concrete and Asphalt Production, Application, and Cutting			
IC6	Contaminated or Erodible Surfaces Areas			
IC7	Landscape Maintenance			
IC8	Nurseries and Greenhouses			
IC9	Outdoor Drainage From Indoor Areas			
IC10	Outdoor Loading/Unloading Of Materials			
IC11	Outdoor Process Equipment Operations and Maintenance			
IC12	Outdoor Storage of Raw Materials, Products, and Containers			
IC13	Over Water Activities			
IC14	Painting, Finishing, and Coatings of Vehicles, Boats, Buildings, and Equipment			
IC15	Parking and Storage Area Maintenance			
IC16	Pool and Fountain Cleaning			
IC17	Spill Prevention and Cleanup			
IC18	Vehicle and Equipment Fueling			
IC19	Vehicle and Equipment Maintenance and Repair			
IC20	Vehicle and Equipment Washing and Steam Cleaning			
IC21	Waste Handling and Disposal			
IC22	Eating and Drinking Establishments			
IC23	Fire Sprinkler Testing/Maintenance			

Table 9. 2 Commercial BMPs

ACTIVITIES/SOURCES	BMP FACT SHEETS					
Automobile mechanical repair, maintenance, fueling, or cleaning	IC18. IC19. IC20.	Vehicle and Equipment Fueling Vehicle and Equipment Maintenance and Repair Vehicle and Equipment Washing and Steam Cleaning				
Airplane mechanical repair, maintenance, fueling, or cleaning	IC1. IC18. IC19. IC20.	Airplane Maintenance and Repair Vehicle and Equipment Fueling Vehicle and Equipment Maintenance and Repair Vehicle and Equipment Washing and Steam Cleaning				
Boat mechanical repair, maintenance, fueling, or cleaning	IC13. IC18. IC19. IC20.	Over-Water Activities Vehicle and Equipment Fueling Vehicle and Equipment Maintenance and Repair Vehicle and Equipment Washing and Steam Cleaning				
Equipment repair, maintenance, fueling, or cleaning	IC18. IC19. IC20.	Vehicle and Equipment Fueling Vehicle and Equipment Maintenance and Repair Vehicle and Equipment Washing and Steam Cleaning				
Automobile and other vehicle body repair or painting	IC14.	Painting, Finishing, and Coatings Of Vehicles, Boats, Buildings, and Equipment Vehicle and Equipment Maintenance and Repair				
Mobile automobile or other vehicle washing	IC20.	Vehicle and Equipment Washing and Steam Cleaning				
Automobile (or other vehicle) parking lots and storage facilities	IC15.	Parking and Storage Area Maintenance				
Retail or wholesale fueling	IC18.	Vehicle and Equipment Fueling				
Pest control services	IC7. IC21.	Landscape Maintenance Waste Handling and Disposal				
Eating or drinking establishments	IC22.	Eating and Drinking Establishments				
Mobile carpet, drape or furniture cleaning	IC4.	Carpet Cleaning				
Cement mixing or cutting	IC5.	Concrete and Asphalt Production, Application, and Cutting				
Masonry	IC5.	Concrete and Asphalt Production, Application, and Cutting				
Building Maintenance and Light Construction	IC3. IC5.	Building Maintenance Concrete and Asphalt Production, Application, and Cutting				
Outdoor Activities	IC6. IC9. IC10. IC11.	Contaminated or Erodible Surfaces Areas Contaminated or Erodible Surfaces Areas Outdoor Drainage From Indoor Areas Outdoor Loading/Unloading Of Materials Outdoor Process Equipment Operations and Maintenance Outdoor Storage of Raw Materials, Products, and Containers				
Painting and coating	IC14.	Painting, Finishing, and Coatings of Vehicles, Boats, Buildings, and Equipment				
Landscaping	IC7.	Landscape Maintenance				
Nurseries and greenhouses	IC8.	Nurseries and Greenhouses				

ACTIVITIES/SOURCES	BMP FACT SHEETS
Golf courses, parks and other recreational areas/facilities	IC6. Contaminated or Erodible Surfaces Areas
Gon courses, parks and other recreational areas/racintles	IC7. Landscape Maintenance
Pool and fountain cleaning	IC16. Pool and Fountain Cleaning
Port-a-Potty servicing	IC21. 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;
- 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

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

^aNitrogen and Phosphorous compounds

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:

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

^cIncluding chlorinated hydrocarbons, paint, etc.

dIncluding bleach, etc.

- 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	ВМР	FACT SHEET ¹
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	Landscape maintenance BMPs	FP-2
fertilization		IC-7
Operation and maintenance of community pools	Pool cleaning BMPs	IC-16
Operations and maintenance of recreation	Disposal of Pet Waste BMPs	R-5
areas such as stables, golf courses, and parks	Landscape Maintenance BMPs	FP-2
	Disposal of Green Waste BMPs	R-6

Maintenance Yard BMPs									
ACTIVITY	ВМР	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	ВМР	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

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. (To Be Provided)

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



		City of Mission Viejo Fiscal Year 2016-17 Commercial Facility Inventory						SIC		
Business Name	St#	Street Name	City	State	Zip Code	Watershed	Code	Potential Pollutants		
non-investment a standard Water & JE	And W.	ALBERTANE.		A.	and the same	A-677 - 777 A-67	-2.34	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
MUIRLANDS ANIMAL & AVIAN HOSPITAL	24174	ALICIA PARKWAY	MISSION VIEJO	CA	92691	Aliso Creek (J)	742	Substances, Bacteria, Pesticides		
ALIANIA MARKANIA MARKANIA	72022	Excel about the	ansenth nete	- 22.7	42.000	427,000 2000,000	-9207	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
DLYMPIAD ANIMAL HOSPITAL	23032	ALICIA PARKWAY A	MISSION VIEJO	CA	92692	San Juan Creek (L)	0742	Substances, Bacteria, Pesticides		
		Tanana and a same a	Company of the	42	Laureni.	20. 21. 120	****	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
CHARLINDA ANIMAL HOSPITAL	25222	CHARLINDA DRIVE C	MISSION VIEJO	CA	92691	Aliso Creek (J)	0742	Substances, Bacteria, Pesticides		
ANIMAL & BIRD CLINIC OF MISSION VIEJO	24912	CHRISANTA DRIVE	MISSION VIEJO	CA	92691	San Juan Creek (L)	0742	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
RIVINAL & BIND CEINIC OF WISSION VIEW	24912	CHRISANTA DRIVE	MISSION VIDO	CA	92091	San Juan Creek (L)	0742	Substances, Bacteria, Pesticides		
MISSION PARK PET HOSPITAL	27672	CROWN VALLEY PARKWAY	MISSION VIEJO	CA	92691	San Juan Creek (L)	0742	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding Substances, Bacteria, Pesticides		
MISSION FARK FET HOSFITAL	2/0/2	CROWN VALLET FARRYAT	WIBSION VIESO	CM.	32031	Sall Juan Creek (L)	0742	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
NIMAL URGENT CARE	28085	HILLCREST	MISSION VIEJO	CA	92692	San Juan Creek (L)	0742	Substances, Bacteria, Pesticides		
HIMAE ONGERI CARE	20003	Incedies	WILDOIGH VIEW	- On	JEUJE	Sali saali oj con (E)	0742	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
NIMAL MEDICAL CENTER & SPAY-NEUTER CLINIC	27230	LA PAZ ROAD	MISSION VIEJO	CA	92692	San Juan Creek (L)	0742	Substances, Bacteria, Pesticides		
THE RESIDENCE SERVER OF A PRESIDENCE SERVER	27230	DITTE MANU	1911331634 911316	No.	JEUJE	Sail Joan Creek (E)	0.142	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
AMILY MEMBER VETERINARY HOSPITAL	28731	LOS ALISOS	MISSION VIEJO	CA	92692	San Juan Creek (L)	0742	Substances, Bacteria, Pesticides		
THE PERSON AND PROPERTY OF	20/31	report of the control	INITIAL VICTO	No.	22022	Salisbuil Circle (L)	47.72	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
LISOS ANIMAL HOSPITAL	23902	LOS ALISOS BOULEVARD	MISSION VIEJO	CA	92691	Aliso Creek (J)	0742	Substances, Bacteria, Pesticides		
ALIGNATURAL TRADE TO THE		1997/1009 09012/////	(1)(00(0)11100			Y lines of early (e)	91.02	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
VERY ANIMAL CLINIC	28892	MARGUERITE PARKWAY 130	MISSION VIEJO	CA	92692	San Juan Creek (L)	0742	Substances, Bacteria, Pesticides		
321131000000000000000000000000000000000	10002	MUNICIPAL PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS	Interest Figure			Surragir diddit (b)	V1 14	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
UST FUR PAWS	25270	MARGUERITE PARKWAY A	MISSION VIEJO	CA	92691	San Juan Creek (L)	0742	Substances, Bacteria, Pesticides		
	7,7		300000000000000000000000000000000000000				- 32.12	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
CA MISSION VIEJO ANIMAL HOSPITAL	26852	OSO PARKWAY	MISSION VIEJO	CA	92691	San Juan Creek (L)	0742	Substances, Bacteria, Pesticides		
A1 1000-1-10 12 1-10 10 10 10 10 10 10 10 10 10 10 10 10 1					SHIP.	APTICANT ACTION		Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
ORTOLA PLAZA VETERINARIAN	27752	SANTA MARGARITA PARKWAY	MISSION VIEJO	CA	92691	Aliso Creek (J)	0742	Substances, Bacteria, Pesticides		
	7.7.50							Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
SATEWAY PET GROOMING	24000	ALICIA PARKWAY 3	MISSION VIEJO	CA	92691	Aliso Creek (J)	0752	Substances, Bacteria, Pesticides		
					2000	2000		Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
ETCO #537	25592	EL PASEO	MISSION VIEJO	CA	92691	San Juan Creek (L)	0752	Substances, Bacteria, Pesticides		
	-							Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
OTTIE'S PET GROOMING	25542	JERONIMO ROAD 5	MISSION VIEJO	CA	92691	San Juan Creek (L)	0752	Substances, Bacteria, Pesticides		
								Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
ALI'S PET GROOMING	25542	JERONIMO ROAD 5	MISSION VIEJO	CA	92691		0752	Substances, Bacteria, Pesticides		
								Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
ROOM AT THE TOP	27001	LA PAZ 436A	MISSION VIEIO	CA	92691	San Juan Creek (L)	0752	Substances, Bacteria, Pesticides		
								Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
HE MUDD PUPPY	22922	LOS ALISOS BOULEVARD #O	MISSION VIEJO	CA			0752	Substances, Bacteria, Pesticides		
								Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
GOLDEN TOUCH PET GROOMING	28715	LOS ALISOS L-4	MISSION VIEJO	CA	92692	San Juan Creek (L)	0752	Substances, Bacteria, Pesticides		
		the state of the s		0	Catal			Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
ETS PLUS	25502	MARGUERITE PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	0752	Substances, Bacteria, Pesticides		
								Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
ANDBAR PET SHOP	25571	MARGUERITE PARKWAY	MISSION VIEJO	CA		San Juan Creek (L)	0752	Substances, Bacteria, Pesticides		
AND THE RESERVE TO SERVE								Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
ahoots Feed & Pet Supply	26012	Marguerite Ste. O	MISSION VIEJO	CA	92692	San Juan Creek (L)	0752	Substances, Bacteria, Pesticides		
		Company Company of the Company						Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
Pet Stop Warehouse	27690	SANTA MARGARITA PARKWAY	MISSION VIEJO	CA	92691		0752	Substances, Bacteria, Pesticides		
								Sediments, Nutrients, Floatable Materials, Oxygen-Demanding		
ETCO #2124	27815	SANTA MARGARITA PARKWAY	MISSION VIEJO	CA		Aliso Creek (J)	0752	Substances, Bacteria, Pesticides		

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Business Name	St #	Street Name	City	State	Zip Code	Watershed	SIC Code	Potential Pollutants
OCEANS TROPICAL FISH	24001	VIA FABRICANTE #1003	MISSION VIEJO	CA			0752	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding Substances, Bacteria, Pesticides
FOREVER PUPPY	24002	VIA FABRICANTE #402	MISSIÓN VIEJO	CA	92691		0752	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding Substances, Bacteria, Pesticides
K9 KRAZY INC.	24001	VIA FABRICANTE 902	MISSION VIEJO	ĊA	92691	Aliso Creek (J)	0752	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding Substances, Bacteria, Pesticides
Pet Supply Warehouse	23854	Via FABRICANTE E1	MISSION VIEIO	CA	92691	Allow Creek (7)	0752	Sediments, Nutrients, Floatable Materials, Oxygen-Demanding Substances, Bacteria, Pesticides
ION'S MASONRY & LANDSCAPE	26586	AVENIDA DESEO	MISSION VIETO	CA	92691	San Juan Creek (L)	0782	Sediments, Nutrients, Floatable Materials, Oxygen Demanding Substances, Bacteria, Pesticides
						C. Jan. Car. 737	7	Sediments, Nutrients, Floatable Materials, Oxygen Demanding
OON CHANG LANDSCAPING AND MAINTENANCE	27052	ENCINAS	MISSION VIEIO	CA	92692	San Juan Creek (L)	0782	Substances, Bacteria, Pesticides Sediments, Nutrients, Floatable Materials, Oxygen Demanding
GIGNATURE LANDSCAPING	25862	JAMON LANE	MISSION VIEJO	CA	92691	San Juan Creek (L)	0782	Substances, Bacteria, Pesticides Sediments, Nutrients, Floatable Materials, Oxygen Demanding
E LANDSCAPE	28016	PASEO RINCON	MISSION VIEJO	CA	92692	San Juan Creek (L)	0782	Substances, Bacteria, Pesticides
GENUINE SPRINKLER & REPAIR	27132	PINARIO	MISSION VIEJO	CA	92692	San Juan Creek (L)	0782	Sediments, Nutrients, Floatable Materials, Oxygen Demanding Substances, Bacteria, Pesticides
MG LANDSCAPING	26	RIMANI DRIVE	MISSION VIEJO	ĊĀ	92692	San Juan Creek (L)	0782	Sediments, Nutrients, Floatable Materials, Oxygen Demanding Substances, Bacteria, Pesticides
AC WEST LAND CARE	24351	VIA ALBENIZ	MISSION VIEJO	CA	92692	San Juan Creek (L)	0782	Sediments, Nutrients, Floatable Materials, Oxygen Demanding Substances, Bacteria, Pesticides
EE'S PAINTING & MAINTENANCE	31	AMATO	MISSION VIEIO	CA	92692	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
A PARTNERS	23221	COBBLEFIELD	MISSION VIEJO	CA	92692	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
TEW MILLER PAINTING	28742	ESCALONA DRIVE	MISSION VIEJO	CA	92692	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
& PAINTING	21661	FLAMENCO	MISSION VIEJO	CA	92692	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
ICK'S QUALITY PAINTING	28222	GLENBROOK	MISSION VIEJO	CA	92692	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
ONNER PAINTING	21	HAWK HILL	MISSION VIEJO	CA	92691	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
DEAL PAINTING	24031	JUANENO DRIVE	MISSION VIEJO	CA	92691	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
OGERS JAS PAINTING CONTRACTOR	26492	LA QUILLA LANE	MISSION VIEJO	CA	92692	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
UN RISE CONSTRUCTION	27971	MAZAGON	MISSION VIEJO	CA	92692	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
ITZPATRICKS PAINTING	21075	MUAVE	MISSION VIEIO	CA	92691	Aliso Creek (J)	1721	Metals, Organics & Toxicants, Oil & Grease
RIMO PAINTING	25362	PACIFICA AVENUE	MISSION VIEIO	CA	92691	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
ERTA PRO PAINTERS	26552	SAN TORINI ROAD	MISSION VIEJO	CA	92692	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
VEST COAST RECONDITIONING	27712	SINSONTE	MISSION VIEJO	CA	92692	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
TEVEN N SWARTZ	27152	SOLEDAD	MISSION VIEJO	CA	92691	Aliso Creek (J)	1721	Metals, Organics & Toxicants, Oil & Grease
ERRY WALL PAINTING	24061	SPRIG STREET	MISSION VIEIO	CA	92691	Aliso Creek (J)	1721	Metals, Organics & Toxicants, Oil & Grease
DIETZ PAINTING CONSTRUCTION	25572	TERRENO DRIVE	MISSION VIEJO	CA	92691	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
BIG D'S CONSTRUCTION	26861	TRABUCO ROAD E352	MISSION VIEJO	CA	92691	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
OE WILSON	26575	VIA CUERVO	MISSION VIEJO	CA	92691	Aliso Creek (J)	1721	Metals, Organics & Toxicants, Oil & Grease
DAVID A GREEN PAINTING	23575	VIA EL ROCIO	MISSION VIEJO	CA	92691	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
MORRISON DAVE CUSTOM PAINTING	26521	VIA JUANITA	MISSION VIEJO	CA	92691	Aliso Creek (J)	1721	Metals, Organics & Toxicants, Oil & Grease
H PROFESSIONAL PAINTING	22616	VIA SANTIAGO	MISSION VIEIO	ca	92691	Aliso Creek (J)	1721	Metals, Organics & Toxicants, Oil & Grease
& J PAINTING & WOOD FINISH	26002	VIA VIENTO	MISSION VIEJO	CA	92691	San Juan Creek (L)	1721	Metals, Organics & Toxicants, Oil & Grease
AA CUSTOM BRICKWORK	26625	AVENIDA DESEO	MISSION VIEIO	CA	92691	San Juan Creek (L)	1741	Sediments
SIERRA ASSOCIATE	22442	MANACOR	MISSION VIEJO	GA	92692	San Juan Creek (L)	1741	Sediments
PYRAMID MASONRY	25322	POSADA LANE	MISSION VIEIO	CA	92691	San Juan Creek (L)	1741	Sediments

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Business Name	St #	Street Name	City	State	Zip Code	Watershed	SIC Code	Potential Pollutants
ALL AMERICAN HANDYMAN	21742	TEGLEY	MISSION VIEJO	CA	92692	San Juan Creek (L)	1741	Sediments
BRICK STEVE MASONRY	26671	VENADO DRIVE	MISSION VIEJO	CA	92691	San Juan Creek (L)	1741	Sediments
M& K MASONRY	24401	VIA SAN CLEMENTE	MISSION VIEJO	CA	92692	San Juan Creek (L)	1741	Sediments
NEILSON PAINTING	27758	SANTA MARGARITA PARKWAY 191 (PO Box)	MISSION VIEJO	CA	92691	Alisa Creek (J)	1742	Metals, Organics & Toxicants, Oil & Grease
CALIFORNIA WEATHERPROOFING	21746	VIA HERENCIA	MISSION VIEJO	CA	92691	San Juan Creek (L)	1742	Metals, Organics & Toxicants, Oil & Grease
MISSION VALLEY TILE & MARBLE	23392	MADERO ROAD D	MISSION VIEIO	CA	92691	Aliso Creek (J)	1743	Sediments
BELLA TILE & STONE	24166	ALICIA	MISSION VIEJO	CA	92691	Aliso Creek (J)	1752	Sediments
FLOOR GALLERY	23891	ALICIA#130	MISSION VIEJO	CA	92691	Alisa Creek (J)	1752	Sediments
MARBLE & GRANITE IMPORTS	28892	MARGUERITE #140	MISSION VIEJO	CA	92691		1752	Sediments
ROYAL FLOORING	23854	VIA FABRICANTE #C2	MISSION VIEJO	CA	92691	Aliso Creek (J)	1752	Sediments
CLASSIC HARDWOOD RESTORATION	23881	VIA FABRICANTE 507	MISSION VIEJO	CA	92691	Aliso Creek (J)	1752	Sediments
COURTESY ROOFING		CARRILLO DRIVE	MISSION VIEJO	CA	92691	San Juan Creek (L)	1761	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
SCHOLTEN ROOFING	23401	MADERO ROAD C	MISSION VIEIO	CA	92691	Aliso Creek (J)	1761	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oll & Grease
PRINCE LIMOUSINE	22752	VIA SANTA ROSA	MISSION VIEJO	CA	92691	Aliso Creek (J)	4119	Metals, Floatable Materials, Oils & Grease
PS BOAT CLEANING	22831	TINDAYA	MISSION VIEJO	CA	92692	San Juan Creek (L)	4499	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
NEW ORLEANS FRENCH DOORS	26451	VIA LOGRONO	MISSION VIEJO	CA	92691	San Juan Creek (L)	5031	
HOME DEPOT	27952	HILLCREST	MISSION VIEJO	CA	92691	San Juan Creek (L)	5211	
VISTA PAINT	24164	ALICIA	MISSION VIEJO	CA	92691	San Juan Creek (L)	5231	Metals, Organics & Toxicants, Oll & Grease
SHERWIN WILLIAMS	25800	JERONIMO ROAD 702	MISSION VIEJO	CA	92691	San Juan Creek (L)	5231	Metals, Organics & Toxicants, Oil & Grease
ALBERTSON'S	23072	ALICIA PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demanding Substances, Oil & Grease, Bacteria, Pesticides
CROWN VALLEY MARKETPLACE	27771	CENTER DRIVE	MISSION VIEJO	CA	92692	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demanding Substances, Oil & Grease, Bacteria, Pesticides
NADY'S MARKET	25222	CHARLINDA DRIVE A	MISSION VIEJO	CA	92691	Aliso Creek (J)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demanding Substances, Oil & Grease, Bacteria, Pesticides
COST PLUS WORLD MARKET #45	25262	EL PASEO	MISSION VIEJO	CA	92691	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demanding Substances, Oil & Grease, Bacteria, Pesticides
R & M PACIFIC RIM (JERONIMO SHELL)	25561	JERONIMO ROAD	MISSION VIEJO	CA	92691	Aliso Creek (J)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demanding Substances, Oil & Grease, Bacteria, Pesticides
MISSION VIEJO LIQUOR & DELI	25571	JERONIMO ROAD 18	MISSION VIEJO	CA	92691	Aliso Creek (J)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demanding Substances, Oil & Grease, Bacteria, Pesticides
7-ELEVEN	23012	LOS ALISOS BOULEVARD	MISSION VIEJO	CA	92691	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demanding Substances, Oil & Grease, Bacteria, Pesticides

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Business Name	St #	Street Name	City	State	Zip Code	Watershed	SIC Code	Potential Pollutants
OAK TREE LIQUOR	23162	LOS ALISOS BOULEVARD 106	MISSION VIEJO	ĊA	92691	Aliso Creek (J)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
MISSION RANCH MARKET	23166	LOS ALISOS BOULEVARD 116	MISSION VIEJO	CA	92691	Alisa Creek (J)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
FAST CHECK MARKET	22902	LOS ALISOS BOULEVARD A	MISSION VIEJO	CA	92691	Aliso Creek (J)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
CPS FOOD SVC	23322	MADERO ROAD B	MISSION VIEJO	CA	92691	Aliso Creek (J)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
RALPH'S	25104	MARGUERITE PARKWAY	MISSION VIEIO	CA	92692	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
TRADER JOES	25410	MARGUERITE PARKWAY	MISSION VIEJO	CA	92691	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
PAVILIONS #2210	26022	MARGUERITE PARKWAY	MISSION VIEIO	CA	92692	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
AVERY PARKWAY LIQUOR	28752	MARGUERITE PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
ANDREA'S DISCOUNT LIQUOR & DELI	27500	MARGUERITE PARKWAY 1	MISSION VIEIO	CA	92692	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
TONI 3 RAMI LIQUOR	24011	MARGUERITE PARKWAY A	MISSION VIEIO	CA	92692	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
LUCKY 1 LIQUOR	25571	MARGUERITE PARKWAY A	MISSION VIEJO	CA	92691	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
RALPH'S	27730	SANTA MARGARITA PARKWAY	MISSION VIEJO	CA	92691	Aliso Creek (J)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
SPROUTS	27765	SANTA MARGARITA PARKWAY	MISSION VIEJO	CA	92691	Aliso Creek (J)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
R & M PACIFIC RIM (SHELL)	27875	SANTA MARGARITA PARKWAY	MISSION VIEJO	ĊA	92691	Aliso Creek (J)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
7-ELEVEN	27271	TRABUCO	MISSION VIEJO	CA	92691	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
SMART & FINAL EXPRESS	26911	TRABUCO ROAD	MISSION VIEJO	CA	92691	San Juan Creek (L)	5411	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demandin Substances, Oil & Grease, Bacteria, Pesticides
SOUTH COUNTY LEXUS MISSION VIEJO	28242	MARGUERITE PARKWAY	MISSION VIEIO	CA	92692	San Juan Creek (L)	5511	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
SOUTH COUNTY FIAT/MASERATI	28400	MARGUERITE PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	5511	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
AUDI OF MISSION VIEJO	28451	MARGUERITE PARKWAY	MISSION VIEIO	CA	92692	San Juan Creek (L)	5511	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
INFINITI OF MISSION VIEJO	28471	MARGUERITE PARKWAY	MISSION VIEJO	CA	92691	San Juan Creek (L)	5511	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
MISSION VIEJO JAGUAR/LANDROVER	28701	MARGUERITE PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	5511	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
NORM REEVES ACURA MISSION VIEJO	28802	MARGUERITE PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	5511	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
O'REILLY AUTOMOTIVE	24510	ALICIA PARKWAY	MISSION VIEJO	CA	92691	Aliso Creek (J)	5531	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
UNIQUE IMPORTS	25800	JERONIMO ROAD 201	MISSION VIEJO	CA	92691	San Juan Creek (L)	5531	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
BAUM'S AUTO SUPPLY	27230	LA PAZ	MISSION VIEJO	ĊA	92692	San Juan Creek (L)	5531	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease

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Business Name	St#	Street Name	City	State	Zîp Code	Watershed	SIC Code	Potential Pollutants
AUTOZONE #5533	22942	LOS ALISOS BOULEVARD T	MISSION VIEJO	CA	92691	Aliso Creek (J)	5531	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
FREEWAY AUTO SUPPLY	28752	MARGUERITE	MISSION VIEJO	CA	92692	San Juan Creek (L)	5531	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
GREGG'S MISSION VIEJO MOBIL	23002	ALICIA PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
ARCO #3102/ PSI #574	23921	ALICIA PARKWAY	MISSION VIEJO	CA	92691	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
CROWN VALLEY 76 #6447	26411	CROWN VALLEY PARKWAY	MISSION VIEJO	CA	92691	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
ARCO CROWN VALLEY #3048	27682	CROWN VALLEY PARKWAY	MISSION VIEJQ	CA	92691	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
CHEVRON STATION #90297	27742	CROWN VALLEY PARKWAY	MISSION VIEIO	CA	92691	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
R & M SHELL STATION (TESORO)	25561	JERONIMO ROAD	MISSION VIEIO	CA	92691	Aliso Creek (J)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
ARCO LA PAZ CENTER	26001	LA PAZ ROAD	MISSION VIEJO	CA	92691	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
LA PAZ SHELL	26202	LA PAZ ROAD	MISSION VIEJO	CA	92691	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
ARCO #3101/SMOG PROS	25122	MARGUERITE PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
MOBIL 18-ADQ	26052	MARGUERITE PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
CROWN VALLEY SHELL (Tesoro)	27600	MARGUERITE PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
SHELL (TESORO)	28681	MARGUERITE PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
CHEVRON STATION #1881	26302	OSO PARKWAY	MISSION VIEJO	CA	92691	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
OSO FREEWAY UNOCAL	26282	OSO PARKWAY	MISSION VIEJO	CA	92691	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
CHEVRON STATION #202017	27650	SÁNTA MARGARITA PARKWAY	MISSION VIEJO	ĊÁ	92691	Aliso Creek (J)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
SHELL#204-5026 0623 (TESORO)	27875	SANTA MARGARITA PARKWAY	MISSION VIEJO	CA	92691	Aliso Creek (J)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
MOBIL OIL CORP #18-822	26811	TRABUCO ROAD	MISSION VIEJO	ĊA	92691	San Juan Creek (L)	5541	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
AVERY WOOD TILE & CARPET	26371	AVERY PARKWAY A	MISSION VIEJO	CA	92691	San Juan Creek (L)	5713	Trash & Debris
ARIZONA TILE	25552	EL PASEO	MISSION VIEJO	CA	92691		5713	Trash & Debris
FLOORING-R-US INC	28892	MARGUERITE PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	5713	Trash & Debris
KINGDOM FLOORING	27660	MARGUERITE PARKWAY #G	MISSION VIEJO	CA	92691		5713	Trash & Debris
OC FLOORING-FABSHOW	25106	MARGUERITE PARKWAY B	MISSION VIEJO	CA	92691		5713	Trash & Debris
COAST ORIENTAL RUG SERVICE	23052	ALICIA PARKWAY 189H	MISSION VIEJO	CA	92692	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
CARPET MASTERS	28222	AMABLE	MISSION VIEIO	CA	92692	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
CLEAN GREEN WITH CARPET KING	27906	AMBER	MISSION VIEJO	CA	92691	Aliso Creek (J)	7217	Sediments, Organics & Toxicants,
AL'S CARPET CARE SVC	26462	AMBIA	MISSION VIEJO	CA	92691	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
AAA CARPET CLEANING SVC	26778	AVENIDA SHONTO	MISSION VIEJO	CA	92691	Aliso Creek (J)	7217	Sediments, Organics & Toxicants,
CATALINA ORIENTAL RUG	21625	BOGARRA	MISSION VIEJO	CA	92691	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
J.V. NEPTUNE RESTORATION AND CLEANING	24682	CAVERNA	MISSION VIEIO	CA	92691	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
ISLANDS CARPET & TILE CLEANING	22315	CLEARBROOK	MISSION VIEJO	CA	92692	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,

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Business Name	St #	Street Name	City	State	Zip Code	Watershed	SIC Code	Potential Pollutants
MGM CARPET CLEANING	23861	CORONEL DRIVE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
COAST CARPET CLEANING	23272	EAGLE RIDGE	MISSION VIEJO	CA	92692	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
A TO Z JANITORIAL SERVICES	24885	EL CORTIJO LANE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
QWIK DRY CUSTOM CARPET CARE	26571	ESTANCIERO DRIVE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
SONSHINE CARPET	27335	JARDINES	MISSION VIEJO	CA	92692	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
LARRY'S CARPET SERVICES, INC.	23332	MADERO ROAD B	MISSION VIEJO	CA	92691	Aliso Creek (J)	7217	Sediments, Organics & Toxicants,
PARADISE CARPET CLEANERS	27681	MILANO WAY	MISSION VIEJO	CA	92691	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
EXPRESS CLEANING	24332	OLIVERA DRIVE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
A ALL DRY 24 HOUR FLOOD REMOVAL	26475	PORTOLA	MISSION VIEJO	CA	92692	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
PROCLEAN SERVICES	25942	ROBIN CIRCLE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
LAGUNA HILLS CARPET & UPHOLSTERY CLEANING	24801	SAN VINCENT LANE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
BLUE PACIFIC COMMERCIAL CARPET CLEANER	23461	VIA BURRIANA	MISSION VIEJO	CA	92691	San Juan Creek (L)	7217	Sediments, Organics & Toxicants,
MASTER BUILDING MAINTENANCE	22897	VIA CEREZA	MISSION VIEJO	CA	92691	Aliso Creek (J)	7217	Sediments, Organics & Toxicants,
ILLUSIONS UNLIMITED	25800	JERONIMO ROAD 601	MISSION VIEJO	CA	92691	San Juan Creek (L)	7231	
ROBERTS EXTERMINATING CO	21996	ANTIGUA	MISSION VIEJO	ĊA	92691	San Juan Creek (L)	7342	Pesticides
OCEANFRONT PEST CONTROL	266	CALIFORNIA COURT	MISSION VIEJO	CA	92692	Aliso Creek (J)	7342	Pesticides
QUALITY CARE TERMITE CONTROL	26072	MERIT CIRCLE 126	MISSION VIEJO	CA	92691	San Juan Creek (L)	7342	Pestícides
BEE MAN	25652	TALADRO CIRCLE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7342	Pesticides
SOUTHLAND TERMITE	25925	VIA DEL SUR	MISSION VIEJO	CA	92691	San Juan Creek (L)	7342	Pesticides
CORETECH TERMITE CONTROL	23712	VIA SAN GIL	MISSION VIEIO	CA	92691	San Juan Creek (L)	7342	Pesticides
BEE-BE-GONE	22821	VIA SANTA ROSA	MISSION VIEJO	CA	92691	Aliso Creek (J)	7342	Pestícides
MISSION POOL & SPA SUPPLIES	24186	ALICIA	MISSION VIEJO	CA	92691	San Juan Creek (L)	7389	Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen Demanding Substances, Bacteria
CHERRY 'S DETAILING	110	CALIFORNIA COURT	MISSION VIEJO	CA	92692	Aliso Creek (J)	73.89	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
CHERRY S DETAILING	.110	CALIFORNIA COOKT	MISSION VIETO	CA	92092	Allso Creek (7)	7509	Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen
DOWDING'S POOL SERVICE	26731	CALLE MARIA	MISSION VIEJO	CA	92691	San Juan Creek (L)	7389	
DOWDING'S POUL SERVICE	20/31	CALLE MARIA	MISSION VIEJO	CA	92091	San Juan Creek (C)	/389	Demanding Substances, Bacteria
BIO SWIMMING POOL CLEANING & REPAIR	21832	CAMARGO	MISSION VIEJO	CA	92691	San Juan Creek (L)	7389	Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen Demanding Substances, Bacteria
BIO SWINING POOL CLEANING & REPAIR	21032	CAWARGO	MISSION VIEW	CA	92091	Jan Juan Cleak (L)	7303	
STERLING DETAILING	27362	CELANOVA	MISSION VIEJO	CA	92692	San Juan Creek (L)	7389	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
JAMES AUTO DETAILING	2222	COUNTE	Medialiticia	CA	92692	e a consequent	7389	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
JAMES AUTO DETAILING	23324	COPANTE	MISSION VIEJO	CA	92692	San Juan Creek (L)	7389	Substances, Oil & Grease
PAMPERED PETS MOBILE PET SALON	24795	DAPHNE E	MISSION VIEJO	CA	92691	San Juan Creek (L)	7389	Nutrients, Floatable Materials, Oxygen Demanding Substances, Bacteria
NESTOR POOL AND SPA SERVICE	27262	DELEMOS	MISSION VIEJO	CA	92692	San Juan Creek (L)	7389	Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen Demanding Substances, Bacteria
AQUADOG POOL CARE	24431	ENCORVADO LANE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7389	Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen Demanding Substances, Bacteria
AQUATIC POOL CARE	24021	JUÁNENO DRIVE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7389	Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen Demanding Substances, Bacteria
								Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding

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Business Name	St #	Street Name	City	State	Zip Code	Watershed	SIC	Potential Pollutants
Statistical Items	51.11	Street Hame	- Lig	Jinia	Zip couc	Translation:	Code	Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen
LESLIE'S SWIMMING POOL SUPPLIES	24021	MARGUERITE PARKWAY A	MISSION VIEJO	ÇĀ	92692	San Juan Creek (L)	7389	Demanding Substances, Bacteria
WAGGIN WAGON PET GROOMING	26802	SADDLEBACK DRIVE	MISSION VIEIO	CA	92691	San Juan Creek (L)	7389	Nutrients, Floatable Materials, Oxygen Demanding Substances, Bacteria
Mccurdy's Pool Service	26966	SAFIRO	MISSION VIEJO	CA	92691	Aliso Creek (J)	7389	Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen Demanding Substances, Bacteria
A AND M POOL SERVICE	27846	SHEFFIELD	MISSION VIEJO	ČA	92692	San Juan Creek (L)	7389	Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen Demanding Substances, Bacteria
CLEAN CLEAN CAR WASH AUTO DETAIL	24051	SPRIG STREET	MISSION VIEIO	CA	92691	Aliso Creek (J)	7389	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
UPSCALE DETAIL BY KEITH	25203	TERRENO DRIVE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7389	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
and the second of the second o	0.120	Construction (A)	and the same of th	123	4200		19860	Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen
RELIABLE POOL SOLUTIOINS	23421	VIA BURRIANA	MISSION VIEJO	CA	92691	San Juan Creek (L)	7389	Demanding Substances, Bacteria Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen
AALL RIGHT POOL SERVICE	23632	VIA FABRICANTE	MISSION VIEJO	CA	92692	Aliso Creek (J)	7389	Demanding Substances, Bacteria
THE WALL TO THE WALL THE WALL TO THE	F . 175	2		-	100	77-7-7-7		Nutrients, Metals, Organics & Toxicants, Floatable Materials, Oxygen
DANN MANG POOL SERVICE & REPAIR	21952	VISO LANE	MISSION VIEJO	CA	92691	Aliso Creek (J)	7389	Demanding Substances, Bacteria
CALIBER COLLISION CENTER	25712	TALADRO CIRCLE A-H	MISSION VIEJO	CA	92691	Aliso Creek (J)	7532	Metals, Organics & Toxicants, Oil & Grease
MIKE'S AUTO TOPS & UPHOLSTERY	25701	TALADRO CIRCLE D	MISSION VIEJO	CA	92691	Aliso Creek (J)	7532	Metals, Organics & Toxicants, Oil & Grease
AMERICAN PERFORMANCE MOTORCYCLES	25712	TALADRO CIRCLE D	MISSION VIEJO	CA		Aliso Creek (J)	7532	Metals, Organics & Toxicants, Oil & Grease
AUTO INTERIORS-MISSION VIEJO	23602	VIA FABRICANTE	MISSION VIEIO	CA	92691	Aliso Creek (J)	7532	Metals, Organics & Toxicants, Oil & Grease
PRESTIGE AUTO COLLISION INC.	23726	VIA FABRICANTE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7532	Metals, Organics & Toxicants, Oil & Grease
MISSION VIEJO AUTO COLLISION (MVAC)	23812	VIA FABRICANTE A	MISSION VIEJO	CA	92691	San Juan Creek (L)	7532	Metals, Organics & Toxicants, Oil & Grease
AUTO CARE EXPERTS	23662	VIA FABRICANTE A	MISSION VIEJO	CA	92691	Aliso Creek (J)	7532	Metals, Organics & Toxicants, Oil & Grease
COLLINS MUFFLER & HITCH CO	25721	OBRERO DRIVE C	MISSION VIEIO	CA	92691	Aliso Creek (J)	7533	Metals, Organics & Toxicants, Oil & Grease
Salara and	Like	And substitute			4000			Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
AMERICAS TIRE COMPANY	24512	ALICIA PARKWAY	MISSION VIEJO	CA	92692	Aliso Creek (J)	7534	Substances, Oil & Grease Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
MISSION VIEJO TIRE EMPORIUM	25800	JERONIMO ROAD 602	MISSION VIEJO	CA	92691	San Juan Creek (L)	7534	Substances, Oil & Grease
MISSION VIEIO TIRE PROS	25800	JERONIMO ROAD 602	MISSION VIEIO	CA	92691	San Juan Creek (L)	7534	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Dil & Grease
AMERICAS TIRE COMPANY	28592	MARGUERITE PARKWAY	MISSION VIEJO	CA	92692	San Juan Creek (L)	7534	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
BYMAR TIRE BRAKE	25631	TALADRO CIRCLE A	MISSION VIEJO	CA	92691	Aliso Creek (J)	7534	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
LARRY'S INDEPENDENT SERVICE	25721	TALADRO CIRCLE B	11.000000000000000000000000000000000000			Aliso Creek (J)	7534	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
CONTROL CIDENT SERVICE	23/21	mentent billiott b				Aliso creek (s)	7.334	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
WTC MOTORSPORTS	23652	VIA FABRICANTE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7534	Substances, Oil & Grease
ALLEN TIRE CO #8	23854	VIA FABRICANTE E2	MISSION VIEJO	CA	92691	San Juan Creek (L)	7534	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease

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Business Name	St.#	Street Name	City	State	Zip Code	Watershed	SIC Code	Potential Pollutants
HANSON'S AUTO GLASS	24662	CAVERNA	MISSION VIEJO	CA	92691	San Juan Creek (L)	7536	Metals, Oil & Grease, Organics & Toxicants
GLAS-WELDERS	26861	TRABUCO ROAD E128	DISSION VIEW	ÇĀ	92691	San Juan Creek (L)	7536	Metals, Oil & Grease, Organics & Toxicants
MISSION VIEJO TRANSMISSION	27210	LA PAZ ROAD J	MISSION VIEIO	CA	92692	San Juan Creek (L)	7537	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
ANGEL'S EL TORO TRANSMISSION	23255	MADERO ROAD B101	MISSION VIEJO	CA	92691	Alisa Creek (J)	7537	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
AUTO TRANSMISSION & MERCEDES	25741	OBRERO DRIVE D	MISSION VIEJO	CA	92691	Aliso Creek (J)	7537	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
ACTION AUTOMOTIVE	23991	ALICIA PARKWAY	MISSION VIEIO	CA	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
PROAUTO CARE	26371	AVERY PARKWAY C	MISSION VIEJO	CA	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
COMPLETE AUTO CARE & TIRE	27913	CENTER DRIVE A	MISSION VIEJO	CA	92692	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
SOUTH COUNTY AUTO REPAIR	25752	EL PASEO	MISSION VIEJO	CA	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
ECONO LUBE N TUBE #214	25902	EL PASEO	MISSION VIEJO	CA	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
EURO PERFORMANCE WORLD	26566	GUADIANA	MISSION VIEIO	CA	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
AUTO BAHN WEST	25800	JERONIMO ROAD 200	MISSION VIEIO	CA	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
RAMONA TIRE OF MISSION VIEJO #8	27210	LA PAZ ROAD A	MISSION VIEIO	CA	92692	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
PRO-CARE AUTO	27220	LA PAZ ROAD B	MISSION VIEJO	CA	92692	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
SADDLEBACK AUTOMOTIVE#2	27220	LA PAZ ROAD H	MISSION VIEJO	CA	92692	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin Substances, Oil & Grease
MISSION VIEJO TRANSMISSION & AUTO REPAIR	27220	LA PAZ ROAD M	MISSION VIEJO	CA	92692	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin Substances, Oil & Grease
ADVANCED TECH	27210	LA PAZ ROAD P	MISSION VIEIO	CA	92692	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
PURRECT AUTO SERVICE	23255	MADERO ROAD B109	MISSION VIEJO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
ACCU AUTO SVC	23253	MADERO ROAD A104	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
FINISHLINE TIRE & AUTOMOTIVE	23253	MADERO ROAD A108	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
TONY'S AUTOMOTIVE	23253	MADERO ROAD A112	MISSION VIEJO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
	0000	W. Z 200 S. D. Z.						Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
MARK DOUGLAS MOTOR WORKS	23253	MADERO ROAD A116	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Substances, Oil & Grease Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
PACIFIC PARK AUTO CARE	23253	MADERO ROAD A120	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Substances, Oil & Grease Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
BRITISH 4 X 4	28752	MARGUERITE PARKWAY 1	MISSION VIEIO	CA	92692	San Juan Creek (L)	7538	Substances, Oil & Grease Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
AVERY AUTOMOTIVE	28570	MARGUERITE PARKWAY 111	MISSION VIEJO	CÀ	92692	San Juan Creek (L)	7538	Substances, Oil & Grease

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Business Name	St #	Street Name	City	State	Zip Code	Watershed	SIC Code	Potential Pollutants
SUNDWRENCHED MOTO WERKS	28570	MARGUERITE PARKWAY 114	MISSION VIEIO	CA	92692	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
MARGUERITE AUTO REPAIR	28752	MARGUERITE PARKWAY 5	MISSION VIEJO	CA	92692	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
JIMMY'S V-TWINS	25721	OBRERO	MISSION VIEJO	CA	92692	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
CHUCKS AUTOMOTIVE	25761	OBRERO	MISSION VIEJO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
MASTER SMOG	25761	OBRERO	MISSION VIEJO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
MISSION VIEJO MOTORS	25781	OBRERO DRIVE	MISSION VIEJO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
ORANGE COUNTY PERFORMANCE	25721	OBRERO DRIVE A	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
FIVE STAR AUTOMOTIVE	25741	OBRERO DRIVE A	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
THE MECHANIC OC	25761	OBRERO DRIVE A	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances. Oil & Grease
FREEWAY TIRE SVC	25741	OBRERO DRIVE B	MISSION VIEJO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
DEPENDABLE SERVICES & SALES [CLOSED]	25761	OBRERO DRIVE C	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
OC AUTOWORKS	25741	OBRERO DRIVE E	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
KEITH'S AUTO	25761	OBRERO DRIVE E	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
VW REPAIR	25721	OBRERO DRIVE F	MISSION VIEJO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
IMPORT AUTOWORKS	25741	OBRERO DRIVE F	MISSION VIETO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
HIGHWAY FIVE AUTO	25761	OBRERO DRIVE F	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
GERMAN CAR GARAGE	25721	OBRERO DRIVE G	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
MIKE'S AUTOMOTIVE	25721	OBRERO DRIVE G	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
- C-	25741	OBRERO DRIVE G	MISSION VIEJO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
G & A AUTOMOTIVE	1.75					Day San San		Substances, Oil & Grease Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
RAMONA TIRE	27865	SANTA MARGARITA PARKWAY	MISSION VIEIO	CA	92692	Aliso Creek (J)	7538	Substances, Oil & Grease Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandini
DRIVELINES INC	25651	TALADRO CIRCLE A	MISSION VIEJO	CA	92691	Aliso Creek (J)	7538	Substances, Oil & Grease Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
BOGART AUTOMOTIVE	25712	TALADRO CIRCLE A	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Substances, Oil & Grease Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
IMPORT SPECIALTIES	25651	TALADRO CIRCLE C	MISSION VIEJO	CA	92691	Aliso Creek (J)	7538	Substances, Oil & Grease Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
BOB MC KRAY PERFORMANCE	25672	TALADRO CIRCLE F	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Substances, Oil & Grease Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding
ACCURATE AUTO REPAIR	25675	TALADRO CIRCLE G	MISSION VIEJO	CA	92691	Aliso Creek (J)	7538	Substances, Oil & Grease

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Business Name	St #	Street Name	City	State	Zip Code	Watershed	SIC Code	Potential Pollutants
JAPANESE CAR SPECIALTIES INC	25672	TALADRO CIRCLE H	MISSION VIEJO	ĊA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin Substances, Oil & Grease
SADDLEBACK CARS	25701	TALADRO F	MISSION VIEJO	CA	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin Substances, Oil & Grease
A TO Z AUTOMOTIVE	23672	VIA FABRICANTE	MISSION VIEIO	CA	92692	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
MAAC MOTORSPORTS (CLOSED)	26362	VIA FABRICANTE	MISSION VIEJO	CA	92691		7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
BRITISH CLASSIC CAR RESTORATION	23602	VIA FABRICANTE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
EUROTECH	24002	VIA FABRICANTE 504	MISSION VIEJO	ĊĀ	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
SOUTH COUNTY BRAKE & AUTO SVC	24002	VIA FABRICANTE 507	MISSION VIEJO	CA	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
PEDRO'S AUTO REPAIR	24002	VIA FABRICANTE 508	MISSION VIEIO	CA	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
AUTOCARE EXPERTS	23662	VIA FABRICANTE À	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
ACTION TIRE COMPANY	23761	VIA FABRICANTE C & B	MISSION VIEIO	ĊA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
ELITE MOTORS INC	23725	VIA FABRICANTE F	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin Substances, Oil & Grease
SOLELY BIMMER	23854	VIA FABRICANTE G2	MISSION VIEJO	CA	92691	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
BOKKES INDEPENDENT MERCEDES SERVICE	23854	VIA FABRICANTE #4	MISSION VIEIO	CA	92691		7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
NEIGHBORHOOD CAR CARE	23761	VIA FABRICANTE A	MISSION VIEIO	CA	92691	Aliso Creek (J)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
MISSION VIEIO CAR WASH	27903	CENTER DRIVE	MISSION VIEIO	CA	92692	San Juan Creek (L)	7542	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin Substances, Oil & Grease
MISSION VIEIO AUTO SPA	23156	LOS ALISOS BOULEVARD	MISSION VIEIO	CA	92691	Aliso Creek (J)	7542	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin Substances, Oil & Grease
SPEEDY SMOG	27913	CENTER DRIVE B	MISSION VIEJO	CA	92692	San Juan Creek (L)	7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
VALVOLINE	25800	JERONIMO ROAD 300	MISSION VIEIO	CA	92691	San Juan Creek (L)	7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
JIFFY LUBE NO. 1053	27240	LA PAZ ROAD	MISSION VIEIO	CA	92692	San Juan Creek (L)	7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
E Z SMOG CHECK	27220	LA PAZ ROAD D	MISSION VIEIO	CÁ	92692	San Juan Creek (L)	7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oll & Grease
M & M SMOG	23253	MADERO ROAD 114	MISSION VIEJO	CA	92691	Aliso Creek (J)	7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
A TERRIFIC TINT	28570	MARGUERITE PARKWAY 107	MISSION VIEIO	CA	92692	San Juan Creek (L)	7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
CENTRAL AUTOCARE	25671	OBRERO DRIVE D	MISSION VIEIO	ČA	92691		7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
MESMAN MOTORS	24002	VIA FABRICANTE 509	MISSION VIEIO	CA	92691	San Juan Creek (L)	7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease
GRC PERFORMANCE	23854	VIA FABRICANTE F5	MISSION VIEIO	CA	92691	San Juan Creek (L)	7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demandin, Substances, Oil & Grease

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Business Name	St #	Street Name	City	State	Zip Code	Watershed	SIC Code	Potential Pollutants
ROSSI AUTO REPAIR	24002	VIA FABRICANTE 511	MISSION VIEJO	CA	92691	San Juan Creek (L)	7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
MIKE'S ADVANCED AUTO CARE	24002	VIA FABRICANTE 512	MISSION VIEIO	CA	92691	San Juan Creek (L)	7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
EXECU-TINT	24002	VIA FABRICANTE, #408	MISSION VIEJO	CA	92692	San Juan Creek (L)	7549	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
T & G SERVICES	27111	MANZANO	MISSION VIEIO	CA	92691	San Juan Creek (L)	7699	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
OHM SWEET OHM	25675	TALADRO CIRCLE A	MISSION VIEJO	CA	92691	Aliso Creek (J)	7699	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
LA BELLE'S VACUUM REPAIR	23381	VIA FABRICANTE 502	MISSION VIEJO	CA	92691	San Juan Creek (L)	7699	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
ARROYO TRABUCO GOLF COURSE	26772	AVERY PARKWAY	MISSION VIEJO	CA	92691	San Juan Creek (L)	7992	Sediments, Nutrients, Floatable Materials, Organics & Toxicants, Floatable Materials, Oxygen-Demanding Substances, Oil & Grease, Bacteria, Pesticides
CASTA DEL SOL GOLF COURSE	27601	CASTA DEL SOL ROAD	MISSION VIEJO	CA	92691	San Juan Creek (L)	7992	Sediments, Nutrients, Floatable Materials, Organics & Toxicants, Floatable Materials, Oxygen-Demanding Substances, Oil & Grease, Bacteria, Pesticides
CASTA DEL SOL RECREATION CENTER #1	27651	CASTA DEL SOL ROAD	MISSION VIEJO	CA	92692	San Juan Creek (L)	7997	organic materials (food wastes), oils and grease, toxic chemicals from cleaning products
MISSION VIEJO COUNTRY CLUB	26200	COUNTRY CLUB DRIVE	MISSION VIEIO	ĊA	92691	San Juan Creek (L)	7997	organic materials (food wastes), oils and grease, toxic chemicals from cleaning products
MISSION VIEIO SWIM AND RAQUET	26221	LA TIERRA CIRCLE	MISSION VIEJO	CA	92691	San Juan Creek (L)	7997	organic materials (food wastes), oils and grease, toxic chemicals from cleaning products
CASTA DEL SOL RECREATION CENTER #2	24351	VIA ALBENIZ	MISSION VIEJO	CA	92691	San Juan Creek (L)	7997	organic materials (food wastes), oils and grease, toxic chemicals from cleaning products
SADDLEBACK DRIVING RANGE	28000	MARGUERITE PARKWAY	MISSION VIEJO	ĊA	92692	San Juan Creek (L)	7999	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demanding Substances, Oil & Grease, Bacteria, Pesticides
MISSION VIEIO VOLVO	28730	MARGUERITE PARKEWAY	MISSION VIEIO	CA	92692	San Juan Creek (L)	7538	Sediments, Nutrients, Metals, Organics & Toxicants, Oxygen-Demanding Substances, Oil & Grease
COMPOSITEC	23352	MADERO ROAD STE G	MISSION VIEJO	CA	92691	Aliso Creek (J)	1.008	Nutrients, Organics & Toxicants, Floatable Materials, Oxygen-Demanding Substances, Oil & Grease, Bacteria, Pesticides

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EXHIBIT 9.2

Best Management Practices

Industrial-Commercial Factsheets Residential Factsheets





IC2. ANIMAL HANDLING AREAS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents					
Sediment	Х				
Nutrients	Х				
Floatable Materials	Х				
Metals					
Bacteria	Х				
Oil & Grease					
Organics & Toxicants					
Pesticides					
Oxygen Demanding	Х				

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Use dry cleaning methods to clean animal handling areas regularly.
- Properly collect and dispose of water when water is used for cleaning.
- 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.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

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 and contain the runoff for proper disposal.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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.).

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:

City of Mission Viejo
Public Works Department
200 Civic Center Drive
Mission Viejo, California 92691
(949) 470-3057
www.cityofmissionviejo.org



IC3. BUILDING MAINTENANCE

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents					
Sediment	Χ				
Nutrients	Х				
Floatable Materials					
Metals	Х				
Bacteria	Х				
Oil & Grease					
Organics & Toxicants					
Pesticides					
Oxygen Demanding					

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Properly collect and dispose of water when pressure washing buildings, rooftops, and other large objects.
- Properly prepare work area before conducting building maintenance.
- Properly clean and dispose of equipment and wastes used and generated during building maintenance.
- Store toxic material under cover when not in use and during precipitation events.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

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.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- If pressure washing on a landscaped 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 landscaping 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.
- 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. 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).
- 9. Use chemicals that can be recycled.
 - Buy recycled products to the maximum extent practicable

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:

City of Mission Viejo
Public Works Department
200 Civic Center Drive
Mission Viejo, California 92691
(949) 470-3057
www.cityofmissionviejo.org



IC4. CARPET CLEANING

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents				
Sediment	Χ			
Nutrients				
Floatable Materials				
Metals				
Bacteria				
Oil & Grease				
Organics & Toxicants	Х			
Pesticides				
Oxygen Demanding				

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Discharge wash water to sink, toilet, or other drain connected to the sanitary sewer system.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

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:

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- 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.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:

City of Mission Viejo
Public Works Department
200 Civic Center Drive
Mission Viejo, California 92691
(949) 470-3057
www.cityofmissionviejo.org



IC5. CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents					
Sediment	Χ				
Nutrients					
Floatable Materials					
Metals					
Bacteria					
Oil & Grease					
Organics & Toxicants					
Pesticides					
Oxygen Demanding					

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Properly collect and dispose of process water.
- Protect production, pouring, and cutting areas from stormwater runoff and runon.
- Sweep the production, pouring, and cutting areas regularly to collect loose materials.
- Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
- Use drip pans or absorbent material to catch drips from paving equipment, including equipment that is not in use.
- Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc.
- To avoid runoff, use only as much water as necessary for dust control.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

- 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 runon. Construct a berm around the perimeter of the area to prevent the runon 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.

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¹ EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices*" IC5 Concrete and Asphalt Production, Application, and Cutting

- 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.

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

Existing Development

For additional information contact:

City of Mission Viejo Public Works Department 200 Civic Center Drive Mission Viejo, California 92691 (949) 470-3057 www.cityofmissionviejo.org

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IC6. CONTAMINATED OR ERODIBLE SURFACES AREAS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Χ
Nutrients	Χ
Floatable Materials	
Metals	Χ
Bacteria	Χ
Oil & Grease	Χ
Organics & Toxicants	Х
Pesticides	Х
Oxygen Demanding	

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Protect contaminated or erodible surface areas from rainfall and wind dispersal.
- Protect materials from stormwater runoff and runon.
- Conduct routine maintenance.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- 2. Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Protect contaminated or erodible surface areas from rainfall and wind dispersal though 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.

April 1, 2017

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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 runon. Construct a berm around the perimeter of the area to prevent the runon 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.

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

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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.

For additional information contact:



IC7. LANDSCAPE MAINTENANCE

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Х
Nutrients	Х
Floatable Materials	Х
Metals	
Bacteria	Х
Oil & Grease	
Organics & Toxicants	
Pesticides	Х
Oxygen Demanding	Χ

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Properly store and dispose of gardening wastes.
- Use mulch or other erosion control measures on exposed soils.
- Properly manage irrigation and runoff.
- Properly store and dispose of chemicals.
- Properly manage pesticide and herbicide use.
- Properly manage fertilizer use.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

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.
- Consider alternative landscaping techniques such as naturescaping and xeriscaping.

2. Properly store and dispose of gardening wastes.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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.
- If re-claimed water is used for irrigation, ensure that there is no runoff from the landscaped area(s).
- 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.
- 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.
- 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.
- When conducting mechanical or manual weed control, avoid loosening the soil, which could lead to
 erosion.
- 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.
- Sweep pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.
- Use slow release fertilizers whenever possible to minimize leaching

8. 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.

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:



IC8. NURSERIES AND GREENHOUSES

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Χ
Nutrients	Χ
Floatable Materials	Χ
Metals	
Bacteria	Χ
Oil & Grease	
Organics & Toxicants	
Pesticides	
Oxygen Demanding	Х

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Properly manage irrigation and runoff.
- Properly store and dispose of gardening wastes.
- Properly store and dispose of chemicals.
- Properly manage pesticide and herbicide use.
- Properly manage fertilizer use.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

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.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- Convert paved or bare soil areas to vegetation that will retard runoff (turf grasses or other comparable plant materials) wherever possible.
- 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.
- 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.
- Sweep pavement and sidewalk if chemicals are spilled on these surfaces before applying irrigation water
- 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.
- 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. 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 softbodied 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.

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:



IC9. OUTDOOR DRAINAGE FROM INDOOR AREAS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Х
Nutrients	Х
Floatable Materials	Х
Metals	Х
Bacteria	Х
Oil & Grease	Х
Organics & Toxicants	X
Pesticides	Х
Oxygen Demanding	X

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Utilize dry cleanup methods such as sweeping for removal of litter and debris, or use of rags and absorbents for leaks and spills.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

- 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.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:



IC10. OUTDOOR LOADING/UNLOADING OF MATERIALS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Х
Nutrients	Х
Floatable Materials	
Metals	Х
Bacteria	
Oil & Grease	Х
Organics & Toxicants	Х
Pesticides	Х
Oxygen Demanding	

MINIMUM BEST MANAGEMENT PRACTICES Pollution Prevention/Good Housekeeping

- Park vehicles and conduct loading/unloading only in designated loading/unloading areas so that spills or leaks can be contained.
- Clean loading/unloading areas regularly to remove potential sources of pollutants.
- Reduce exposure of materials to rain.
- Use drip pans underneath hose and pipe connections and other leak-prone spots during liquid transfer operations, and when making and breaking connections.
- Inspect equipment regularly.
- If possible, conduct loading and unloading in dry weather.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Properly design loading/unloading areas to prevent storm water runon, runoff of spills, etc.

- Grade and/or berm the area to prevent runon.
- 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.

9.2 - 24

Avoid placing loading/unloading areas near storm drains.

Existing Development

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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.

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

Existing Development

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:



IC11. OUTDOOR PROCESS EQUIPMENT OPERATIONS AND MAINTENANCE

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Х
Nutrients	
Floatable Materials	
Metals	Х
Bacteria	
Oil & Grease	Х
Organics & Toxicants	Х
Pesticides	
Oxygen Demanding	

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Conduct activities indoors and/or under covered areas
- Inspect equipment regularly.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

- 1. Alter activities to prevent exposure of pollutants to stormwater.
 - Perform activities during dry periods.
 - Move activities indoors.
 - Replace toxic materials with benign materials.
- 2. Cover process equipment/area with a permanent roof.
- 3. Design process area to prevent stormwater runon.

Existing Development

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- Grade and/or berm the area to prevent runon.
- Position roof downspouts to direct stormwater away from the area.

4. Design process area to contain spills.

- Place equipment on an impervious surface, or install a drip pan under potential leak points.
- Construct a berm around the process equipment 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. If discharge to the sanitary sewer is not
 allowed, pump water to a tank and dispose of properly.

5. Inspect equipment regularly.

- Conduct regular and frequent inspection of equipment for leaks, malfunctions, staining on and around equipment, and other evidence of leaks.
- Develop a standard methodology for reporting inspection results.
- Develop a procedure for taking action on items in the report, responding to leaks, cleaning up spills, and completing repairs to prevent future leaks.
- **6. 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.

7. Recycled wastes 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.

Training

- 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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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).

For additional information contact:



IC12. OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND CONTAINERS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Χ
Nutrients	Χ
Floatable Materials	
Metals	Χ
Bacteria	
Oil & Grease	Х
Organics & Toxicants	Х
Pesticides	
Oxygen Demanding	

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Store materials indoors, if feasible.
- Store materials on paved or impervious surfaces.
- Protect materials stored outside from rainfall and wind dispersal.
- Protect materials stored outside from stormwater runon.
- Properly store and handle chemical materials.
- Keep outdoor storage containers in good condition.
- Conduct regular inspections of storage areas.
- 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.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

- 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.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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 runon. Construct a berm around the perimeter of the material storage area to prevent the runon 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.
 - 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.

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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).

For additional information contact:

City of Mission Viejo
Public Works Department
200 Civic Center Drive
Mission Viejo, California 92691
(949) 470-3057
www.cityofmissionviejo.org

Existing Development



IC13. OVER WATER ACTIVITIES

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	
Floatable Materials	Х
Metals	Χ
Bacteria	Χ
Oil & Grease	Χ
Organics & Toxicants	Х
Pesticides	
Oxygen Demanding	Х

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Move maintenance and repair activities on-shore, if feasible.
- Use ground cloths and/or secondary containment when painting boats on land.
- Shelter any blasting and spray painting activities.
- Post signs to indicate proper use and disposal of residual paints, rags, used oil, and other engine fluids
- Keep boat motors well-tuned to prevent fuel and lubricant leaks.
- Recycle used motor oil, diesel oil, and other fluids and parts whenever possible.
- Maintain a clean working environment.
- Properly dispose of bilge water, ballast water, and wastewater.

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Move maintenance and repair activities on-shore if feasible.

- Perform paint and solvent mixing, fuel mixing, and similar handling of liquids on-shore, to avoid spillage directly to surface water bodies.
- If minor hull surface maintenance (sanding and minor painting) is being completed, protect the water body below with secondary containment. Major hull resurfacing should occur on land.
- 2. Use ground cloths and/or secondary containment when painting boats on land.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 3. Shelter any blasting and spray painting activities.
 - Hang wind-blocking tarps to prevent blasting dust and overspray from escaping.
 - Do not conduct these activities when wind conditions are such that containment is rendered ineffective.
- 4. Post signs to indicate proper use and disposal of residual paints, rags, used oil, and other engine fluids.
- 5. Boats with inboard engines should have oil absorption pads in bilge areas that are changed when no longer useful or at least once a year.
- 6. Keep boat motors well-tuned to prevent fuel and lubricant leaks.
- 7. Recycle used motor oil, diesel oil, and other fluids and parts whenever possible.
- 8. 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.
- 9. Properly dispose of bilge water, ballast water, and wastewater.
 - Collect bilge and ballast water that has an oily sheen for proper disposal.
 - Collect and properly dispose of wash water from washing painted boat hulls.
 - Pump bilge water into storage tanks on shore for analysis, treatment and proper disposal.
 - DO NOT discharge treated or untreated sewage from vessels to harbors.
 - Empty portable toilets into approved shore side waste handling facilities and MSDs should be discharged into approved pump out stations.
 - Use as fine a filter as is practical on the ballast water intake ports to eliminate as many organisms and as much particulate matter as possible.
 - Carry out physical or chemical sterilization or neutralization of ballast water *in situ*, and subsequent neutralization of the sterilant, if required, before discharge.
 - Dump estuarine or harbor ballast water at sea and take in fresh high salinity water to eliminate both pollutants and estuarine organisms.
- 10. Minimize impacts of cleaning products.
 - Clean parts without using solvents whenever possible.
 - Use nontoxic chemicals that do not harm humans or aquatic life.
 - Use phosphate-free and biodegradable detergents for hull washing.
 - Choose cleaning agents that can be recycled.

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:



IC14. PAINTING, FINISHING, AND COATINGS OF VEHICLES, BOATS, BUILDINGS, AND EQUIPMENT

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	
Floatable Materials	
Metals	Х
Bacteria	
Oil & Grease	Х
Organics & Toxicants	Х
Pesticides	
Oxygen Demanding	

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Use drop/ground cloths.
- Shelter any blasting and spray painting activities.
- Maintain a clean working environment.
- Cover and seal nearby storm drain inlets.
- Properly clean, store, and dispose of painting, finishing, and coating materials.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

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.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- Do not conduct these activities when wind conditions are such that containment is 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 discharges
- 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, ground, or storm drain.
- Cover materials 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.
- Recycle paint, paint thinner, solvents, and other recyclable materials whenever possible.

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:

City of Mission Viejo
Public Works Department
200 Civic Center Drive
Mission Viejo, California 92691
(949) 470-3057
www.cityofmissionviejo.org

Existing Development

9.2-38



IC15. PARKING AND STORAGE AREA MAINTENANCE

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Х
Nutrients	Х
Floatable Materials	Х
Metals	Х
Bacteria	Х
Oil & Grease	Х
Organics & Toxicants	Х
Pesticides	Х
Oxygen Demanding	Х

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Conduct regular cleaning.
- Properly collect and dispose of wash water.
- Keep the parking and storage areas clean and orderly.
- Use absorbent materials and properly dispose of them when cleaning heavy oily deposits.
- When conducting surface repair work cover materials and clean paintbrushes and tools appropriately.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

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.
- Establish frequency of sweeping based on usage and field observations of waste accumulation.

2. Properly collect and dispose of wash water.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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.

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.

Existing Development

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:



IC16. POOL AND FOUNTAIN CLEANING

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Χ
Nutrients	Χ
Floatable Materials	Χ
Metals	
Bacteria	Χ
Oil & Grease	
Organics & Toxicants	Χ
Pesticides	Х
Oxygen Demanding	Х

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Prevent algae problems with regular cleaning, consistent adequate chlorine levels, and wellmaintained water filtration and circulation systems.
- Discharge pool and fountain water properly.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

- 1. Prevent algae problems with regular cleaning, consistent adequate chlorine levels, and wellmaintained 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.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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 dechlroinated 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 sewering agency.

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:



IC17. SPILL PREVENTION AND CLEANUP

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Х
Nutrients	Χ
Floatable Materials	Χ
Metals	Х
Bacteria	Х
Oil & Grease	Х
Organics & Toxicants	Х
Pesticides	Х
Oxygen Demanding	Х

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for

MINIMUM BEST MANAGEMENT PRACTICES Pollution Prevention/Good Housekeeping

- Develop procedures to prevent/mitigate spills to storm drain systems.
- Post "No Dumping" signs with a phone number for reporting illegal dumping and disposal.
- Conduct routine cleaning, inspections, and maintenance.
- Properly store and handle chemical materials.
- Protect materials stored outside from stormwater runon.
- Secure drums stored in an area where unauthorized persons may gain access to prevent accidental spillage, pilferage, or any unauthorized use.
- Identify key spill response personnel.
- Clean up leaks and spills immediately.
- Report and track spills.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

Spill Prevention

- 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.
- 3. Conduct routine cleaning, inspections, and maintenance.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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. **DO NOT** discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required
- Pass accumulated stormwater in petroleum storage areas through an oil/water separator.
- Use catch basin filtration inserts.
- **6. Protect materials stored outside from stormwater runon.** Construct a berm around the perimeter of the material storage area to prevent the runon 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. The plan should include:
 - 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).

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:

City of Mission Viejo Public Works Department 200 Civic Center Drive Mission Viejo, California 92691 (949) 470-3057 www.cityofmissionviejo.org



IC18. VEHICLE AND EQUIPMENT FUELING

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	
Floatable Materials	Х
Metals	Χ
Bacteria	
Oil & Grease	Х
Organics & Toxicants	Х
Pesticides	
Oxygen Demanding	

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Maintain clean fuel-dispensing areas.
- Utilize fueling safeguards.
- Conduct regular inspections of fueling equipment.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

- 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.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

If cleaning by washing, place a temporary plug in the downstream storm 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 runon 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.
- 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.
- 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. 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.

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
- 5. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

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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.

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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).

For additional information contact:

City of Mission Viejo Public Works Department 200 Civic Center Drive Mission Viejo, California 92691 (949) 470-3057 www.cityofmissionviejo.org



IC19. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	
Floatable Materials	
Metals	Х
Bacteria	
Oil & Grease	Х
Organics & Toxicants	Х
Pesticides	
Oxygen Demanding	

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for

MINIMUM BEST MANAGEMENT PRACTICES Pollution Prevention/Good Housekeeping

- Utilize dry cleanup methods such as sweeping try to avoid washing down work areas.
- Use drip pans and/or containers where needed.
- Inspect vehicles and equipment for leaks.
- Dispose of all waste products properly and recycle whenever possible.
- Clean storm drain inlet(s) on a regular schedule and after large storms.
- Store idle equipment under cover.
- Keep equipment clean and free of excess oil and grease.
- Remove all fluids from retired, wrecked, or salvaged vehicles.
- Dispose of solvents per instructions on the container.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

- 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 runon 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.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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.
 - Recycle greases, used oils, oil filters, antifreeze, cleaning solutions, batteries, and hydraulic and transmission fluids whenever possible.
 - 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. 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.
- 14. Reduce or eliminate use of solvents when feasible

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

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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.

For additional information contact:

City of Mission Viejo
Public Works Department
200 Civic Center Drive
Mission Viejo, California 92691
(949) 470-3057
www.cityofmissionviejo.org



IC20. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Χ
Nutrients	Χ
Floatable Materials	
Metals	Χ
Bacteria	
Oil & Grease	Х
Organics & Toxicants	
Pesticides	
Oxygen Demanding	Х

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Consider using off-site commercial washing and/or steam cleaning businesses, if feasible.
- Use on-site commercial washing and/or steam cleaning businesses capable of disposing of wastewater off-site.
- Designate an impervious indoor or outdoor area to be used solely for vehicle and equipment washing/steam cleaning.
- Clearly mark the vehicle and equipment washing/steam cleaning area.
- If the area is outdoors, cover the wash area when not in use to prevent contact with rainwater.
- Provide trash containers in wash area and empty on a regular basis.
- Use hoses with nozzles that automatically turn off when left unattended.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

- 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)

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

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. Design wash area to properly collect and dispose of wash water and/or effluent generated.
 - 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 runon.
 - 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.
- 5. If the area is outdoors, cover the wash area when not in use to prevent contact with rainwater.
- 6. Provide trash containers in wash area and empty on a regular basis.
- 7. Use hoses with nozzles that automatically turn off when left unattended.
- 8. Use biodegradable, phosphate-free detergents if possible.
- 9. 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.

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

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Public Works Department
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Mission Viejo, California 92691
(949) 470-3057
www.cityofmissionviejo.org



IC21. WASTE HANDLING AND DISPOSAL

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Χ
Nutrients	Χ
Floatable Materials	Χ
Metals	Χ
Bacteria	Χ
Oil & Grease	Χ
Organics & Toxicants	Х
Pesticides	Χ
Oxygen Demanding	Х

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Prevent waste materials from coming in direct contact with wind or rain.
- Keep waste collection areas clean.
- Secure solid waste containers when not in use.
- Regularly inspect, repair, and/or replace waste containers.
- Use all of a product before disposing of the container.
- Label and store hazardous wastes according to hazardous waste regulations.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

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 runon.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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.
- 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 if necessary.

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.

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

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For additional information contact:

City of Mission Viejo
Public Works Department
200 Civic Center Drive
Mission Viejo, California 92691
(949) 470-3057
www.cityofmissionviejo.org



IC22. EATING AND DRINKING ESTABLISHMENTS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	Χ
Floatable Materials	Χ
Metals	
Bacteria	Χ
Oil & Grease	Χ
Organics & Toxicants	Χ
Pesticides	Х
Oxygen Demanding	Х

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Use dry cleaning methods instead of water
- 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.
- Recycle and/or properly dispose of grease and oil.
- Block the storm drain when hosing or steam/pressure washing outside dumpster areas, sidewalks, and common areas.
- Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

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.

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

- 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).

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.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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.

For additional information contact:

City of Mission Viejo Public Works Department 200 Civic Center Drive Mission Viejo, California 92691 (949) 470-3057 www.cityofmissionviejo.org



IC23. FIRE SPRINKLER TESTING/MAINTENANCE

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

Provided below are specific procedures associated with this activity. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

Best Management Practices

- Contain flows onsite and/or direct the water flows to landscaped or green areas whenever possible and safe to do so without causing damage or erosion.
- 2. Divert sprinkler system flows to the sewer, when practicable and with the permission of the local sewer agency.

3. Training

- a. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- b. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
- c. Use a training log or similar method to document training.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Conduct activity on non-rainy days and for the shortest duration possible to minimize discharge volume.
- Inspect flow path and remove all debris and materials prior to testing or maintenance.

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	
Floatable Materials	
Metals	Х
Bacteria	
Oil & Grease	Х
Organics & Toxicants	
Pesticides	
Oxygen Demanding	

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

References

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IC24. DISPOSAL OF WASTEWATER GENERATED BY MOBILE BUSINESSES & OUTDOOR ACTIVITIES

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner.¹ The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	Χ
Nutrients	Χ
Floatable Materials	Х
Metals	Х
Bacteria	Χ
Oil & Grease	Χ
Toxic Organic	Χ
Pesticides	Х
Oxygen Demanding	Χ

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

 Dispose of wastewater according to the instructions below. No wastewater shall be disposed of into the storm drain system.

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Purpose of this BMP:

Existing Development

Orange County cities and the County of Orange are mandated under NPDES Permits issued by the California Regional Water Quality Control Boards to prohibit the discharge of pollutants and non-storm water runoff into the storm drain system. Therefore, untreated wastewater (including wastewater from mobile detailing, pressure washing, steam cleaning, carpet cleaning, or similar activities) shall **not** be discharged to the storm drain system.

In an effort to help businesses comply with the NPDES Permit, the cities of Orange County, County of Orange, South Orange County Wastewater Authority, Orange County Sanitation District, and Irvine Ranch

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

Water District have developed the following best management practices (BMPs) for the proper disposal of wastewater generated by mobile business operations and outdoor activities.

If you have specific questions regarding any of the BMPs herein, please call your local sewering agency or your City's NPDES Coordinator. The telephone numbers are listed at the end of this document.

1. General Best Management Practices (BMPs) and Preparation of Work Area

What should I do prior to conducting a job?

The BMPs presented below are intended to help you comply with local and state regulations that prohibit wasteater from entering the storm drain system. The following BMPs must be followed by all mobile businesses or outdoor activities of a fixed business that generate wastewater, regardless of the type of surface to be cleaned or cleaning operation to be performed:

- Evaluate the chemicals and compounds used for cleaning and reduce or eliminate the use of those that
 contain solvents, heavy metals, high levels of phosphates, or very high/very low pH that exceeds the
 local sewering agency requirements.
- Walk through the area where the cleaning will occur prior to the start of the job and identify all area drains, yard drains, and catch basins where wastewater could potentially enter the storm drain system.
- Block/seal off identified drains or catch basins using sand bags, plugs, rubber mats, or temporary berms.
- Collect all trash and debris from the project area and place them in a trash bin for disposal.
- Sweep all surface areas prior to cleaning to minimize the amount of suspended solids, soil, and grit in wastewater.
- Identify the wastewater disposal option that will be used. Whether you are discharging to landscaping
 or the sanitary sewer, it is necessary that you meet all the requirements identified below.
- Conduct mobile washing in accordance with all operating instructions provided by the equipment supplier. Maintain equipment in good working order and routinely check and test all safety features.

What methods can be used to collect wastewater at a site?

There is no specific containment method that must be used for wastewater collection/diversion. However, the system must be adequately designed so that the wastewater does not flow into an on-site or off-site storm drain inlet. All mobile and existing businesses should use one of the following methods, regardless of the surface to be cleaned or the type of cleaning operation to be performed:

Portable containment areas can be made from waterproof tarps, heavy-duty plastic, or rubber matting
equipped with berms to prevent wastewater from running into storm drain inlets or discharge off-site.
Materials that can be used for berms include sand bags or water-filled tubing. Whatever containment
material is used, it must seal tightly to the ground so that no wastewater can pass under or over the
berms.

- When power washing smaller pieces of equipment, containment devices to use may include portable vinyl swimming pools, plastic 55-gallon drums on casters, and flat metal or plastic containment pads.
- Depending on the volume of wastewater generated, it may be necessary to use a pump system, which
 may range in size from a wet-dry vacuum to a sump pump. A natural basin from which to pump can
 also be set up by establishing a slightly sloped containment area.
- Stationary or more permanent containment areas can be constructed with cement. Berms and pump systems may be used to contain wastewater and divert it to a holding tank.
- Commercial wastewater collection systems are also available for power washing. These systems can
 range from portable wash pits to self-contained water recycling systems. A list of companies selling this
 type of equipment can usually be found in the telephone book under "Pressure Washing Services and
 Equipment".
- Storm drain inlet covers can be made of an impermeable barrier such as a heavy-duty vinyl or plastic secured in place with materials such as concrete blocks, gravel bags, or sand bags. Storm drain inlet covers may also be available though commercial vendors.

<u>Note:</u> Blocking storm drain catch basin inlets in the public right-of-way (i.e. public street, or other publicly owned facility) is prohibited as a method of containment, unless expressly permitted by the municipality typically through an encroachment permit process. Wastewater should be contained on-site prior to entering the public right-of-way. Contact the local municipality for more information.

2. Wastewater Disposal Options

How can I dispose of my wastewater?

Wastewater is not allowed in the storm drain or street. However, the wastewater may be discharged to landscaping or the sanitary sewer, or it may be picked up and disposed of by a waste hauler. Please note that if you are unsure of the types of pollutants in the wastewater, laboratory analysis may be required to establish the proper disposal method.

Choose one of the three wastewater disposal options listed below based upon the following conditions:

Option 1: Discharge Wastewater to a Landscaped Area

The wastewater must meet the following requirements if discharging to landscaping:

- The pH must be between 6.5 and 8.5. This can be checked quickly and easily through the use of pH paper test strips.
- The wastewater may not contain:
 - Toxic materials.
 - o Degreasers.
 - o Pollutants that may create a fire or explosion hazard (e.g., gasoline, diesel).
 - o Solid or viscous pollutants in amounts sufficient to cause obstruction or blockage of flow.
 - o Petroleum oil, or other products of mineral oil origin.
 - Paint.

- In addition, wastewater from cleaning food-related vehicles or areas, vehicle exteriors or engines, and buildings with lead- or mercury-based paint should **not** be discharged to landscaping.
- Filter the wastewater if it contains debris, fibers, or other suspended solids.
- Ensure that the wastewater is fully contained within the landscaped area and will fully infiltrate into the ground prior to leaving the job site.

Option 2: Discharge Wastewater to the Sanitary Sewer

The wastewater must comply with the following conditions if disposed of into the sanitary sewer system:

- The wastewater temperature must be less than 140°F (60°C).
- The pH must be between 6.0 and 12.0. This can be checked quickly and easily through the use of pH paper test strips. Adjust the wastewater to a pH that is between 6.0 and 12.0. Dilution is not an effective or acceptable pretreatment.
- The wastewater quality must comply with the local sanitary sewer district's discharge limits and requirements. The wastewater should not contain large volumes or concentrations of:
 - o Pollutants that may create a fire or explosion hazard (e.g., gasoline, diesel).
 - o Solid or viscous pollutants in amounts sufficient to cause obstruction or blockage of flow.
 - o Petroleum oil, non-biodegradable cutting oil, or other products of mineral oil origin.
 - Oil based paint.

Prior to surface washing, you must exercise any reasonable means to eliminate large volumes or concentrations of the above listed pollutants. Common methods to eliminate standing pools of pollutants include the placement of absorbent to adsorb the pollutant, dry-sweeping the absorbent, and disposing of the absorbent properly.

- No wastewater shall be discharged into any publicly owned sewer manholes without the sewer agency's written authorization.
- Filter the wastewater if it contains debris, fibers, or other suspended solids.
- If chemicals (e.g., solvents or acids) are used during the cleaning process, additional precautions
 may be needed. Contact your local sanitation district to learn if wastewater containing these
 chemicals requires pretreatment before discharge to the sanitary sewer or if it needs to be treated
 as hazardous waste.
- Ensure that the wastewater is released at a flow rate and/or concentration, which will not cause
 problems, pass through, or interference with the sewerage facilities. Generally, if you are using a
 privately owned cleanout, sink, toilet, or floor drain at a client's property, and the flow does not
 backup, the flow amount will not cause problems, pass through, or interference with the sewerage
 facilities.
- Utilize an approved discharge point such as:

- Privately owned cleanout (or sink, toilet or floor drain), oil/water separator, or below ground clarifier at the client's property where the wash water is generated;
- Privately owned industrial sewer connection at the client's property where the wash water is generated;
- Waste hauler station at sanitary sewer facility; and
- Any other disposal points approved by the sanitary sewer facility.
- Maintain a logbook of all discharges.

Option 3: Dispose of Wastewater Using a Professional Hazardous Waste Hauler

Wastewater that can be characterized in any of the following ways must be disposed of using a hazardous waste hauler:

- Is corrosive (as indicated by a pH value of less than 5.5) or caustic (as indicated by a pH value of greater than 10.0).
- Contains a pollutant that may create a fire or explosion hazard (e.g., gasoline, diesel fuel).
- Contains solid or viscous pollutants in amounts sufficient to cause obstruction or blockage of flow.
- Contains petroleum oil, non-biodegradable cutting oil, or other products of mineral oil origin.
- Contains other potential hazardous wastes. Examples of other potential hazardous wastes include:
 - Wastewater generated from power washing old paint off a building. Paint chips need to be collected, evaluated, and disposed of properly. Paint chips cannot be left on the ground at the job site. Old paint stripped off commercial buildings may contain metals (e.g., lead, chromium, cadmium, and mercury), causing it to be a regulated hazardous waste.
 - Wastewater used in conjunction with certain solvents and degreasing agents, which may cause the wastewater to be classified as a listed or characteristic hazardous waste.

You must comply with the following conditions if a hazardous waste hauler is used:

- Ensure that the waste hauler is certified by the appropriate sanitary sewering agency and the
 Orange County Health Care Agency, is Hazardous Waste DOT certified, and is complying with
 applicable discharge regulations, which may include obtaining necessary permits and conducting
 water quality monitoring requirements. Please contact the Orange County Health Care Agency
 and/or your local fire department for specific requirements.
- Identify the wastes involved and determine if a hazardous waste has been generated.
- Maintain a logbook of all discharges and hazardous waste manifests, if applicable.

For additional information contact:

City of Mission Viejo
Public Works Department
200 Civic Center Drive
Mission Viejo, California 92691
(949) 470-3057
www.cityofmissionviejo.org

South Orange County Wastewater Authority Industrial Waste Administrator 34156 Del Obispo Street Dana Point, California 92629 (949) 234-5412 www.socwa.com

Moulton Niguel Water District 27500 La Paz Road Laguna Niguel, California 92677-3489 (949) 425-3553 www.mnwd.com

El Toro Water District 24251 Los Alisos Boulevard Lake Forest, California 92630 (949) 837-7050 x 224 www.etwd.com

Santa Margarita Water District 26111 Antonio Parkway Las Flores, California 92688 (949) 459-6581 www.smwd.com



Parked automobiles may contribute pollutants to the storm drain because poorly maintained vehicles may leak fluids containing hydrocarbons, metals, and other pollutants. 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. The pollution prevention activities outlined in this fact sheet should be used to prevent the discharge of pollutants to the storm drain system.

Think before parking your car. Remember - *The ocean starts at your front door.*

Required Activities

- If the automobile is leaking, immediately place a pan or similar collection device under the automobile. Have the vehicle fixed as soon as possible. It is against the law to allow vehicles to drip vehicle fluids onto the City's streets.
- Use dry-cleaning methods to remove any materials deposited by vehicles (e.g., adsorbents for fluid leaks, sweeping for soil clod deposits).

Recommended Activities

- If possible, remove vehicles from the street on designated street sweeping day.
- If possible, limit vehicle parking to covered areas.
- Perform routine maintenance to minimize fluid leaks, and maximize fuel efficiency.



Automobile repair and maintenance activities have the potential to contribute pollutants directly to storm drain systems primarily through spills or the dumping of waste fluids. Automotive fluids, such as oils, greases, and solvents, are hydrocarbon based, and may contain metals, chlorinated hydrocarbons, and other toxic compounds. Removal of caked dirt and grime from an automobile increases the sediment load to the storm drain system. The pollution prevention activities outlined in this fact sheet are used to prevent the discharge of pollutants to the storm drain system.

Think before conducting automobile repair and maintenance activities. Remember - *The ocean starts at your front door.*

Required Activities

 Recycle used oil and antifreeze by taking them to service stations and otherrecycling centers. Never pour oil in storm drains or other areas. Contact theCity of Mission Viejo for a list of certified collection centers that will take thiswaste for free.



- Do not perform repair and maintenance activities during rain events.
- Immediately clean up and contain any spills. Dispose of all waste and adsorbent materials properly.
- Store hazardous materials and wastes (including, but not limited to, fluids, solvents, parts containing fluids, batteries) indoors, under cover, or in watertight containers.
- Perform automobile maintenance and repairs over impervious surfaces such as concrete, so spills and waste material should be readily cleaned up. Use drip pans, plastic sheeting, etc., to contain spills and waste material.
- Dispose of cleaning solvents at a designated hazardous waste collection center.

Recommended Activities

- Conduct auto repair activities at a commercial repair facility
- Perform automobile repair and maintenance activities under a covered area.
- Do not buy fluids containing target pollutants (e.g., degreasers containing PERC).
- Monitor parked or stored vehicles and equipment for leaks and place pans under leaks to collect fluids for proper disposal or recycling.

CITY OF MISSION VIEJO REQUIREMENTS FOR INDIVIDUAL RESIDENTIAL AUTOMOBILE WASHING



Automobile washing activities have the potential to contribute pollutants because road dust washed from vehicles may contain metals and hydrocarbons. Any leaking fluids washed from the automobile may also be carried to the storm drain by the wash water. Detergents used for automobile washing often contain phosphorus and foaming agents, which contribute to the degradation of our streams and creeks. The pollution prevention activities outlined in this fact sheet should be used to prevent the discharge of pollutants to the storm drain system.

Think before conducting automobile washing activities. Remember - *The ocean starts at your front door.*

Required Activities

- Shake floor mats into trash can or vacuum to clean. Do not shake over ground.
- If using cleaners (such as acid-based wheel cleaners) use a rag to wipe them on and off, do not rinse them off with water.
- If possible, divert runoff from automobile washing to a grassy surface large enough to contain and allow complete infiltration/percolation into the ground.
- Dispose of excess wash water into the sanitary sewer (i.e., via sink or toilet) or onto a landscaped area that will allow for complete infiltration.
- Conduct engine degreasing at a commercial facility that is set up to handle that type
 of waste.

Recommended Activities

- When possible, use commercial wash facilities.
- Wash vehicles over pervious surfaces such as lawns and gravel areas.
- Choose soaps, cleaners, or detergents labeled "non-toxic", "phosphate free", or "biodegradable". Vegetable- and citrus-based products are typically safest for the environment.
- Turn off water when not actively washing down automobile.
- If available, use established neighborhood wash areas, where runoff is properly controlled and managed.

9.2-74



CITY OF MISSION VIEJO REQUIREMENTS FOR THE DISPOSAL OF GREEN WASTE

Green waste entering the storm drain may clog the system creating flooding problems. Green waste washed into our creeks and the ocean create an oxygen demand as they decompose, reducing the available oxygen for aquatic life. Pesticide and nutrient residues may be carried to our creeks and ocean with the green waste. The pollution prevention activities outlined in this fact sheet should be used to prevent the discharge of pollutants to the storm drain system.

Think before disposing of any green waste – Remember - *The ocean starts at your front door.*

Required Activities

- Green waste cannot be disposed of in the street, gutter, public right-of-way, or storm drain. Dispose of green waste in the receptacle provided by the City's waste hauler. If the quantities are too large, arrange a pick up with the local waste hauler.
- After conducting yard or garden activities, sweep the area and properly dispose of the clippings and waste. Do not sweep, wash, or blow clippings into the street or gutter.

Recommended Activities

- Utilize a commercial landscape company/gardener to conduct the landscape activities and waste disposal. (Monitor their performance to make sure they are complying with these requirements).
- Utilize native plants and drought-tolerant species to reduce the water use and green waste produced.
- Use a lawn mower that has a mulcher so that the grass clippings remain on the lawn and do not have to be collected and disposed of.
- Compost materials in a designated area within the yard.
- Recycle lawn clippings and green waste in the receptacles provided by the City's waste hauler.

9.2-75



Pet waste left in the environment may introduce solids, bacteria, and nutrients to the storm drain. 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). The pollution prevention activities outlined in this fact sheet should be used to prevent the discharge of pollutants to the storm drain system.

Think before you dispose of any pet wastes. Remember - **The ocean starts at your front door**.

Required Activities

- All pet wastes must be picked up and properly disposed of. Pet waste should be disposed of in the regular trash, flushed down a toilet, or composted as type and quantities dictate.
- In order to properly dispose of pet waste, carry bags, pooper-scooper, or equivalent to safely pick up pet wastes while walking with pets.
- Bathe pets indoors and use less toxic shampoos. When possible, have pets professionally groomed.
- Properly inoculate your pets in order to maintain their health and reduce the possibility of pathogens in pet wastes.



CITY OF MISSION VIEJO REQUIREMENTS FOR HOME AND GARDEN CARE ACTIVITIES

HOME CARE

Many hazardous materials may be used in and around residences during routine maintenance activities (such as: oils, paints, cleaners, bleaches, pesticides, glues, solvents, and other products). Improper or excessive use of these products can increase the potential for pollutants to be transported to the storm drain by runoff. The pollution prevention activities outlined in this fact sheet should be used to prevent the discharge of pollutants to the storm drain system.

Think before conducting home care activities. Remember - The ocean starts at your front door.

Required Activities

- Clean out painting equipment in an area where the waste can be contained and properlydisposed of (preferably into the sewer). Use a sink connected to the sewer to clean brushes, rollers, etc. It is illegal to wash out paint in the gutter, street, or any other area which ultimately drains to the storm drain system. Note: oil-based paints/products should be disposed of at a household hazardous waste center.
- Rinse off cement mixers and cement laden tools in a contained washout area. Dispose of dried concrete waste in household trash.
- If safe, contain, clean up, and properly dispose all household hazardous waste spills. If an unsafe condition exists, call 911 to activate the proper response team.
- Household hazardous materials must be stored indoors or under cover, and in closed and labeled containers. Dispose of them at a household hazardous waste center.
- Household wash waters (e.g., washer machine effluent, mop water, etc.) must be disposed of in the sanitary sewer.
- Pool and spa water may be discharged to the storm drain if residual chlorine is less than 0.1 mg/L, the pH is between 6.5 and 8.5, and the water is free from any unusual coloration and filter media.
 Pool filter media must be contained and disposed of properly.

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Recommended Activities

- Only purchase the types and amounts of materials needed.
- Share unused portions of products with neighbors or community programs (latex paint).

GARDEN CARE

Garden activities may contribute pollutants via soil erosion, green waste, fertilizer and pesticide Plant and garden care activities such as landscape maintenance, fertilization, and pesticide application have the potential to discharge significant quantities of pollutants to the storm drain system. Non-vegetated surfaces may allow for significant erosion leading to high sediment loads. Other pollutants such as pesticides may adsorb into the soil particles and be transported off site. Excess fertilizer and pesticide pollutants from over application may be carried to the storm drain by dissolving in irrigation runoff or rainwater. Green wastes may also adsorbed contain organic matter and mav have fertilizers and pesticides.

Excessive irrigation is often the most significant factor in home and garden care activities. Pollutants may dissolve in irrigation water and then be transported to the storm drain, or particles and materials coated with fertilizers and pesticides may be suspended in the irrigation flow and carried to the storm drain. The pollution prevention activities outlined in this fact sheet should be used to prevent the discharge of pollutants to the storm drain system.

Think before conducting garden care activities. Remember - The ocean starts at your front door.

Required Activities

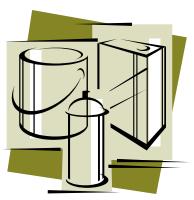
- Irrigation systems must be properly adjusted to reflect seasonal water needs.
- Minimize the use of pesticides and fertilizers. Read labels and follow the directions to avoid improper use. Do not apply chemicals if it is windy or about to rain.
- Properly clean up and dispose of spills of gardening chemicals, fertilizes, or soils. If possible, return the spilled material to the container for future use.
 Never use a hose to wash down spills into the gutter.
- Lawn and garden care products must be stored in closed labeled containers, in covered areas, or off-ground and under protective tarps.
- Household hazardous waste must be properly disposed at a household hazardous waste center.
- Cover non-vegetated surfaces to prevent erosion.

Recommended Activities

- Use drought- and insect-resistant landscaping.
- Cultivate garden often to control weeds.
- Use integrated pest management (IPM). Planting pest-repelling plants (e.g., marigolds) or using pest-eating insects (e.g., ladybugs) may reduce the need for pesticides.

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- Do not leave food (human or pet) outside overnight.
- Remove fruit and garden waste.



HOUSEHOLD HAZARDOUS WASTE

Household hazardous wastes (HHW) are defined as waste materials which are typically found in homes or similar sources, which exhibit characteristics such as: corrosivity, ignitability, reactivity, and/or toxicity, or are listed as hazardous materials by EPA.

List of most common HHW products:

Drain openers Oven cleaners

Wood and metal cleaners and

Automotive oil and fuel additives Grease and rust solvents

Carburetor and fuel injection

cleaners Starter fluids

Starter fluid Batteries

Paint Thinners

Paint strippers and removers

Adhesives

Herbicides

Pesticides

Fungicides/wood preservatives

Many types of waste can be recycled, however options for each waste type are limited. Recycling is always preferable to disposal of unwanted materials. All gasoline, antifreeze, waste oil, and lead-acid batteries can be recycled. Latex and oil-based paint can be reused, as well as recycled. Materials that cannot be reused or recycled should be disposed of at a properly permitted landfill.

Think before disposing of any household hazardous waste. Remember - *The ocean starts at your front door.*

The California Integrated Waste Management Board has a Recycling Hotline (800) 553-2962, that provides information and recycling locations for used oil.

RECYCLE USED OIL

Required Activities

- Dispose of HHW at a local collection facility. Call (714) 834-6752 for the household hazardous waste center closest to your area. The City of Mission Viejo also holds an annual Household Hazardous Waste collection day within the City once per year.
- Household hazardous materials must be stored indoors or under cover, and in closed and labeled containers.
- If safe, contain, clean up, and properly dispose all household hazardous waste spills. If an unsafe condition exists, call 911 to activate the proper response team.

Recommended Activities

- Use non-hazardous or less-hazardous products.
- Participate in HHW reuse and recycling. Call (714) 834-6752 for participating household hazardous waste centers.

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For additional information contact: City of Mission Viejo Public Works Department 949-470-3057

Local Implementation Plan Existing Development



Excessive irrigation and/or the overuse of water are often the most significant factor in transporting pollutants to the storm drain system. Pollutants from a wide variety of sources including automobile repair and maintenance, automobile washing, automobile parking, home and garden care activities and pet care may dissolve in the water and can be transported to the storm drain. In addition, particles and materials coated with fertilizers and pesticides may be suspended in the flow and be transported to the storm drain.

Hosing off outside areas to wash them down not only consumes large quantities of water, but also transports any pollutants, sediments, and waste to the storm drain system. The pollution prevention activities outlined in this fact sheet should be used to prevent the discharge of pollutants to the storm drain system.

Think before using water. Remember - The ocean starts at your front door.

Required Activities

- Irrigation systems must be properly adjusted to reflect seasonal water needs.
- Do not hose off outside surfaces to clean; sweep with a broom instead. If this is not
 adequate, use a mop and dispose of the water in a sink or toilet. It is illegal to wash
 off the sidewalk, patio, or driveway if the water will flow into the gutter and ultimately
 the storm drain.

Recommended Activities

- Fix any leaking faucets and eliminate unnecessary water sources.
- Use drought-tolerant landscaping to reduce the watering needs.
- Do not over-water lawns or gardens. Over-watering wastes water and promotes diseases.
- Wash automobiles at a commercial car wash.



CITY OF MISSION VIEJO REQUIREMENTS FOR THE DISPOSAL OF TRASH/WASTE

Rotting food and trash often contain high levels of bacteria. If this trash/waste is spilled in the street or gutter or on the ground, it may ultimately be washed into our creeks and into the ocean untreated. Unlike our sewer system, storm drains flow directly into our creeks and the ocean without any disinfection. High bacteria levels can cause health risks to humans who come into contact with this water. In addition, high bacteria levels result in beach closures.

Help Protect the Environment, keep your lids closed! Remember - The ocean starts at <u>your</u> front door.

Trash cans and dumpsters left open/uncovered can pollute the environment in several ways. Here are just a few:

- Rainwater that collects inside can leak out carrying pollutants and bacteria into our creeks and the ocean untreated.
- Wind can carry trash out into our streets and neighborhoods.
- Wildlife animals and rodents can gain access to this waste, which can propagate the spread of disease and bacteria.

There are several things you can do to help.

- Always keep trashcan lids closed. Waste Management of Orange County will replace residential containers and commercial dumpsters in Mission Viejo <u>at no charge</u> if they have missing or damaged lids, leak, or are in disrepair. Contact Waste Management Customer Service Center at 949-642-1191 to arrange for a replacement.
- Avoid overfilling trashcans. Contact Waste Management to obtain additional containers if your existing container is not big enough to handle all of your waste. (additional Green Waste and Recycling Containers are FREE!)
- Never hose down trashcans or trash enclosure areas if the water will run out into the street
 or gutter. This water will likely contain pollutants and bacteria that will flow directly into our
 creeks and the ocean untreated. In addition, this is illegal if the water will ultimately enter the
 storm drain system. These areas should be cleaned by sweeping and/or mopping (used
 mop water should be disposed of in a sink or toilet).
- Remove your trash containers from the street as soon as possible. Typically, the street sweeper is scheduled to be in your neighborhood the day after your trash collection day, every other week. When trash containers, vehicles, basketball hoops, or boats are in the street, the sweepers must go around them and their effectiveness is drastically reduced.
- For more information about what you can do to prevent stormwater pollution, call the Public Works Department at 949-470-3095.

EXHIBIT 9.3 Best Management Practices Inspection Forms





INDUSTRIAL/COMMERCIAL FACILITIES WATER QUALITY INSPECTION

MISSION VIEJO MUNICIPAL CODE CHAPTER 6.61.100 STORMWATER MANAGEMENT

INSPECTOR NAME:	Inspection Date:	TIME:	□ AM □ PM			
FACILITY NAME:		BUSINESS TYPE: INDUSTRIAL COMMERCIAL				
CONTACT NAME: ADDRESS: PHONE:		☐ ROUTINE INSPECTION ☐ RESPONSE TO COMPLAINT ☐ FOLLOW-UP INSPECTION				
	5-50%	WATERSHED: SIC CODE: SIC DESCRIPTION:				
IS FACILITY COVERED UNDER A STATE PERMIT? (CHECK ALL THAT APPL ☐ INDUSTRIAL GENERAL PERMIT ☐ NON-EXPOSURE CERTIFICATION ☐ NOTICE OF INTENT ☐ SWPPP ON-SITE ☐ WDID:	□ NONE □ EDUCATIONAL MATERIALS	SSUED: Administrative Citation Stop Work Order Cease & Desist Order				
ACTIVITIES (FACT SHEET)	ORRECTIVE 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—I	C11					
5. OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND CONTAINER	rs—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						
☐ PHOTOS TAKEN 12. OTHER COMMENTS: ☐ BMP INFORMATION PE	ROVIDED					
CORRECTIVE ACTION(S)	CIES: BY: SULT:					
This report is furnished to the facility representative as a measure Your facility may be subject to an enforcement action if the noted of the correction of deficiencies noted above, please contact the Department of the Correction of Department of Depart	deficiencies are not corrected by	To review and				

Printed Name:

Date:

Facility Representative's Signature*

^{*}Signature indicates that the above items were discussed and a copy of the inspection report was received.



CITY OF MISSION VIEJO STORM WATER QUALITY INSPECTION FORM FOR RESTAURANTS

			PERSON:				
DRESS: PHONE NO							
POLLUTANT DISCHARGE POTENTIAL: TRASH BACTERIA [ASE		
REASON FOR INSPECTION: ANNUAL: (DATE)		[J FOL	LOW-L	JP: (DATE)		
OTHER:							
BMP IMPLEMENTATION				ADEQUATE			
DIVIP TIVIPLEIVIENTATION			ADEQUATE	DEQ			
		N/A	DEGI	NOT A			
TRAINING		ž	ΙΨ	ž	COMMENT	s	
ANNUAL EMPLOYEE TRAINING							
DOCUMENTATION OF TRAINING							
ADEQUATE TRAINING PROVIDED							
CONNECTIONS							
STORM DRAIN INLET LABELING							
REVIEW FACILITIES FOR ILLICIT CONNECTIONS AND ILLEGAL DISCHARGES							
STORM DRAIN CONVEYANCE SYSTEM/STRUCTURES MAINTAINED							
MATERIALS AT HAND AND EMPLOYEES TRAINED IN SPILL CLEANUP SOPS							
TRASH STORAGE/DISPOSAL AREAS	1			I			
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				<u> </u>			
WASHING OF MATS IN PROPER AREAS	Т						
PROTECTION OF STORM DRAIN INLETS DOWNHILL OF LOADING/UNLOADING AREA	\S						
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 PERVIOUS AREAS AND AWAY FROM WORK AREAS	S						
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				ı			
PREVENT SPILLS, LEAKS, OVER-APPLICATION OF CHEMICAL LANDSCAPING PRODU	UCTS						
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				<u> </u>			
REPORT SIGNIFICANT SPILLS TO CITY AND/OR OTHER AGENCIES	Т						
NEI ON GIONI IOAN OF ILLO TO OTT AND/ON OTHER AGENGIES							
ADDITIONAL COMMENTS							
MANAGER'S AND/OR OWNER'S SIGNATURE:					DATE:		
					DATE:		
INSPECTOR'S SIGNATURE:		DATE			TIME:		

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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 an 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/ILLICIT 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 Services Operations Manager

Telephone: 949-470-3095

Address: 200 Civic Center, Mission Viejo, CA 92691

Title: Storm Water Program Manager

Telephone: 949-470-8419

Address: 200 Civic Center, Mission Viejo, CA 92691

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: Storm Water Program Manager

Telephone: 949-470-8419

Address: 200 Civic Center, Mission Viejo, CA 92691

Title: City Engineer P49-470-3079

Address: 200 Civic Center, Mission Viejo, CA 92691

Title: Public Services Operations Manager

Telephone: 949-470-3095

Address: 200 Civic Center, Mission Viejo, CA 92691

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. D02-076, 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 Mission Viejo 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 by calling 949-470-3000, through the Mission Viejo Life app, or through the Countywide water pollution reporting hotline number 1-877-89SPILL or www.myoceservices.ocgov.com.

10.2.3 Detection and Elimination of Illegal Discharges

The City of Mission Viejo 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 Mission Viejo 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
 - o Cleanup Costs
 - o 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 Mission Viejo 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-our 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 949-470-3000 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:

- <u>Notification to Other Agencies</u>—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 Mission Viejo'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 Mission Viejo 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

Moulton Niguel Water District, El Toro Water District, 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 Mission Viejo detects and eliminates illicit connections within its municipal storm drain system.

Any illicit connection identified by the City of Mission Viejo 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 Mission Viejo 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 Mission Viejo 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 Mission Viejo 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 Mission Viejo 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.