



MUNICIPAL URBAN RUNOFF REQUIREMENTS MANUAL



Chapter 1 Introduction



This *Municipal Urban Runoff Procedures Manual* (Manual) details procedures and requirements of the City of Oceanside, which were developed by the City of Oceanside (City) as part of the City's Jurisdictional Urban Runoff Management Program (JURMP) and the City's Clean Water Program. The City produced this Manual to provide guidance for operations and maintenance as well as to standardize procedures for inspection and enforcement.

1.1 How to Use this Manual

This Manual is provided to assist municipal staff in complying with the California Regional Water Quality Control Board, San Diego Region (RWQCB) Urban Runoff Order 2007-001. Information is provided to assist municipal staff in determining the applicability of the requirements and it details the requirements and procedures for which the City must comply.

This Manual is divided into the following four chapters:

- Chapter 1** Provides an introduction to the Manual and a brief overview of its purpose and relevance
- Chapter 2** Describes the general applicability of the requirements of this Manual and lists the general requirements and procedures of the City
- Chapter 3** Describes Activity Specific BMPs
- Chapter 4** Summarizes inspection, enforcement, and reporting procedures of the City

1.2 What are Urban Runoff and Storm Water?

The terms, Urban Runoff and storm water (sometimes written as one word, "stormwater"), are commonly used in discussions about the quality of water in urbanized areas. These terms are often used interchangeably and, therefore, are confusing. Urban Runoff refers to water that originates in urbanized areas. Sources of Urban Runoff include precipitation, industry discharges, leaks, washing, irrigation, and natural springs. Storm water refers to water generated from precipitation during a storm event. However, in some cases inconsistent with its definition, storm water is used to refer to or to include Urban Runoff not exclusively resulting from precipitation. Inversely, the definition of non-storm water is water that is not the direct product of storm precipitation such as water from industry discharges, leaks, washing, irrigation, and springs. Therefore, Urban Runoff is composed of both storm water and non-storm water.

Regardless of the terminology, water located in urbanized areas and the quality of that water is of the utmost importance. The water in urbanized areas drains to the creeks, lakes, lagoons in the City, and ultimately to the ocean. Many people recreate and fish in these waters, and still others enjoy the plants and wildlife that these aquatic habitats support. All water used in the homes and businesses in the City drain to the ocean, creeks, and lakes. Spills, trash, and pollutants wash from properties and roads into the public drainage system, which flows directly to these water bodies.

1.3 Background

In February 2001, the RWQCB issued a National Pollutant Discharge Elimination System (NPDES) Order, or permit, that regulates storm water discharges from the City's public drainage system, referred to as the MS4 or Storm Water Conveyance System. The Order (NPDES Order CAS0108758) required the City to develop and implement a JURMP that identified and described the methods that the City uses to eliminate significant pollutants from the City's Storm Water Conveyance System. As part of the Order, the City was required to implement a plan to eliminate pollutant discharges from municipal areas (often referred to as facilities)

and activities by requiring the implementation of appropriate Best Management Practices (BMPs) at applicable sites and situations. BMPs are activities, practices, procedures, or facilities implemented to avoid, prevent, or reduce pollution of our Storm Water Conveyance System and Receiving Waters.

On January 24, 2007, an updated permit, Order No. R9-2007-001 was released. This new Municipal Permit required each Copermittee, as defined in Section B of the Municipal Permit, to update its JURMP document to comply with the new requirements. This BMP Manual has been updated to reflect changes to the City's JURMP document.

BMPs for all Municipal Areas and Activities should achieve the Maximum Extent Practicable (MEP) performance standard. In general, implementation requirements for Municipal Areas and Activities are

primarily non-structural BMPs, such as, controlling sources of pollutants and altering operational activities to reduce the potential for pollution. Structural BMPs such as treatment systems and devices are typically required when non-structural BMPs alone cannot achieve adequate reduction of pollution potential. In addition, if the City is determined to be negatively impacting water quality, the City may implement additional BMP requirements that involve non-structural and structural measures.

This Manual provides BMPs that are developed based on the appropriate performance standards for various Municipal Areas and Activities. The BMPs are organized based on type of municipal facilities, locations of the facilities, and types of municipal activities being conducted.



Chapter 2

Requirements of All Municipal Areas and Activities



2.1 Applicability

This chapter defines BMP requirements of all Municipal Areas and Activities within the City, including activities of leased municipal areas and contractors employed to do work for the City.

Leased or Contracted Municipal Areas and Activities

Municipal areas and activities that are leased or contracted are subject to the requirements in this Manual. The leasee or contractor will be subject to the applicable Urban Runoff requirements of the City Municipal Code, and the City's *Commercial Urban Runoff Requirements Manual* and the *Industrial Urban Runoff Requirements Manual*, where applicable. Compliance with these regulations by the leasee or contractor will be adequate to comply with the procedures identified in this Manual. However, the City manager or supervisor for the area or activity should inspect the area or activity to ensure adequate implementation of Urban Runoff requirements and leases and contracts should hold the leasee or contractor responsible for all Urban Runoff compliance related to the area or activity.

Municipal Construction Activities

Municipal construction activities are not covered by this Manual. Municipal construction activities should comply with the regulations set forth in the City's *Construction Urban Runoff Requirements Manual*.

2.2 General Requirements

Municipal areas and activities are required to comply with two interrelated sets of directives; (1) compliance with applicable discharge prohibition requirements, and (2) implementation of BMPs to prevent non-storm water discharges and to reduce contaminants in Urban Runoff. Regardless of their

categorization or prioritization, all Municipal Areas and Activities are subject to the applicable BMP requirements summarized in this section. Failure to comply with applicable discharge prohibitions may be considered evidence of an inadequate BMP program, although BMPs can be determined as inadequate prior to the occurrence of actual discharges.

2.2.1 Discharge Prohibitions

Without exception, discharges of both storm water and non-storm water to the City's Storm Water Conveyance System or Receiving Waters (see Definitions section for details) are prohibited if the discharge contains pollutants that have not been reduced to the MEP.

This prohibition establishes a general BMP standard that must be met by all Dischargers for storm water or non-storm water discharges. In essence, it requires the application of BMPs to prevent discharges in violation of the City Municipal Code and the RWQCB Order.

Categorical Exemptions

With minor exceptions, non-storm water discharges are prohibited to the City's Storm Water Conveyance System and Receiving Waters. The City has limited discretion in determining whether selected categories of non-storm water discharges must also be prohibited. The following seventeen categories of non-storm water discharge are currently allowable as long as pollutants in the discharges are reduced to the MEP:

Diverted stream flows

Rising groundwaters

Uncontaminated groundwater infiltration [as defined in the *U.S. Code of Federal Regulations*, Chapter 40, Part 35.2005(20)]

Uncontaminated pumped groundwater

Foundation drains

Springs

Water from crawl space pumps

Footing drains

Air conditioning condensation
Flows from riparian habitats and wetlands
Water line flushing
Landscape irrigation
Discharges from potable water sources not subject to NPDES Permit No. CA6679001, other than water main breaks
Irrigation water
Lawn watering
Individual residential vehicle washing
Dechlorinated swimming pool discharges.

As further information becomes available, the City may determine that some or all of these discharge types are significant sources of pollutants to waters of the United States. Based on this determination, the City will establish the types of discharges that will continue to be conditionally allowed, or that will be disallowed, into the City's Storm Water Conveyance System. The City may also impose additional BMP requirements specific to those discharges that are allowed.

2.2.2 BMP Implementation

As previously stated, for all discharges of storm water and non-storm water to the City's Storm Water Conveyance System or Receiving Waters, pollutants must be reduced to the MEP.

MEP is a loosely defined standard that is commonly used by the RWQCB in requiring BMP implementation for municipalities. In general, it is defined as the implementation of all effective, technically, and economically feasible BMPs (see the Definitions section for a detailed discussion). The BMPs that are generally emphasized to meet MEP are pollution-prevention and source-control BMPs. Implementing these proactive BMPs avoids pollutants from ever entering discharges. Treatment BMPs are then implemented, when appropriate, to serve as backups to remove pollutants from discharges.

Because discharges are prohibited unless MEP is achieved, all Dischargers must meet this general BMP standard. A Discharger can be generalized as any person or entity engaged in activities or operations or owning facilities that are exposed to precipitation that drains to the City's Storm Water

Conveyance System or Receiving Waters, or that discharges any other waters or materials to the City's Storm Water Conveyance System or Receiving Waters. Therefore, the City is a Discharger.

To assist in meeting the MEP standard, the City has developed minimum BMP requirements for Municipal Areas and Activities. This Manual focuses on those minimum BMP requirements for Municipal Areas and Activities. These requirements are standards themselves and the City is required to implement, at a minimum, these BMPs or equivalent measures, methods, or practices. It is recognized that the proper selection of BMPs depends on numerous factors that are specific to individual sites and activities, and therefore does not advocate or require the use of particular practices. Rather, the City has established these minimum BMP standards that the City has determined are the minimum necessary measures to prevent discharges of pollutants to its Storm Water Conveyance System and Receiving Waters. The City is required to implement these BMPs at the areas and activities described.

Furthermore, if MEP has not been met by meeting the minimum BMP requirements prescribed by the City, the City must implement additional BMPs until MEP is achieved.

The City is required to evaluate their activities and to implement those BMPs that they determine are necessary to meet MEP. The City may implement specific BMPs, additional BMPs, and/or structural controls, in addition to the minimum BMP requirements for an area or activity, if MEP has not been met.

The remainder of this Manual provides the City's minimum BMP requirements to assist in meeting the MEP standard.

2.3 Minimum BMP Requirements for All Municipal Areas and Activities

The following are BMP requirements for all Municipal Areas and Activities. Each Municipal Area and Activity is required to implement these BMPs, or equivalent measures, methods, or practices.

The following BMP requirements are described in this section, which are applicable to all Municipal Areas and Activities:

Pollution Prevention
Employee Training
URMPs and SWPPPs, when applicable
Storm Drain Tileage and Signing
Annual Review of Facilities and Activities
Materials and Waste Management
Vehicles and Equipment
Outdoor Areas

Pollution Prevention

Pollution prevention is defined as practices and processes that reduce or eliminate the generation of pollutants. Recycling, use of different types of products or chemicals, and altering operational procedures are all types of pollution-prevention practices that can reduce the amounts of pollutants generated by a municipality. Under many circumstances, those pollution-prevention practices that are commonly implemented can provide benefits to the municipality in addition to pollution prevention, such as cost savings or operational efficiency.

BMP A.2.1. Dischargers shall implement those Urban Runoff pollution-prevention practices that are generally recognized in that Discharger's industry or business as being effective and economically advantageous. The following types of pollution prevention measures may be considered:

Good housekeeping practices
The use of smaller quantities of toxic materials or substitution of less toxic materials
Changes to production processes to reduce waste
Decreases in wastewater flows
Recycling of wastes as part of the production process
Segregation of wastes
Treatment of wastes onsite to decrease volume and/or toxicity

Prevention of Illegal Discharges

BMP A.3.1. Illicit connections must be eliminated (even if the connection was established pursuant to a valid permit and was legal at the time it was

constructed), and illegal discharge practices eliminated.

Employee Training

The City is required to implement these BMPs, or equivalent measures, methods, or practices.

BMP MA.1.1. The City shall provide training at least annually to employees with responsibility for the design, selection, implementation, and/or operations and maintenance of BMPs. Integration with other existing training programs is encouraged.

BMP MA.1.2. Documentation of training shall be maintained onsite at the location(s) where operations or activities are conducted, and shall be provided on request to Authorized Enforcement Officials or Staff, or the City's Urban Runoff management personnel.

BMP MA.1.3. Training shall be adequate to ensure compliance with the standards established in this Manual, the City Municipal Code, and the RWQCB Order.

BMP Description

Employee training is a crucial component of Urban Runoff quality protection as it informs all municipal personnel of the components and goals of Urban Runoff rules and practices. Employee-training programs should at least address the following topics:

- I. Good Housekeeping
- II. Preventative Maintenance
- III. Spill Prevention and Response
- IV. Material Management Practices.

Urban Runoff Management Plans (URMPs) and SWPPPs

BMP MA.2.1. The development and implementation of SWMPs is encouraged for Municipal Areas and Activities.

BMP Description

SWMPs are an important tool for planning, implementing, and demonstrating compliance with BMP requirements. However, SWPPPs may be required for facilities where MEP has not been met, for those demonstrating significant or continued noncompliance, or those determined to be a significant source of pollutants. It is recommended that SWPPPs for Municipal Areas and Activities

should be modeled after the applicable required elements for SWPPPs as provided under the General Industrial Storm Water Permit. This permit and accompanying documentation can be downloaded from the State Water Resource Control Boards website at the following address:

<http://www.swrcb.ca.gov/stormwtr/industrial.html>.

The City is responsible for demonstrating compliance with all applicable provisions of the City Municipal Code and this Manual, regardless of whether or not a SWPPP is utilized.

Storm Drain Tileage and Signing

The City is required to implement these BMPs, or equivalent measures, methods, or practices.

BMP CA.3.1. The use of tiles or other labeling of storm drain inlets is encouraged, but not required, for Municipal Areas and Activities.

BMP Description

The City does not allow the use of storm drain stenciling because stencils are generally less durable than other methods of labeling. In contrast, more permanent methods such as tiles or imprints require little maintenance and are legible for many years.

Annual Review of Facilities and Activities

The purpose of this requirement is to actively identify and eliminate connections and practices that might otherwise lead to discharge violations. This is especially important for facilities and activities not subject to routine inspection by City staff. The City is required to implement these BMPs, or equivalent measures, methods, or practices.

BMP MA.4.1. City facilities and managers shall review their activities, operations, and procedures at least annually to detect illicit connections and illegal discharges.

BMP MA.4.2. Illegal connections, as defined in this Manual, must be eliminated (even if the connection was established pursuant to a valid permit and was legal at the time it was constructed), and illegal discharge practices eliminated.

BMP MA.4.3. Corrective training shall be provided as needed (and documented in training records) whenever an illegal disposal practice is discovered.

BMP MA.4.4. City facilities and managers shall review their activities, operations, and procedures, as determined necessary, to ensure adequate BMP implementation.

Materials and Waste Management

All materials and wastes with the potential to pollute Urban Runoff shall be stored in a manner that either prevents contact with rainfall and storm water, or contaminated runoff for treatment and disposal.

BMP MA.6.1. The following conditions apply to the storage, management, and disposal of hazardous materials and wastes at City areas and activities:

- (a) Hazardous materials and wastes shall be stored, managed, and disposed in accordance with applicable federal, state, and local laws and regulations.
- (b) Hazardous materials must be stored off the ground. Where practicable, overhead coverage shall be provided for all outside hazardous materials or waste storage areas. If overhead coverage is not available, stored materials shall be covered with an impervious material (e.g., a tarp).
- (c) Drums and other containers shall be kept in good condition, and shall be kept securely closed when not in use.
- (d) Materials and equipment necessary for spill response shall be maintained and kept readily accessible, and all employees involved in the storage, management, or disposal of hazardous materials or wastes must be trained in their proper use.
- (e) Significant spills shall be reported promptly to the City's Urban Runoff Manager. Significant spills are those which discharge, or have the potential to discharge, contaminants directly or indirectly to the Storm Water Conveyance System or Receiving Waters. Spills that have been completely contained and cleaned up onsite are not considered significant unless they pose a threat to human health or safety.
- (f) All spills that could reach storm drains, the sanitary sewer, rivers, lakes, streams, coastal waters, and other ambient water bodies must be reported immediately to the City Urban Runoff Manager and appropriate

agencies, which may include the RWQCB and the U.S. Environmental Protection Agency (EPA) regional offices.

- (g) All hazardous materials present in each facility should be clearly labeled. All hazardous materials containers should be labeled to show significant information such as the name and type of the substance, health hazards, suggestions for handling, and first aid information. When applicable the information must be consistent with the Material Safety Data Sheet (MSDS) for each substance. All materials requiring special handling, storage, use, and disposal should be clearly marked as such.

BMP MA.6.2. The following conditions apply to the storage of solid waste at Municipal Areas and Activities:

- (a) Trash storage and disposal areas shall be kept clean and free of debris.
- (b) Dumpsters and other containers shall be maintained in good condition, and shall be kept securely closed when not in use.
- (c) Materials and equipment necessary for the clean up of trash and debris shall be maintained and kept readily accessible.

BMP MA.6.3. The following conditions apply to the loading and unloading of materials with pollution potential at Municipal Areas and Activities:

- (a) Where practicable, loading/unloading of materials shall only be allowed in designated areas.
- (b) Spills and leaks shall be promptly cleaned up and the generated wastes disposed of properly.
- (c) Loading/unloading areas shall be periodically inspected, and accumulations of debris, litter, waste, or other materials removed.
- (d) Materials and equipment necessary for spill response shall be maintained and kept readily accessible and all employees conducting loading/unloading activities trained in their proper use.
- (e) Same as BMP MA.6.1.(e)

- (f) Same as BMP MA.6.1.(f)

Vehicles and Equipment

The term, motor vehicle, is defined in the Definitions section of this Manual. In the context of these requirements, it includes all categories of vehicles contained in that definition in addition to airplanes. The City is required to implement these BMPs, or equivalent measures, methods, or practices.

BMP MA.7.1. The following conditions apply to the fueling of vehicles and equipment at all Municipal Areas and Activities:

- (a) Precautions shall be taken to prevent spills and leaks during fueling activities.
- (b) Materials and equipment necessary for spill response shall be maintained and kept readily accessible, and staff conducting fueling activities should be instructed in their proper use.
- (c) Same as BMP MA.6.1.(e)
- (d) Same as BMP MA.6.1.(f)

BMP MA.7.2. The following conditions apply to the maintenance and repair of vehicles and equipment at all Municipal Areas and Activities:

- (a) Precautions shall be taken to prevent spills and leaks during maintenance and repair activities.
- (b) Materials and equipment necessary for spill response shall be maintained and kept readily accessible, and staff conducting maintenance and repair activities should be instructed in their proper use.
- (c) Same as BMP MA.6.1.(e)
- (d) Same as BMP MA.6.1.(f)

BMP MA.7.3. The following conditions apply to the washing of vehicles and equipment at all Municipal Areas and Activities:

- (a) Storm drain inlets located within or down gradient of wash areas shall be covered or otherwise protected to prevent the entry of washwater or rinse water.

- (b) Where practicable, the introduction of pollutants (soaps, degreasers, etc.) to washwater shall be reduced or eliminated.

The discharge or disposal of untreated washwater to the Storm Water Conveyance System or Receiving Waters is prohibited.

BMP Description

Washwater should be recycled or reused when possible to reduce waste quantities. Depending on quantities generated, untreated washwater may be disposed of to the sanitary sewer or to licensed sewerage disposal facilities. Untreated washwater of appropriate quantities that does not contain high levels of pollutants may also be disposed of through infiltration, such as by watering landscaped areas.

BMP MA.7.4. The following conditions apply to the outdoor storage of equipment at all Municipal Areas and Activities:

- (a) Drip pans or other methods of spill containment shall be used to prevent the discharge of materials to the Storm Water Conveyance System or Receiving Waters.
- (b) Materials and equipment necessary for spill response shall be maintained and kept readily accessible.
- (c) Same as BMP MA.6.1.(e).

Outdoor Areas

The City is required to implement these BMPs, or equivalent measures, methods, or practices.

BMP MA.8.1. The following condition applies to rooftop areas at Municipal Areas and Activities:

- (a) Materials that may contaminate storm water shall not be stored on rooftops unless adequate precautions have been taken to prevent their contact with precipitation and storm water.
- (b) Equipment located on rooftops (e.g. emergency generators, heating, ventilation, and air conditioning systems) shall be periodically inspected, and preventative maintenance conducted as necessary to prevent leaks and spills

- (c) Where practicable, roof downspouts shall be routed away from work areas and toward pervious areas such as lawns

BMP MA.8.2. The following conditions apply to parking areas at Municipal Areas and Activities:

- (a) Parking areas shall be periodically cleaned using dry methods (manual sweeping, street sweepers, etc.). Wet methods shall only be used where adequate precautions have been taken to prevent the entry of washwater and other contaminants into the Storm Water Conveyance System or Receiving Waters.
- (b) Prior to any improvement or expansion project, parking areas designed to accommodate 100 or more vehicles shall be evaluated to determine the feasibility of installing structural devices, including treatment controls. Such devices shall be installed if practicable. Installed controls shall be inspected and maintained as necessary to ensure their continued proper functioning.
- (c) Where practicable, trash containers shall be provided in convenient locations to discourage littering and encourage proper disposal
- (d) Vehicles stored in parking areas for extended periods shall be periodically inspected, and leaks and spills treated as necessary
- (e) Materials and equipment that may contaminate Urban Runoff may not be stored on parking areas unless adequate precautions have been taken to prevent their contact with precipitation, Urban Runoff, and storm water

BMP MA.8.3. The following conditions apply to landscaping and groundskeeping conducted at all Municipal Areas and Activities:

- (a) Precautions shall be taken to prevent spills, leaks, and over application of chemical products during landscaping and groundskeeping activities.
- (b) Precautions shall be taken to prevent over irrigation of landscaped areas.
- (c) Pesticides, herbicides, fertilizers, and other chemical products shall be used in accordance with label directions and

manufacturer recommendations. Application of chemicals before irrigation or rainfall is discouraged. These products shall be stored in a manner that does not expose them to Urban Runoff. These products shall not be disposed to streets or gutters, but shall be collected and properly disposed.

- (d) Grounds and landscaped areas shall be periodically inspected. Litter, debris, organic matter (leaves, cut grass, etc.), and other materials with the potential to contaminate Urban Runoff shall be collected and properly disposed.
- (e) Materials and equipment necessary for spill response shall be maintained and kept readily accessible, and employees trained in their proper use.
- (f) Mechanical vegetation control measures include, mowing grass, brush and tree trimming and the application of herbicides. Vegetation controls are most useful in areas of steep slopes adjacent to roadside channels, or within roadside swales. As a source-control BMP, it is suggested that plants be compatible with semi-arid conditions and native to Southern California. This will reduce the amount of trimming and mowing necessary. Cutting less frequently on roads that do not pose a threat to passing vehicles or pedestrians. Using hand-held cutting tools when possible to more adequately manage the waste and to

conduct maintenance at optimal seasonal times.

- (g) The application of pesticides, and other chemical products prior to irrigation or rainfall is discouraged
- (h) Integrated Pest Management (IPM) practices and other non-chemical pest control methods (e.g., traps, sticky tape, hot-wire lamps) shall be considered where practicable
- (i) Stockpiles shall be covered during windy and rainy conditions
- (j) Exposed slopes shall be stabilized as soon as possible
- (k) Prior to the rainy season, significant accumulations of eroded soils should be secured.
- (l) Paves surfaces, such as sidewalks, shall be cleaned regularly using dry methods (e.g. sweeping, vacuuming). Hosing power washing, and other wet cleaning methods are permissible only if adequate precautions have been taken to prevent the discharge of washwater to the Storm Water Conveyance System or Receiving Waters.
- (g) Same as BMP MA.6.1.(e).



Chapter 3

Activity Specific BMPs



This chapter describes activity specific BMPs for Municipal Areas and Activities. In addition to the requirements described in Chapter 2, the following requirements apply to specific Municipal Areas and Activities.

This chapter contains minimum BMP requirements for the following areas and activities:

- 3.1 Roads, Streets, Highways, and Parking Facilities
- 3.2 Flood Management Projects, and Flood Control Devices (MS4)
- 3.3 Municipal Waste and Wastewater Facilities
- 3.4 Corporate, Storage, and Maintenance Yards
- 3.5 Municipal Airfields
- 3.6 Vehicle or Equipment Mechanical Repair, Maintenance, Fueling, or Cleaning
- 3.7 Parks, Recreational Facilities, and Other Landscaped Areas
- 3.8 Non-Emergency Fire Fighting Flows
- 3.9 Mobile Municipal Activities, Including Power Washing
- 3.10 Special Events
- 3.11 Additional Controls

For each of these areas or activities, a section is provided in this chapter with additional requirements for BMP implementation. In addition, each section provides a discussion of the applicability of the requirements. In general, if a Municipal Area or Activity involves or conducts the activities for which the regulations are provided, the City should comply with the BMP requirements. This is regardless of whether or not the activity is the primary activity of the Municipal Area or Activity.

Also contained within each of these sections are recommended BMPs. These BMPs are not required

but instead are provided by the City as recommendations for implementation where applicable.

For a detailed discussion explaining BMP implementation requirements, refer to section 2.2.2 of this Manual.

3.1 Roads, Streets, Highways, and Parking Facilities

These types of facilities have the potential to collect/generate many pollutants. Streets, roads, highways, and parking facilities tend to collect litter and debris from nearby activities as well as from vehicular traffic. The characteristic that those areas are also primarily impervious increases the runoff from these areas and reduces the opportunities for reductions of pollutants through infiltration or removal by natural areas. In addition most of these types of facilities have direct discharges into Storm Water Conveyance System and/or Receiving Waters to reduce flooding during periods of rain.

It should be noted that the City's Storm Water Conveyance System includes curbs, gutters, and any other portions of roads and streets that are used to convey storm water. These and the remaining components of the City's Storm Water Conveyance System are discussed in section 3.2 of this Manual.

3.1.1 BMP Requirements for Roads, Streets, and Highways

The following BMPs or equivalent measures, methods, are required during roads and streets maintenance activities:

BMP MS.1.1. Street sweeping is widely recognized as an effective method of reducing the amount of pollutants (litter, green waste, oils and grease and sediment) on street surfaces that may impact storm water. Street sweeping is most effective when sweepers have access to the entire length of the curb. In order to increase cleaning efforts, sweeper operators are advised to make a sufficient number of passes to maximize collection. In areas of chronic hindrances due to parked cars, the road crew should post temporary "no parking" signs.

BMP MS.1.2. Roadway and Bridge Maintenance The regular maintenance activities for roads and bridges may include, filling potholes, minor construction for sidewalks, and maintenance of drainage channels. To minimize the impact to storm water resulting from the maintenance of these facilities, the following BMPs are suggested:

Repair potholes to reduce sediment loss and erosion.

Be sure that all spare filling material on the road is collected.

Conduct maintenance measures during dry weather.

Barricade drain inlets to reduce sediment or waste from entering the drain during maintenance and construction activities.

Store materials away from conveyance systems.

Construct temporary onsite washout areas.

BMP MS.1.3. Saw-Cut Slurry The following procedures will be implemented or required:

Avoid saw-cut activities during wet weather, to the extent feasible.

Store saw-cutting materials away from drainage areas to prevent storm water pollution, or implement other equally effective BMPs.

Clean up spills from equipment and activities and dispose properly, when practicable

BMP MS.1.4. Paving The following procedures will be implemented or required:

Avoid paving activities during wet weather, to the extent feasible.

Store paving materials away from drainage areas to prevent storm water pollution, or implement other equally effective BMPs.

Avoid cleaning paving equipment on-site, to the MEP; restrict equipment cleaning to an appropriate designated location, to the MEP.

BMP MS.1.5. Concrete The following procedures will be implemented or required:

Wash concrete trucks off site or in designated areas on site, such that there is no discharge of concrete washwater into storm drains, open ditches, streets, catch basins, or other storm water conveyance structures.

Store concrete materials under cover, away from drainage areas, or implement other equally effective BMPs.

Avoid mixing excess amounts of concrete or cement on site.

3.1.2 BMP Requirements for Parking Facilities

The following conditions apply to publicly owned parking lots:

BMP MS.2.1. Parking facilities shall not be cleaned using wet methods (e.g., hosing, steam-cleaning, pressure-washing) unless adequate precautions have been taken to prevent the entry of washwater and other contaminants into the Storm Water Conveyance System or Receiving Waters.

BMP MS.2.2. Parking areas shall be periodically cleaned using dry methods (e.g., sweeping, scraping) to prevent the accumulation of significant materials. Accumulated materials shall be properly disposed.

BMP MS.2.3. Signs shall be posted that prohibit littering, dumping, and vehicle servicing.

BMP MS.2.4. Trash cans shall be placed in strategic locations within the parking areas.

Additional Recommended BMPs

The following BMPs are not required, however, these and/or other BMPs may be required by the City if it is determined that MEP has not been met. These BMPs are provided as recommendations for commercial vehicle parking lots and vehicle storage facilities and to assist business with those areas in selecting appropriate BMPs in order to achieve MEP.

Develop and implement a weekly sweeping/cleaning program.

Install treatment BMPs in storm drain inlets and ensure adequate operation and maintenance of treatment systems.

Divert runoff to natural treatment BMPs such as filter strips, swales, and biofiltration areas.

Cover vehicle storage areas.

In vehicle storage areas, conduct routing inspections of stored vehicles to detect leaks.

Use porous pavement and other infiltration surfacing techniques.

3.2 Flood Management Projects and Flood Control Devices (MS4)

These types of projects or devices refer to the portions of the City's Storm Water Conveyance System that primarily collect and convey storm water to Receiving Water during storms in order to prevent flooding. Such areas include inlets, catch basins, pipes, channels, basins, natural conveyance channels, and outfalls. The systems must be maintained so that they function hydraulically as intended during storm events. A consequence of this is that they also convey non-storm water runoff (Urban Runoff) into the same Receiving Waters. They have the potential of transporting pollutants that are discharged into them over great distances.

3.2.1 BMP Requirements for Flood Control Facilities

The following are BMPs that must be implemented for the MS4. The BMPs should be scheduled in the City's maintenance schedule.

BMP MS.3.1. Remove trash and debris from all drainage facilities.

BMP MS.3.2. Inspect and clean catch basins, culverts, and concrete channels.

BMP MS.3.3. Remove silt after sufficient accumulation from creeks, desilting basins, detention basins, and rock-lined channels.

BMP MS.3.4. Non-emergency storm water facility repairs and construction should be completed on an as needed basis between March 15 to November 15.

BMP MS.3.5. Illicit discharge detection and reporting should occur as they are encountered.

BMP MS.3.6. Properly handle materials and dispose of waste removed during maintenance activities in a manner that will not release the material to the storm drain system, or in any other way contaminate storm water runoff.

BMP MS.3.7. Maintain inspection records for the following information:

The date and time the inspection was performed

Name of the inspector

Items inspected

Locations of facilities inspected or cleaned

Overall amount of material removed (estimated in either volume or dry weight)

Type of material

Disposal site

Problems noted

Illegal/Illicit connection detected

Corrective action required

Date corrective action was taken.

3.3 Municipal Waste and Wastewater Facilities

Municipal waste facilities are required by the RWQCB Order to be identified as High Priority facilities. The following is a list of the categories of waste facilities that must be classified by the City as High Priority:

Active or closed municipal landfills

Publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewage collection systems

Incinerators

Solid waste transfer facilities

Land application sites

Uncontrolled sanitary landfills

Sites for disposing and treating sewage sludge

Hazardous waste treatment, disposal, and recovery facilities.

3.3.1 BMP Requirements for Municipal Waste and Wastewater Facilities

Most municipal waste facilities are subject to the General Industrial Storm Water Permit and shall comply with that permit. The other types of municipal waste facilities that are identified by the RWQCB that are not subject to the General Industrial Storm Water Permit such as the City's MS4 and corporate yards are discussed in other sections. Additional BMP requirements are not required at this time for the category of municipal waste facilities.

3.4 Corporate, Storage and Maintenance Yards

Municipal corporate yards include yards, lots, or other areas at which the City stores materials, wastes, equipment, or materials, and/or at which equipment or vehicles are maintained.

3.4.1 BMP Requirements for Corporate, Storage, and Maintenance Yards

The following BMPs or equivalent measures, methods, or practices are required at all City storage yards for materials, waste, equipment and vehicle maintenance:

BMP MS.5.1. Repair and maintenance activities shall be conducted only in designated work areas.

BMP MS.5.2. Repair and maintenance work must be conducted indoors or under cover whenever practicable. If this work cannot be conducted indoors or under cover, other precautions must be taken to prevent the discharge of contaminants into the Storm Water Conveyance System or Receiving Waters.

BMP MS.5.3. Significant repair and maintenance work on boats may not be conducted over water. Minor engine work and routine changing of oil or other fluids are not considered significant, but may only be conducted over water if adequate precautions have been taken to prevent the entry of pollutants into the water.

BMP MS.5.4. As necessary to prevent the entry of pollutants into the Storm Water Conveyance System or Receiving Waters, designated work areas shall

utilize structural controls to (1) prevent the discharge of spills from the work area, (2) prevent run-on from contacting work surfaces and pollutants, and (3) prevent rainfall from contacting work surfaces and pollutants. The City may use structural controls if determined necessary.

BMP MS.5.5. Any release of fluids during repair and maintenance shall be promptly contained and cleaned up. Any absorbent materials used must be disposed of properly.

BMP MS.5.6. Repair and maintenance materials and wastes must be stored indoors, under cover, or in secure and watertight containers.

BMP MS.5.7. Where practicable, fueling areas and storage areas shall be under permanent cover.

BMP MS.5.8. Where practicable, all storm drain inlets draining the areas of fueling and surrounding areas shall be connected to an oil/water separator and to the sanitary sewer.

BMP MS.5.9. Fueling and parking areas shall be periodically inspected, and significant accumulations of materials and substances (oil, fuel, grease, etc.) removed. All materials shall be properly disposed.

BMP MS.5.10. Only dry cleaning methods shall be used on fueling and parking areas unless adequate precautions have been taken to prevent the discharge of washwater to the Storm Water Conveyance System or Receiving Waters (e.g., the discharge is directed to the sanitary sewer, a sump).

Additional Recommended Measures

The following BMPs are not required, however, these and/or other BMPs may be required if it is determined that MEP has not been met.

Train employees involved in fueling operations in emergency spill response and appropriate spill clean-up procedures.

Post signs to educate employees. Personnel responsible for fueling vehicles should be trained in spill response procedures and instructed to avoid overtopping fuel tanks. Employees should stay with the vehicle while fueling.

Maintain an Emergency Spill Response and Clean up Plan.

Cover fueling area with an overhanging roof structure or canopy with dimensions equal or greater than the area with the grade break and which must not drain onto the fuel dispensing area.

Make sure areas surrounding the fueling area have a 2 to 4 percent slope to prevent ponding and a grade break to prevent run-on of storm water.

Pave the fuel area using Portland cement concrete, not asphalt, and design to contain fuel spills. Asphalt is not used because it deteriorates when it comes in contact with fuels.

Design the fuel area as a spill containment pad and size to prevent the runoff of spilled fuel and the run-on of storm water from surrounding pavement.

Collect liquids spilled at the fuel area in drains, either trench drains or catch basins. The drain(s) should be connected to the sanitary sewer or process treatment. The drain shall have a valve to allow shutoff in the event of a large fuel spill and a baffled oil/water separator vault to minimize the flow of fuels into the sewer.

Do not clean the fueling island with water and detergents. Spilled fuels, oils, and grease will leave the site and contaminate surface waters if this method is used. Clean the fueling island using dry methods like spot cleaning with absorbents or mechanical sweepers. Use a damp cloth for pumps and a damp mop will be effective for the paved area.

Keep the number of solvents used to a minimum to make recycling easier and to reduce hazardous waste management cost.

Conduct all liquid cleaning at a centralized station to ensure that solvents and residues stay in one area.

Use drip pans or locate draining boards to direct solvents back into solvent sink or holding tank for reuse.

Use non-hazardous cleaners when possible.

Replace chlorinated organic solvents with non-chlorinated ones like kerosene or mineral spirits.

Use recycled products such as engines, oil, transmission fluid, antifreeze, hydraulic fluid, and recycle used fluids.

Update facility schematics to accurately reflect all plumbing connections.

Monitor parked or stored vehicles closely for leaks and place drip pans under any leaks to collect the fluids for proper disposal or recycling.

Promptly transfer used fluids to recycling drums or hazardous waste containers.

Store cracked batteries in leak-proof secondary containers.

Keep pumps and hoses used for liquid transfers in good condition, and make sure they are equipped with control valves to enable quick shutoff if a leak or spill should occur.

Drain all fluids, from wrecked vehicles and equipment upon arrival. Recover air conditioning coolant.

Use reusable cloth rags to clean up drips and small spills instead of disposable materials. Cloth rags can be professionally laundered if reused. Do not attempt to launder these at home or at a coin-operated laundry.

Use absorbent pillows or booms in or around storm drains and catch basins to absorb oil and fuel.

If the liquid transfer area cannot be paved, provide a containment/storm water run-on prevention structure such as a curb, dike, or berm. As with all containment schemes, spilled materials must be removed from the containment area and properly disposed of, and accumulated water must be properly disposed of or routed to treatment facilities.

Adopt the “dry shop” principle that encourages spills to be cleaned immediately, without waiting for the spilled fluids to evaporate into the air, to transmit to land, or to contaminate other surfaces.

Collect leaking or dripping fluids, paint drips, and spills in designated drip pans or containers. Keep all fluids separated so they may be properly recycled.

Keep a designated drip pan under the vehicle while unclipping hoses, unscrewing filters, or

removing other parts. The drip pan prevents splattering of fluids and keeps chemicals from penetrating the shop floor or outside area where the maintenance is occurring.

Immediately transfer used fluids to proper containers. Never leave drip pans or other open containers unattended.

Spill Clean Up

The following BMPs are recommended for spills:

Maintain a spill management action plan.

Do not use water to clean spills, leaks, and drips.

Obtain and use drain mats to cover drains in the event of a spill.

Always keep spill clean-up materials, such as rags and absorbent materials, close at hand when changing oil and other fluids. Sewer and storm water requirements can be complied with more easily by running a “dry shop,” thereby reducing consumption/discharge of liquids. Soiled rags and other clean-up materials must be properly disposed of or properly cleaned if reused.

Pave and slope a designated area for liquid transfer operations to a sump or holding tank drain to facilitate spill capture. The sump should have a two-way valve so that runoff can typically enter the storm drainage system and can be switched to shut off flow during transfer operations. Collect and dispose of spilled material as mentioned above.

Parts Cleaning

The following BMPs are recommended when cleaning engine and motor parts:

Use detergent-based or water-based cleaning systems instead of organic solvent degreasers.

Use steam cleaning and pressure washing instead of solvent parts cleaning. The wastewater generated from steam cleaning can be discharged to the onsite oil/water separator and to the sanitary sewer system pending appropriate approval from the City.

Provide drip pans underneath hose and pipe connections and other leak-prone areas during liquid transfer operations. Several drip pans should be stored in a covered location near the

transfer area so that they are readily available, yet protected from the rain when not in use. Drip pans must be cleaned periodically and drip-collected materials must be disposed of properly.

If the work is done at a mobile location, use a tarp, ground cloth, or drip pans beneath the vehicle or equipment to capture all spills and drips. The collected drips and spills must be recycled or disposed of properly.

3.5 Municipal Airfields

There is one municipal airfield in the City.

3.5.1 BMP Requirements for Municipal Airfields

Municipal Airfields are subject to the General Industrial Storm Water Permit and shall comply with that permit. Municipal Airfields must meet all applicable BMP requirements set forth in this Manual, specifically regarding repair, maintenance, fueling, and cleaning activities, which are described in Section 3.6.

3.6 Vehicle or Equipment Mechanical Repair, Maintenance, Fueling, or Cleaning

These activities are primarily conducted at the City Operations Center (COC), however, there are many facilities that conduct these activities as well, such as Fire Stations, Police Stations, the Harbor, and Lifeguard Stations. Although the activities may be limited at facilities other than the COC, they still have the potential for substantial water quality impacts and are therefore BMPs must be implemented.

3.6.1 BMP Requirements for Vehicle or Equipment Mechanical Repair, Maintenance, Fueling, or Cleaning

BMP MS.7.1. Repair and maintenance activities shall be conducted only in designated work areas.

BMP MS.7.2. Repair and maintenance work must be conducted indoors or under cover whenever practicable. If this work cannot be conducted indoors or under cover, other precautions must be taken to prevent the discharge of contaminants into the Storm Water Conveyance System or Receiving

Waters. Storm drains in work area(s) should be protected from potential spills or leaks.

BMP MS.7.3. Significant repair and maintenance work on boats may not be conducted over water. Minor engine work and routine changing of oil or other fluids are not considered significant, but may only be conducted over water if adequate precautions have been taken to prevent the entry of pollutants into the water.

BMP MS.7.4. As necessary to prevent the entry of pollutants into the Storm Water Conveyance System or Receiving Waters, designated work areas shall utilize structural controls to (1) prevent the discharge of spills from the work area, (2) prevent run-on from contacting work surfaces and pollutants, and (3) prevent rainfall from contacting work surfaces and pollutants.

BMP MS.7.5. Any release of fluids during repair and maintenance shall be promptly contained and cleaned up. Any absorbent materials used must be disposed of properly. Fluids shall be drained from any retired vehicles or equipment stored onsite.

BMP MS.7.6. Repair and maintenance materials and wastes must be stored indoors, under cover, or in secure and watertight containers. Repair and maintenance equipment shall also be kept clean to avoid the buildup of grease and oil.

BMP MS.7.7. Where practicable, fueling areas shall be under permanent cover.

BMP MS.7.8. Where practicable, all storm drain inlets draining the areas of fueling and surrounding areas shall be connected to an oil/water separator and to the sanitary sewer.

BMP MS.7.9. Fueling and parking areas shall be periodically inspected, and significant accumulations of materials and substances (oil, fuel, grease, etc.) removed. All materials shall be properly disposed.

BMP MS.7.10. Only dry cleaning methods shall be used on fueling and parking areas unless adequate precautions have been taken to prevent the discharge of washwater to the Storm Water Conveyance System or Receiving Waters (e.g., the discharge is directed to the sanitary sewer, a sump).

BMP MS.7.11. Spill clean-up kits shall be maintained and kept readily accessible, and employees trained in their proper use. Absorbents and other materials

used to clean spills shall be collected and properly disposed.

BMP MS.7.13. Washwater and rinse water may not be disposed to the Storm Water Conveyance System or Receiving Waters under any circumstances. The Storm Water Conveyance System includes driveways, streets, and gutters.

BMP MS.7.14. Storm drain inlets located within or downhill of wash areas shall be covered or otherwise protected to prevent the entry of washwater or rinse water.

BMP MS.7.15. Vehicles shall be washed over porous surfaces such as lawns and gravel areas where feasible, such areas will infiltrate all the washwater and rinse water generated during the washing.

BMP MS.7.16. Washwater and rinse water may be infiltrated or disposed to the ground (e.g., soaked into a lawn or landscaped area) if adequate precautions have been taken to prevent the entry of washwater and other contaminants into the Storm Water Conveyance System or Receiving Waters.

BMP MS.7.17. Washwater and rinse water that cannot be properly disposed at a job site shall be collected and contained for recycling, reuse, or proper disposal (e.g., sanitary sewer). Dischargers are responsible for obtaining all necessary approvals from the City prior to discharging to the sewer.

BMP MS.7.18. The use of hose off or single-use engine degreasing chemicals is prohibited, unless captured and properly disposed.

BMP MS.7.19. Where practicable, the introduction of pollutants (soaps, degreasers, etc.) to washwater shall be reduced or eliminated.

BMP MS.7.20. Dry cleaning methods are encouraged.

3.7 Parks, Recreational Facilities, and Other Landscaped Areas

These areas are typically associated with the use of fertilizers, pesticides, and other chemicals.

3.7.1 BMP Requirements for Golf Courses, Parks, or Recreational Facilities

The requirements in this section apply to landscaping activities such as landscape maintenance, fertilization, chemical application, seeding, aeration, planting, and trimming. A variety of pollutants including eroded soil, green waste, fertilizers, and pesticides are related to these activities.

BMP MS.9.1. Landscaping waste shall be properly disposed by composting onsite or at an approved composting location or permitted landfill.

BMP MS.9.2. Stockpiles shall be placed away from watercourses, bermed, and covered to prevent the release of materials to the Storm Water Conveyance System or Receiving Waters.

BMP MS.9.3. Where practicable, native vegetation shall be retained or planted to reduce water, fertilizer, and pesticide needs.

Determine existing native vegetation features (location, species, size, function, importance) and consider the feasibility of protecting them.

Consider elements such as their effect on drainage and erosion, hardness, maintenance requirements, and possible conflicts between preserving vegetation and the resulting maintenance needs.

Where feasible, retain and/or plant selected native vegetation whose features are determined to be beneficial.

BMP MS.9.4. Areas where work is being actively conducted shall be routinely cleaned up using dry methods (e.g., sweeping, raking). Wet methods (e.g., hosing) may only be used if adequate precautions have been taken to prevent the discharge of washwater or other materials to the Storm Water Conveyance System or Receiving Waters.

BMP MS.9.5. The use of blowers is permitted so long as materials are collected and properly disposed. Leaving blown materials in the Storm Water Conveyance System or Receiving Waters is a violation of City Code. The Storm Water Conveyance System includes driveways, streets, and gutters.

BMP MS.9.6. Measures shall be taken to reduce or eliminate landscaping and irrigation runoff.

Examples of practices include proper irrigation programming, programming shorter irrigation cycle times, and decreasing frequency after the application of fertilizers and pesticides.

BMP MS.8.6. When practicable, discharge swimming pool filter back washwater and chemically treated water to the sanitary sewer or detention area for infiltration.

BMP MS.8.7. If discharging swimming pool water to the storm drainage system, dechlorinate the water through mechanical means (such as allowing the water to sit for several days without adding chlorine) or chemical means (i.e., adding sodium bisulfite).

BMP MS.8.8. Neutralize all other chemicals in swimming pool discharges, such as acid wash residue, before discharging to the storm drain system.

BMP MS.8.9. Recreational Water Bodies. Beaches, picnic areas, lakes, and ponds receive a large number of visitors and may collect a large amount of litter, debris and other pollutants. To minimize the amount of potential pollutants that reach the water body, the following procedures will be implemented, when feasible:

Provide and maintain trash receptacles to hold refuse generated by the public.

Collect trash and debris from bins and along water bodies to minimize the amount of trash and debris that may contact the water.

Collect trash and debris from within water bodies where feasible.

When necessary, increase collection during peak visitation months (generally June, July, and August).

3.7.2 BMP Requirements for Activities Involving Pesticides, Herbicides, and Fertilizers

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations are strict in their requirements related to pesticide application handling, training, and testing. These regulations include; a list of approved pesticides and selected uses, application information; equipment use and maintenance procedures; and record keeping requirements. The State of California coordinates

and maintains the licensing and certification programs. All public agency employees and contract service employees shall be appropriately certified for application of pesticides and herbicides by the State of California. Below is a list of regulations and BMPs to be followed:

BMP MS.10.1. Agricultural pest control businesses must be supervised by a Qualified Applicator Licensee who has a current Qualified Applicator Certificate.

BMP MS.10.2. Every two years, the Qualified Applicator Certificate holder must show proof that they have secured a minimum of 40 hours of continuing education.

BMP MS.10.3. All Qualified Applicator Licensees and Qualified Applicator Certificate holders are required to report pesticide usage on a monthly basis to the Department of Agriculture, giving locations, type and quantity of pesticides, and other information.

BMP MS.10.4. The Qualified Applicator Certificate holder will conduct monthly inspections to monitor storage, handling and disposal of the pesticides.

BMP MS.10.5. The Department of Agriculture will review the pesticide application programs of public agencies.

BMP MS.10.6. Ensure written recommendations prepared by a State Pesticide Advisor are followed during pesticide application.

BMP MS.10.7. Ensure that pesticide and fertilizer labels, and the MSDS(s) are followed by the applicator.

BMP MS.10.8. Ensure all state, federal, and local regulations are followed in the use of fertilizers and pesticides.

BMP MS.10.9. Reduce runoff by proper irrigation programming, programming shorter irrigation cycle times and increasing the irrigation frequency after the application of fertilizers and pesticides.

BMP MS.10.10. Do not fertilize or apply pesticides prior to or during storm events.

BMP MS.10.11. Use pesticides that are quickly absorbed into the soil or plants that will reduce the amount of pollutants entering an MS4.

BMP MS.10.12. Whenever practical, use IPM practices.

BMP MS.10.13. Don't spray pesticides when the spray can drift into non-target areas or onto non-target vegetation, insects, or animals.

BMP MS.10.14. Follow the pesticide and fertilizer labels and state regulations in disposing of excess products.

BMP MS.10.15. Comply with county and state reporting requirement, for pesticide.

BMP MS.10.16. All public agency employees and contract service employees who handle pesticides, herbicides, and fertilizers will be familiar with the most up-to-date MSDS.

BMP MS.10.17. Use the entire product before disposing or give the unused portions to other agencies or community groups.

BMP MS.10.18. Minimize the use of pesticides/herbicides—Consider alternative products in lieu of pesticides/herbicides to control insects, fungi and weeds. Information on alternatives can be provided by Bio-Integral Resource Center in Berkeley, California at (510) 524-2567.

BMP MS.10.19. Proper storage and inspections—conduct monthly inspections to monitor storage, handling, and disposal of pesticides.

3.7.3 Activities Involving the Application, Storage, or Disposal of Pesticides, Herbicides, and Fertilizers

Any activities involving the application, storage, or disposal of pesticides, herbicides, and fertilizers are considered High Priority. Such activities include weed management, flood control maintenance, right-of-way maintenance, landscaping, grounds-keeping, park management, and golf course maintenance.

3.8 Non-Emergency Fire Fighting Flows

Non-emergency fire fighting flows primarily consist of training flows. No other types of non-emergency fire fighting flows exist at this time, however, if the fire department altered its current activities to produce additional flows, they would be included in this category.

3.8.1 BMP Requirements for Non-Emergency Fire Fighting

The following are BMPs that can be implemented in order to reduce the pollutants in non-emergency fire fighting flows to the MEP. Many of the BMPs are redundant of BMP requirements listed in Chapters 3, 4, 5, and 6 in this Manual, but fire fighting activities are special activities that deserve to have detailed BMP requirements.

Hose Washing and Cleaning

BMP MS.11.1. Any area or facility used for the washing and/or cleaning of fire hose must be designed so that no washwater or other debris enters the Storm Water Conveyance System or Receiving Water.

Additional considerations include the following:

Create a wash area in a manner that allows all washwater to percolate through plant material or the earth, or evaporate completely, as long as no washwater enters a storm drain, drainage to a waterway, or escapes from the property.

If available, use designated wash areas (preferably covered) that are bermed to prevent contact with storm water and to contain washwater.

Discharge washwater to sanitary sewer (contact local sewer authority to find out if pre-treatment is required) or a holding tank for proper disposal later.

Consider constructing a holding basin for the washwater if sewer is not available (liquid must be disposed of properly). Do not permit washwater containing detergents, degreasers, or other contaminants to enter storm drain.

During clean up of the wash area, do not allow discharge to enter the storm drain. Utilize wet mop of small area cleaning methods when available.

Utilize methods of cleaning fire hoses that employ the minimal use of water, such as high-pressure spray washers when applicable.

Consider the use of a “wet-vac” to pick up washwater and dispose of in sewer, septic system, or holding tank.

Consider the use of biodegradable cleaning agents.

If heavy cleaning operations are in use, become aware of the chemicals and greases removed from the equipment. Any solvents used to pre-treat soiled equipment shall not escape the containment process.

Consider the properties of the cleaning agent. Should chemicals be used to clean up soiled walls and floors of the work area, wet mopping may be the best means of clean up, however, it may be necessary to dispose of any mops or rags in a safety can or other appropriate means.

If washing hoses indoors, consider the effects that a wet environment will have on walls, windows, ceilings, and other surfaces. Protect exposed equipment and porous surfaces.

If facility is not connected to sewer system, consider the impact of placing any chemical agents into the septic system and the effects thereof. Use of a holding tank may be necessary for wastewater.

Fire Ground Training

BMP MS.11.2. Water flows should be directed to landscaped areas or pervious areas whenever possible.

BMP MS.11.3. When flowing water to an area where landscaping does not prevent runoff, the area selected shall be surveyed by the officer in charge prior to training activities to ensure that debris will not enter the storm water system as a result of the drill.

BMP MS.11.4. Live fire training activities will be pre-planned to allow integration of structural BMPs to control runoff. Run-off from live fire training activities may not be discharged to the Storm Water Conveyance System or Receiving Waters.

BMP MS.11.5. Discharge water to lawn areas.

BMP MS.11.6. Use fog streams for short durations while moving the stream.

BMP MS.11.7. Use lower gallon per minute (GPM) nozzle settings.

BMP MS.11.8. When practical minimize the length of the supply lines.

Additional considerations include the following:

Care should be taken to compare the ratio of flow to landscape area.

Consider conducting training activities (water flowing) on non-rain days.

Consider conserving water (guidelines for time versus GPM flows) whenever possible.

Include diversion/diking in the exercises to allow evaporation, whenever possible.

Consider utilizing techniques for velocity reduction (energy dissipaters) when possible.

Incorporate techniques for sediment control in training whenever possible.

Maintenance

BMP MS.11.9. Discharge foam flushing to permeable paving and turf areas for lawn area to flush or divert to drywells or landscaping.

BMP MS.11.10. When performing pump testing, provide recycle test pit area.

BMP MS.11.11. When performing hose testing, perform the test on site and direct flows to drywells or landscape areas.

Cleaning

BMP MS.11.12. Where practical wash in sinks that discharge to sewer or septic system.

BMP MS.11.13. Any area or facility used for the washing and/or cleaning of fire hose must be designed so that no washwater or other debris enters the Storm Water Conveyance System.

BMP MS.11.14. A wash area may be created in a manner that allows all washwater to percolate through plant material or the earth, or evaporate completely, as long as no washwater enters a storm drain, drainage to a waterway, or escapes from the property.

BMP MS.11.15. Use of designated wash areas (preferably covered and bermed) to prevent contact with storm water.

BMP MS.11.16. Discharge to sanitary sewer when possible (contact local sewer authority to find out if pre-treatment is required).

BMP MS.11.17. Consider constructing a holding basin or tank for washwater if sewer is not available (liquid must be disposed of properly).

BMP MS.11.18. Do not permit washwater containing detergents, degreasers, or other contaminants to enter the storm drain.

BMP MS.11.19. Clean up of wash area must be accomplished so as not to discharge to the Storm Water Conveyance System. Utilize wet mop of small area cleaning methods when available.

Additional considerations include the following:

Utilize methods of cleaning fire hoses that employ the minimal use of water, such as high-pressure spray washers when applicable.

Consider the use of a “wet-vac” to pick up washwater and dispose of in sewer, septic system or holding tank.

Consider the use of biodegradable cleaning agents.

If heavy cleaning operations are in use, become aware of the chemicals and greases removed from the equipment. Any solvents used to pre-treat soiled equipment shall not escape the containment process.

Consider the properties of the cleaning agent. Should chemicals be used to clean up soiled walls and floors of the work area, wet mopping may be the best means of clean up, however, it may be necessary to dispose of any mops or rags in a safety can or other appropriate means.

If washing hoses indoors, consider the effects that a wet environment will have on walls, windows, ceilings and other surfaces. Protect exposed equipment and porous surfaces.

If facility is not connected to sewer system, consider the impact of placing any chemical agents into the septic tank and effects.

3.9 Mobile Municipal Activities, Including Power Washing

BMPs must be implemented during all mobile activities conducting in the City. Mobile activities include, but are not limited to power washing, infrastructure maintenance, and landscaping/right-of-way maintenance.

Dependent on the type of mobile municipal activity being conducted, other portions of this Manual shall be used to designate minimum BMPs.

All discharge produced by power washing activities must be contained and collected and either disposed of to the sanitary sewer system or a pervious infiltration area. Discharge produced by any mobile activities, including power washing, may not be discharged to the City's conveyance system.

3.10 Special Events

Special events require the implementation of trash control BMPs. Depending on the type and size of event, temporary trash and recycling containers shall be installed throughout the site. Other post

clean-up activities such as catch basin cleaning shall be conducted if necessary. Street sweeping shall be conducted after the special event.

3.11 Additional Controls

There are a number of Environmentally Sensitive Areas within the City. These areas are sensitive to impacts from Urban Runoff that may degrade water quality and harm aquatic life.

In addition to the general requirements required for all Dischargers and all Municipal Areas and Activities as described in Chapter 2, the City may require that additional BMPs beyond the minimum BMPs for a specific area and/or activity be implemented for Municipal Areas and Activities.



Chapter 4

Inspections, Enforcement, and Reporting



This section is provided to summarize the procedures regarding inspections, enforcement, and reporting of noncompliant sites or activities of the City. The City will achieve compliance at Municipal Areas and Activities with the minimum water quality protection requirements and applicable BMPs through site inspections, review of self-audits by facility managers or staff, enforcement procedures, and other means as described in this section.

4.1 Inspections

4.1.1 Inspection Frequency

High Priority Municipal Areas and Activities

High Priority Municipal Areas and Activities will be inspected at least annually. Additional inspections of High Priority Municipal Areas and Activities may occur as a result of a public or municipal staff reporting, an illicit discharge source investigation, or a follow up to one of these two undertakings or a follow up to a previous inspection

Medium and Low Priority Municipal Areas and Activities

Medium and Low Priority Municipal Areas and Activities will be inspected as needed. Inspections will typically occur as a result of a public or municipal staff reporting, an illicit discharge source investigation, or a follow up to one of these two undertakings or a follow-up to a previous inspection.

4.1.2 Inspection Procedures

Inspections of Municipal Areas and Activities will typically be conducted by responsible managers who must assume the responsibility for those activities associated with the Municipal Areas or Activity. Inspections will be tracked by the JURMP Manager utilizing the Municipal Inventory Database, or another similar database. Inspectors will utilize a Municipal Urban Runoff Inspection Form that they

must sign to certify that the inspection was complete and accurate. Where appropriate, the responsible manager may choose to defer the inspection to a facility manager, supervisor, or other appropriate employee, however, final certification of the inspection must come from the responsible manager.

The City may also utilize inspectors from other departments, such as business or construction inspectors, contract inspectors, or other properly trained personnel, to conduct self-audits, to verify inspections by responsible managers, or to perform inspections when the responsible manager is not available or capable of performing the inspection. This section describes the procedures that inspectors will follow to conduct inspections.

Inspection Initiation

An inspection is initiated as a result of one of the following:

- A public or municipal staff reporting

- An illicit discharge investigation

- As a follow-up to a previous inspection, violation, or citation

- The JUMRP Manager identifies that the municipal area or activity is due for an inspection in accordance with the schedule described in section 2.7.1.

In order to initiate an inspection, the JURMP Manager will issue a Request for Inspection to the responsible manager or other designated inspector. The Request for Inspection will include the reason for the inspection and provide a deadline by when the inspection must be complete.

Responsible managers and other personnel are also encouraged to conduct informal or formal inspections as they determine necessary to verify continual compliance with the requirements of the City and the Order. Formal inspections are any inspections that are requested with a Request for Inspection or any inspection that involves the completion of a Municipal Urban Runoff Inspection Form.

Conducting the Inspection

During formal inspections, the inspector should always conduct a complete inspection of the area or activity regardless of the initiating circumstances. However, the inspectors may choose to focus on specific issues that were previously identified or which were the reason for the initiation of the inspection.

If the inspected site does not meet the City's minimum water quality protection requirements, BMPs are either lacking or being implemented improperly, or there is a non-storm water discharge identified, the inspector should immediately direct compliance and conduct follow-up inspections as necessary to confirm that compliance is attained.

The City must notify the Regional Board of any noncompliance in accordance with Order No. 2001-01 Section R.1 (and B.6 of Appendix C) if the noncompliance meets the City's criteria of posing a threat to human or environmental health. The Manual explains this requirement in more detail.

Certification and Filing

All formal inspections conducted in response to a Request for Inspection must be certified by the inspector and the responsible manager. Copies of the completed and certified Municipal Urban Runoff Inspection Form are then sent to the JURMP Manager for filing and inclusion in any appropriate reports. If a formal inspection was conducted with a Request for Inspection, the responsible manager is encouraged to certify the inspection and provide a copy of the inspection to the JURMP Manager.

4.2 Enforcement

The City is required to enforce its ordinances at all Municipal Areas and Activities. An enforcement action would typically occur as a result of an inspection or in response to a public or municipal staff reporting. The City employs several enforcement mechanisms and penalties to ensure the compliance with its ordinances. Internal enforcement procedures, such as those for municipal staff, are different than external enforcement procedures, such as those for municipal contractors. Both of these are discussed below:

4.2.1 Internal Enforcement Procedures

The City's inspectors, managers, and supervisors all possess internal enforcement authority through

established City personnel rules and regulations procedures. Depending on the severity of the violation, enforcement can range from a verbal warning to disciplinary actions. Internal enforcement will occur when a violation of City regulations or the Order can be attributed to an individual's or group of individuals' negligence. The burden of the enforcement will be placed on the supervisor(s) of that individual or group of individuals. In the case of continuous or substantial violations by an individual or group of individuals the supervisor(s) may also be held accountable.

If a facility or an activity results in continuous or substantial violations, then the manager of the facility or activity may also be held accountable for the violation, even if operations of the facility or activity are under contract.

The primary methods of internal enforcement are described below.

Verbal Warnings

A common initial method of requesting corrective action and enforcing compliance is a verbal warning from the inspector to the responsible supervisor or employee. Verbal warnings are often sufficient to achieve correction of the violation, often while the inspector is present. The inspector should notify appropriate supervisor of the violation, and document the violation and the notification to the project supervisor on the Inspection Form. A specific time frame for correcting the problem and a follow-up inspection date should be documented by the inspector.

Written Warnings

If a deficiency noted in a 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 notice of violation shall be issued describing the infraction that is to be corrected and the time frame for correction and for a follow-up inspection. In judging the degree of severity, the City inspector may also take into account any history of similar or repeated violations by the responsible party at this or other sites. A copy of the notice should be given to the responsible party and appropriate supervisor and placed in the active inspection file. If the violation has been corrected to the satisfaction of the inspector, the inspector will document compliance in the inspection file.

Disciplinary Actions

If a municipal employee is the cause of noncompliant activities, the City may choose to take disciplinary actions against the employee in accordance with its established personnel rules and regulations procedures. By following the above procedures, any substantial violation or repeated violations should be adequately documented to support the decided disciplinary action.

4.2.2 External Enforcement Procedures

If the noncompliance is a result of negligence by a contractor to the municipality, the enforcement action could range from a verbal warning to the assessment of fines. Because contractors to the City are classified as either commercial or industrial businesses they would be subject to the regulations described in the Industrial Component and Commercial Component of the JUMRP, and similarly, violations would be enforced following the programs described in those sections. However, because the businesses would be contracted with the City, the City possesses some additional enforcement mechanisms that it could implement. If a contractor or developer is performing contract work for the City, then the City can use the provisions within the contract for enforcement of noncompliance. The City should add language into their construction and maintenance contracts that give them the right to refuse payment, stop work (without time penalties) or revocation of contracts if the contractors' performing the activities do not comply with appropriate permits, laws, regulations, and ordinances.

4.3 Reporting Noncompliant Sites

Reporting to the City

All City employees are strongly encouraged to become familiar with the general requirements of residents, businesses, and other activities in the City. City employees are also strongly encouraged to report any incidents of noncompliance with the City's regulations to the City's internal reporting hotline, Oceanside Eyes. Oceanside Eyes is an incentive-based reporting hotline established exclusively for City employees. Certificate, gifts, and other items are awarded to City employees who use the Oceanside Eyes hotline when the total number of reports by that individual employee hits certain milestones.

Reporting to RWQCB

The City is required to provide oral notification to the RWQCB Board of noncompliant sites that are determined to pose a threat to human or environmental health within its jurisdiction within 24 hours of the discovery of noncompliance. Such oral notification shall be followed up by a written report and submitted to the RWQCB within 5 days of the incidence of noncompliance. Sites are considered noncompliant when one or more violations of local ordinances, permits, plans, or the Permit exist on the site.

Storm water discharges generated during construction activities or other municipal activities can cause an array of physical, chemical, and biological water quality impacts. Water quality impairment results, in part, because a number of pollutants are preferentially absorbed onto mineral or organic particles found in fine sediment. Erosion, sediment transport, and delivery are the primary pathways for introducing key pollutants such as nutrients (i.e. phosphorus), metals, and organic compounds into aquatic systems. Based on the potential for impacts by sediment transport to human or environmental health, the City is required to submit criteria by which to evaluate events of noncompliance to determine whether they pose a threat to human or environmental health. Some criteria to be considered during evaluation of an event producing noncompliance, whether from storm water or non-storm water discharges, are as follows:

Estimated area of erosion caused by discharge.

Were toxic materials discharged from site?

Proximity of site to sensitive water body (i.e., is discharge to ocean, creek, river, etc)

Proximity of site to impaired water body (303d listed).

Proximity of site to sensitive habitat/endangered species.

Estimated volume of discharge.

Proximity of site to public water supply (well head, monitoring wells)

Beneficial uses for affected water bodies.

If discharge to storm drain, condition of storm drain (clog, etc.)

Total Suspended Solids concentration in discharge and turbidity.

Other materials discharged from site (concrete washout, sanitary washes, etc.)

The City will track the notification process to the RWQCB utilizing the Reporting of Noncompliant Sites form.



Definitions

The following definitions shall be applicable when the following words or phrases are used in this Manual (whether or not these words or phrases are capitalized).

Accelerated Erosion—erosion caused by development activities that exceeds the natural processes by which the surface of the land is worn away. Erosion includes the movement or loss of soil by the action of water, wind, or chemical action.

Authorized Enforcement Staff—any City employee supervised by an Authorized Enforcement Official, assigned to duties involving permits and other City approvals, inspections, and enforcement related to the City Code.

Authorized Enforcement Official—officials including the Director of the Water Utilities Department, the Director of Public Works; the Director of the Department of Planning Department; the Director of Housing Department; the Director of Building and Safety, the Chief of the Police Department, and the Chief of the Fire Department.

Best Management Practices (BMPs)—schedules of activities, pollution treatment practices or devices, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants directly or indirectly to Storm Water, Receiving Waters, or the Storm Water Conveyance System. Best Management Practices also include, but are not limited to, treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage. Best Management Practices may include any type of pollution prevention and pollution control measure that can help to achieve compliance with the City's Code or this Manual.

Channel—a natural or improved watercourse with a definite bed and banks that conducts continuously or intermittently flowing water.

City—the City of Oceanside.

Commercial Discharger—a Discharger who operates a Regulated Commercial Facility.

Constructed Wetland—a vegetated area that has been deliberately modified to provide or enhance habitat, to provide water quality benefits, or to moderate water flow rates or velocities, that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Detention—the temporary storage of storm runoff in a manner that controls peak discharge rates and provides some gravity settling of pollutants.

Detention Facility—a detention basin or alternative structure designed for the purpose of temporary storage of stream flow or surface runoff and gradual release of stored water at controlled rates.

Developer—a person who seeks or receives permits for or who undertakes land development activities.

Development Project Proponent—see Developer.

Discharge—(when used as a verb) to allow pollutants to directly or indirectly enter Urban Runoff, or to allow storm water or non-storm water to directly or indirectly enter the Storm Water Conveyance System or Receiving Waters, from an activity or operations which one owns or operates. (When used as a noun) the pollutants, storm water and/or non-storm water that is discharged.

Discharger—any person or entity engaged in activities or operations or owning facilities, which will or may result in pollutants entering Urban Runoff, the Storm Water Conveyance System, or Receiving Waters; and the owners of real property on which such activities, operations, or facilities are located; provided however that a local government or public authority is not a Discharger as to activities conducted by others in public rights of way.

Discharges Directly To—storm water or non-storm water enters Receiving Waters from a facility or activity, without mixing with any storm water or non-storm water from another facility or activity prior to entering such Receiving Waters.

Drainage Easement—a legal right granted by a land owner to a grantee allowing the use of private land for storm water management purposes.

Environmentally Sensitive Area (ESA)—Impaired Water Bodies, areas designated as Areas of Special Biological Significance or areas that are beneficially used by RARE species, by the State Water Resources Control Board (SWRCB) in the Water Quality Control Plan for the San Diego Basin (1994 and amendments), National Wildlife Refuges, areas designated as preserves for species-protection purposes by the State of California or a local government, and pre-approved mitigation areas identified in agreements between the County and state or federal natural resources agencies.

Erosion Control Plan—an Urban Runoff Management Plan that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.

Household Hazardous Waste—a household hazardous material that no longer has a use and is discarded or intended to be discarded. The term includes, but is not limited to, paint and paint-related materials; yard and garden products; household cleaners; used oil, motor vehicle fluids, batteries and oil filters; and household batteries.

Hydrologic Soil Group—the classification system for soil erodability set out in *Soil Survey - San Diego Area, California* (December 1973), issued by the U.S. Department of Agriculture, Soil Conservation Service and U.S. Forest Service. (In this system, soils are categorized into four runoff potential groups. The groups range from “A” soils, which have high permeability and little runoff production, to “D” soils, which have low permeability rates and produce considerably more runoff.)

Illegal Connection—a pipe, facility, or other device connected to the Storm Water Conveyance System or Receiving Waters, which has not been reviewed and authorized by the City; or a permitted/authorized pipe, facility, or other device, which conveys Illegal Discharges.

Illegal Discharge—any discharge into Urban Runoff, the Storm Water Conveyance System, or Receiving Waters that is prohibited by the City Code. This includes, but is not limited to, discharges of non-storm water that are not exempt discharges listed in section 40.2.2 of the City's Code, any discharge from an Illegal Connection, and any discharge that contains additional pollutants due to the absence of

a required BMP or the failure of a BMP. Discharges that require a County permit or a California Regional Water Quality Control Board, San Diego Region (RWQCB) permit that has not been issued or has not been acknowledged by the Discharger to be applicable are Illegal Discharges. Discharges regulated under an applicable RWQCB or County permit or Storm Water Pollution Prevention Plan (SWPPP) are Illegal Discharges unless compliance with all applicable permit and SWPPP conditions is maintained.

Impaired Water Body—a water body that is listed by the SWRCB as impaired by a particular pollutant or pollutants, pursuant to section 303(d) of the Federal Clean Water Act. The term, “303(d) listed water body,” has the same meaning.

Impervious Cover or Impervious Surface—constructed or modified surfaces that cannot effectively infiltrate rainfall. The term includes, but is not limited to, building rooftops, pavement, sidewalks, and driveways.

Impervious Surface Area—the ground area covered or sheltered by an impervious surface, measured in plan view (i.e., as if from directly above). For example, the impervious surface area for a pitched roof is equal to the ground area it shelters, rather than the surface area of the roof itself.

Industrial Activity—manufacturing, processing, or raw materials storage at a commercial, industrial, or municipal facility. The term includes, but is not limited to, industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials; manufactured products, waste material, or byproduct creation or storage; material handling; refuse storage or disposal; the application or disposal of process wastewaters; storage and maintenance of material-handling equipment; treatment, storage or disposal of residuals; outdoor shipping and receiving; activities in manufacturing buildings; storage of raw materials and intermediate and finished products; and areas where significant industrial activity has taken place in the past and significant materials remain and are exposed to storm water. Material-handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, byproduct, or waste product.

Industrial Discharger—a Discharger who operates a Regulated Industrial Facility.

General Industrial Storm Water Permit—the Statewide General Industrial Storm Water Permit.

Infiltration—the process of percolating storm water or non-storm water into the subsoil.

Infiltration BMPs or Infiltration Facility—any structural treatment BMP designed primarily to percolate water into the subsurface, such as an infiltration trench or infiltration basin. An infiltration facility may include filtering prior to or during infiltration. BMPs that infiltrate some water but which are designed primarily to retain water or to treat water, such as retention basins, constructed wetlands, or filtering swales are not infiltration facilities.

Land Development Activity—any activity or proposed activity that requires any of the permits or approvals listed in section 40.2.1.(f) of the City's Code.

Land Disturbance Activity—any activity that moves soils or substantially alters the pre-existing vegetated or man-made cover of any land. This includes, but is not limited to, grading, digging, cutting, scraping, stockpiling, or excavating of soil; placement of fill materials; paving, pavement removal, exterior construction; substantial removal of vegetation where soils are disturbed including, but not limited to, removal by clearing or grubbing; or any activity which bares soil or rock or involves streambed alterations or the diversion or piping of any watercourse. Land Disturbance Activity does not include routine maintenance to maintain original line and grade, hydraulic capacity, or the original purpose of the facility, nor does it include emergency construction activities (i.e., land disturbances) required to protect public health and safety.

Land Owner—the holder of legal title to the land, and other persons or entities who exercise control over a land development project pursuant to rights granted in a purchase agreement, joint venture agreement, development agreement, or long-term lease.

Maintenance [of a BMP]—periodic action taken to maintain the as-designed performance of a BMP, and includes, but is not limited to, repairs to the BMP as necessary, and replacement of the BMP by an equally effective or more effective BMP at the end of its useful life.

Maximum Extent Practicable (MEP)—acceptability standard for BMPs. When BMPs are required to meet this standard, the BMPs must be the most

effective set of BMPs that is still practicable. A BMP is effective if it prevents, reduces, or removes the pollutants that would otherwise be present in runoff due to human activity. A BMP is practicable if it complies with other regulations as well as storm water regulations; is compatible with the area's land use, character, facilities, and activities; is technically feasible (considering area soil, geography, water resources, and other resources available); is economically feasible; and provides benefits that are reasonable in relation to costs.

Motor Vehicle—any automobile, car, truck, bus, motor home or other self-propelled vehicle used or suited to use for on-road transportation; and any similar vehicle modified for off-road use.

National Pollutant Discharge Elimination System (NPDES) Permit—a permit issued by the U.S. Environmental Protection Agency, the SWRCB, or the RWQCB.

Non-Storm Water—water that is not the direct product of storm precipitation such as those from industry discharges, leaks, washing, irrigation, and springs.

Notice and Order—a form that is used in the case of a public nuisance violation.

NPDES Permit No. CAS 0108758—RWQCB Order No. 2001-01, NPDES Permit No. CAS 0108758, "Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District."

Off-Site BMP—a storm water management measure located outside the subject property boundary of a facility or outside the boundary described in the permit application for a land development activity.

Onsite BMP—a storm water management measure located within the subject property boundary or a facility, or inside the boundary described in the permit application for a land development activity.

Performance Standard—a requirement that specifies a result that must be achieved (e.g., "minimize impervious surface area" or "do not impair Receiving Water quality") without specifying the means that must be used to achieve that result. (This Manual applies performance standards only to

certain land development and redevelopment projects that require discretionary City permits; those permits will typically include enforceable project-specific requirements intended to achieve the result required by the performance standard.)

Pollutant—any agent introduced to storm water or non-storm water through human activity that may cause or contribute to the degradation of water quality such that public health, the environment, or beneficial uses of waters may be affected. The term may include, but is not limited to, dredged soil, rock, sand, or silt (excluding sediment, silt, or substances in quantities which would enter storm water from a natural undeveloped watershed); solid waste, sewage, garbage, or medical waste; wrecked or discarded equipment; radioactive materials; industrial waste; fecal coliform, fecal streptococcus, and enterococcus bacteria and other pathogens that pose a threat to human health; volatile organic carbon, surfactants, oil and grease, petroleum hydrocarbons, total organic carbon, lead, copper, chromium, cadmium, silver, nickel, zinc, cyanides, phenols, and biocides; and any contaminant which can significantly degrade the quality of Receiving Waters by altering pH, total suspended or settleable solids, biochemical oxygen demand, chemical oxygen demand, nutrients, or temperature.

Rainy Season—the season from October 1 through April 31.

Receiving Waters—all waters that are “Waters of the State” within the scope of the State Water Code, including, but not limited to, natural streams, creeks, rivers, reservoirs, lakes, ponds, water in vernal pools, lagoons, estuaries, bays, the Pacific Ocean, and groundwater.

Redevelopment—any construction, alteration, or improvement at an already developed site that will increase the total impervious surface area of that site, or that involves activities that could expose contaminants to rainfall. Redevelopment can include, but is not limited to, the expansion of building footprints, the addition or replacement of a structure, exterior construction and remodeling, replacement of existing impervious surfaces that is not part of a routine maintenance activity, and other activities that create additional impervious surface.

Regulated Commercial Facility—all non-residential facilities engaged in business or commerce, whether for profit or not-for-profit, or publicly or privately owned, except for Regulated Industrial Facilities and Municipal Facilities; plus residences

used for commercial repair, maintenance, cleaning, manufacturing, food preparation, or painting activity if that activity has the potential to result in the discharge of non-storm water or the discharge of pollutants to storm water.

Regulated Industrial Facility—any facility subject to the State General Industrial Storm Water Permit; any other facility primarily engaged in manufacturing, processing, storage, or handling of raw materials, processed bulk materials, or refuse; and any other facility with a total outdoor uncovered area of more than two acres that is used for an Industrial Activity. Municipal Facilities are not Regulated Industrial Facilities, unless they are subject to the General Industrial Storm Water Permit.

Residential Discharger—for an occupied residence, the occupants; and for a vacant residence, the owner and the manager of the residence.

Statewide General Construction Storm Water Permit—NPDES Permit No. CAS000002, “Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activities,” and any amendments thereto.

Statewide General Industrial Storm Water Permit—NPDES Permit No. CAS000001, “Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities,” and any amendments thereto.

Stop Work Order—an order issued that requires that specifically identified activity or all activity on a site be stopped.

Storm Water—surface runoff and drainage associated with storm events.

Storm Water Conveyance System—private and public drainage facilities other than sanitary sewers within the City by which Urban Runoff may be conveyed to Receiving Waters, and includes, but is not limited to, roads, streets, constructed channels, aqueducts, storm drains, pipes, street gutters, inlets to storm drains or pipes, or catch basins.

Urban Runoff Management—the use of structural or non-structural BMPs that are designed to reduce Urban Runoff pollutant loads, discharge volumes, and/or peak discharge flow rates or velocities. When applied to the City or another municipality, Urban

Runoff management also includes planning and programmatic measures.

Urban Runoff Management Plan—a plan, submitted on a City form or in a City-specific format in connection with an application for a City permit or other City approval, identifying the measures that will be used for storm water and non-storm water management during the permitted activity.

Storm Water Pollution Prevention Plan (SWPPP)—a document (other than a Urban Runoff Management Plan), which meets the requirements for a SWPPP set out in the General Construction Storm Water Permit or General Industrial Storm Water Permit. A SWPPP submitted to the City must describe the BMPs to be implemented and other steps to be taken by the Discharger to meet the requirements of the City's Code or this Manual.

Storm Water Retrofit—a storm water management BMP designed for an existing development site or activity that previously had either no storm water management BMPs in place or that relied on BMPs inadequate to meet the storm water management requirements of the site or activity.

Structural BMP—a BMP that relies on either a physical condition (other than an entirely natural and undisturbed condition), or on a constructed or installed device to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Constructed or enhanced BMPs that depend on natural materials and processes (e.g., constructed drainage swales or buffers, or constructed wetlands), and that require periodic maintenance to function as designed, are Structural BMPs.

Structural Post-Construction BMP—a Structural BMP (other than a temporary construction-related BMP) put in place in connection with a land development or redevelopment project to prevent or reduce contamination in storm water or Receiving Waters, or to prevent or reduce erosion downstream from the project.

Tributary To an Impaired Water Body—a facility or activity is Tributary To an Impaired Water Body if Urban Runoff from that facility or activity enters (1) the Storm Water Conveyance System at a place and in a manner that will carry pollutants for which that water body is impaired in that discharge to the impaired water; (2) a flowing stream that will carry pollutants for which that water body is impaired in that discharge to the impaired water; or (3) an ephemeral stream that reaches the impaired water during storm events and that will carry pollutants for which that water body is impaired from the facility or activity to the impaired water body during such storm events.

Urban Runoff—all surface flows originating from within the City. Typically, if in sufficient quantity, these flows will travel from their point of origin and enter the Storm Water Conveyance System and/or Receiving Waters. Urban Runoff includes, but is not limited to, storm water, non-storm water discharges, and Illicit Discharges.

Water Main—a potable or recycled water delivery line greater than or equal to four inches in diameter.

Watercourse—a permanent, ephemeral, or intermittent stream or other body of water, either natural or improved, which gathers or carries surface water.

Water Quality Standards—the water quality objectives adopted by the State or the U.S. Environmental Protection Agency to protect the beneficial uses (e.g., swimming, fishing, municipal drinking water supply) of water.

Waters of the United States—water subject to the regulatory jurisdiction of the United States under the Federal Clean Water Act and applicable case law. In general, this includes navigable waters, waters tributary to navigable waters, and adjacent wetlands.