San Francisco Public Utilities Commission

Storm Water Management Plan 2003 - 2004



City and County of San Francisco

January 2004

Preface

Ownership of the separate storm sewers within the City and County of San Francisco (City) is divided between the Port of San Francisco for areas along the City waterfront and the San Francisco Public Utilities Commission for all other separate storm sewers within the City's jurisdiction. This Storm Water Management Plan covers these non-Port areas of the City while a separate Storm Water Management Plan produced by the Port of San Francisco covers the Port areas.

The reason for two separate plans and programs is that land use and activities of concern for storm water within the two areas are quite different. The municipal separate storm sewer systems currently owned by SFPUC are almost exclusively very small systems in a few of the City's parks. These limited systems drain to lakes in these parks. The Port's programmatic efforts will focus primarily on maritime operations and development, as well as the tourism industry that operates in the vicinity of Fisherman's Wharf. Although the Port of San Francisco and the San Francisco Public Utilities Commission will administer their storm water programs separately, they will continue to coordinate their efforts on issues of mutual concern. To institutionalize this coordination, SFPUC and the Port will enter into a Memorandum of Understanding for interdepartmental coordination on storm water management issues.

San Francisco Public Utilities Commission

City and County of San Francisco

STORM WATER MANAGEMENT PLAN

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Glossary

AGENCIES & ORGANIZATIONS

- List of agencies/organizations and acronyms / short names, as appropriate

<u>San Francisco</u>

CCSF / City – City and County of San Francisco
City Attorney's Office
City Planning Department
DBI – Department of Building Inspection
Commercial Plan Check Division and Residential Plan Check Division
MPC/UMB – Major Projects and UMB Plan Check Division
DOE – Department of the Environment
DPH – Department of Public Health
DPW – Department of Public Works
BCM – Bureau of Construction Management
BOE – Bureau of Engineering
BSES – Bureau of Street and Environmental Services
MUNI – Municipal Railway of San Francisco
Port – Port of San Francisco
EH&S – Environmental Health and Safety
Planning and Development Division
Real Estate Department
RPD – Recreation and Park Department
San Francisco Recreation and Park Commission
SFPUC – San Francisco Public Utilities Commission
BERM – Bureau of Environmental Regulation and Management
SFRA – San Francisco Redevelopment Agency
TIDA – Treasure Island Development Authority

<u>State</u>

BCDC - Bay Conservation and Development Commission

Caltrans - California Department of Transportation

DTSC – Department of Toxic Substances Control

Regional Board - Regional Water Quality Control Board-San Francisco Bay Region

State Board - State Water Resources Control Board

State Department of Parks and Recreation

<u>Federal</u>

DOI – Department of the Interior GGNRA – Golden Gate National Recreation Area U.S. Army Corps of Engineers USEPA – U.S. Environmental Protection Agency US NAVY

<u>Other</u>

BASMAA – Bay Area Storm water Management Agencies Association CASQA – California Storm water Quality Association PGA – Professional Golfers Association of America TERMS – Definitions of terms as they appear in Attachment 9 of the MS4 General Permit.

100,000 Square Foot Commercial Development – 100,000 Square Foot Commercial Development means any commercial development that creates at least 100,000 square feet of impermeable area, including parking areas.

Automotive Repair Shop – Automotive Repair Shop means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

Authorized Non-Storm Water Discharges – Authorized non-storm water discharges are certain categories of discharges that are not composed entirely of storm water but are not found to pose a threat to water quality. They include: water line flushing; landscape irrigation; diverted stream flows; rising ground waters; uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20)) to separate storm sewers; uncontaminated pumped ground water; discharges from potable water sources; foundation drains; air conditioning condensate; irrigation water; springs; water from crawl space pumps; footing drains; lawn watering; individual residential car washing; flows from riparian habitats and wetlands; dechlorinated swimming pool discharges; and discharges or flows from emergency fire fighting activities. If any of the above authorized nonstorm water discharges (except flows from fire fighting activities) are found to cause or contribute to an exceedance of water quality standards or cause or threaten to cause a condition of nuisance or pollution, the category of discharge must be prohibited.

Best Management Practices (BMPs) – Best management practices means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of 'waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (40 CFR §122.2)

Commercial Development – Commercial Development means any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, multi-apartment buildings, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

Directly Connected Impervious Area (DCIA) – DCIA is the acronym for directly connected impervious areas and means the area covered by a building, impermeable pavement, and/ or other impervious surfaces, which drains directly into the storm drain without first flowing across permeable land area (e.g. lawns).

Discretionary Project – Discretionary Project means a project which requires the exercise of judgment or deliberation when the public agency or public body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations.

Greater than (>) 9 unit home subdivision – Greater than 9 unit home subdivision means any subdivision being developed for 10 or more single-family or multi-family dwelling units.

Hillside – Hillside means property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is twenty-five percent or greater.

Infiltration – Infiltration means the downward entry of water into the surface of the soil.

Measurable Goal – Measurable goals are definable tasks or accomplishments that are associated with implementing best management practices.

Minimum Control Measure – A minimum control measure is a storm water program area that must be addressed (best management practices implemented to accomplish the program goal) by all regulated Small MS4s. The following six minimum control measures are required to be addressed by the regulated Small MS4s: Public Education and Outreach on storm Water Impacts, Public Involvement/Participation, Illicit Discharge Detection and Elimination, construction Site Storm Water Runoff Control, Post-Construction Storm Water Management in New Development and Redevelopment, and Pollution Prevention/Good Housekeeping for Municipal Operations.

New Development – New Development means land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision.

Offsite Facility – An offsite facility is a geographically non-adjacent or discontinuous site that serves, or is secondary to, the primary facility and has the same owner as the primary facility. Storm water discharges from an offsite facility must be permitted if it meets the definition of a regulated Small MS4 itself. The offsite facility may satisfy this permitting requirement if the SWMP of the primary facility addresses the offsite facility, such that the permitted area of the primary facility includes the offsite area.

Outfall – A point source at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. (40 CFR §122.26(b)(9))

Parking Lot – Parking Lot means land area or facility for the temporary parking or storage of motor vehicles used personally, for business or for commerce with a lot size of 5,000 square feet or more, or with 25 or more parking spaces.

Point Source – Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. (40 CFR §122.2)

Regulated Small MS4 – A regulated Small MS4 is a Small MS4 that is required to be permitted for discharging storm water through its MS4 to waters of the U.S. and is designated either automatically by the U.S. EPA because it is located within an urbanized area, or designated by the SWRCB or RWQCB in accordance with the designation criteria listed at Finding 11 of the General Permit.

Redevelopment – Redevelopment means, on an already developed site, the creation or addition of at least 5,000 square feet of impervious area. Redevelopment includes, but is not limited to: the expansion of a building footprint or addition of a structure; structural development including an increase in gross floor area and/ or exterior construction or remodeling; and land disturbing activities related with structural or impervious surfaces. Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to these Design Standards, the Design Standards apply only to the addition, and not to the entire development.

Restaurant – Restaurant means a stand-alone facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption. (SIC code 5812).

Retail Gasoline Outlet – Retail Gasoline Outlet means any facility engaged in selling gasoline and lubricating oils.

Small Municipal Separate Storm Sewer System (Small MS4) – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that are:

- (i) Owned or operated by the United States, a State, city, town, boroughs, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
- (ii) Not defined as "large" or "medium" municipal separate storm sewer systems
- (iii) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings. (40 CFR §122.26(b)(16))

Separate Implementing Entity (SIE) – A Separate Implementing Entity is an entity, such as a municipality, agency, or special district, other than the entity in question, that implements parts or all of a storm water program for a Permittee. The SIE may also be permitted under 40 CFR

Part 122. Arrangements of one entity implementing a program for another entity is subject to approval by the Regional Water Quality Control Board Executive Officer.

Source Control BMP – Source Control BMP means any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.

Storm Event – Storm Event means a rainfall event that produces more than 0.1 inch of precipitation and that, which is separated from the previous storm event by at least 72 hours of dry weather.

Structural BMP – Structural BMP means any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution (e.g. canopy, structural enclosure). The category may include both Treatment Control BMPs and Source Control BMPs.

Treatment – Treatment means the application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media adsorption, biodegradation, biological uptake, chemical oxidation and UV radiation.

Treatment Control BMP – Treatment Control BMP means any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

1. Introduction

1.1 Purpose

Storm water management is a critical municipal responsibility. The effectiveness and efficiency of storm water management have a direct impact on public health and safety, surface water quality, environmental habitat, and future development. In response to these concerns, the Federal government amended the Clean Water Act (CWA) in 1987 to include provisions that regulate the management of storm water runoff from municipalities and specific industrial classifications. Recent regulations promulgated as a result of those amendments required that designated municipalities obtain coverage under a statewide general permit by March of 2003. The San Francisco Public Utilities Commission (SFPUC) prepared this Storm Water Management Plan (SWMP) in response to that mandate. A separate Storm Water Management Plan produced by the Port of San Francisco covers the Port areas. Refer to the Preface of this document and the Program Management Section (3.1) for more details on the Port SWMP and coordination with the SFPUC SWMP.

The purpose of this SWMP is to describe SFPUC's plans for its Storm Water Management Program in fiscal year 2003-2004. The plan describes a suite of programmatic elements SFPUC will implement, or is in the process of developing for implementation. Together, these programmatic elements address the six minimum control measures required under the new "Phase II" storm water regulations as shown below in Table 1.

TABLE 1: SIX MINIMUM CONTROL MEASURES

- 1. **Public Education** The Permittee must educate the public in its permitted jurisdiction about the importance of the storm water program and the public's role in that program.
- 2. **Public Involvement / Participation** The Permittee must comply with all state and local notice requirements when implementing a public involvement/participation program.
- 3. **Illicit Discharge Detection and Elimination** The Permittee must adopt and enforce ordinances or take equivalent measures to prohibit illicit discharges. The Permittee must also implement a program to detect illicit discharges.
- 4. **Construction Site Storm Water Runoff Control** The Permittee must develop a program to control the discharge of pollutants from construction sites greater than one acre in size within its permitted jurisdiction.
- 5. **Post-Construction Storm Water Management in New Development and Redevelopment*** The Permittee must require long-term post-construction best management practices (BMPs) that protect water quality and control runoff flow, to be incorporated into development and significant redevelopment projects.
- 6. **Pollution Prevention / Good Housekeeping for Municipal Operations** The Permittee must examine its activities and develop a program to prevent the discharge of pollutants from these activities. At a minimum, the program must educate staff on pollution prevention and minimize pollutant sources.

* Note that most of these BMPs will come in the form of design decisions made during the design phase of a project, which will ultimately impact storm water flow and treatment after construction is completed.

The Plan is designed to reduce the discharge of pollutants from the SFPUC's municipal separate storm sewer system (MS4) to the maximum extent practicable (MEP) and to protect water quality. MEP is the technology-based standard established by Congress in section 402(p)(3)(B)(iii) of the Clean Water Act that municipal dischargers of storm water must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve. MEP is generally a result of emphasizing pollution prevention and best management practices such as source reduction or avoidance as the first line of defense and treatment methods as an additional line of defense, if necessary and applicable.

1.2 Pollutants of Concern

Storm water becomes runoff and collects pollutants of concern while passing over landscapes, parking lots, street, gutters, and roofs. The MS4 areas currently owned by SFPUC are almost exclusively very small systems in a few City parks. These areas are described in more detail in section 2.2. In most cases, the City's MS4s drain to park lakes. Recreational and landscaping activities are the primary factors influencing storm water pollutants in these areas. Based on these settings and the likely activities that occur there, the potential pollutants of concern are sediment, trash, nutrients, and pesticides. In addition, water quality in Lake Merced is a concern due to dissolved oxygen and pH not meeting the beneficial use requirements for the lake. In July 2003, the United States Environmental Protection Agency (USEPA) added Lake Merced to the California 2002 §303(d) list of impaired water bodies due to these water quality issues.

1.3 Permitting Requirements

Storm Water Regulations - In 1972, the Federal Water Pollution Control Act (subsequently referred to as the Clean Water Act) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added §402(p), which established a framework for regulating storm water discharges under the NPDES Program. Consequently, in 1990, the United States Environmental Protection Agency promulgated regulations for permitting storm water discharges from specified types of industrial sites (including construction sites that disturb five acres or more) and from municipal separate storm sewer systems (MS4s) serving a population of 100,000 people or more. These regulations, known as the Phase I regulations, require operators of medium and large MS4s to obtain storm water permits. On December 8, 1999, USEPA promulgated regulations, known as Phase II, requiring permits for storm water discharges from Small MS4s and from construction sites disturbing between one and five acres of land.

A "MS4" is defined¹ as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) designed or used for collecting or conveying storm water;
- (ii) which is not a combined sewer; and
- (iii) which is not part of a Publicly Owned Treatment Works $(POTW)^2$.

A "Small MS4" is defined as an MS4 that is not permitted under Phase I regulations. This definition of a Small MS4 applies to MS4s operated within cities and counties as well as governmental facilities that have a system of storm sewers. The majority of San Francisco is a combined sewer system and thus was not subject to the Phase I regulatory threshold. However, the Port of San Francisco (Port) and a number of its tenants were subject to and obtained coverage under the General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit) because certain regulatorily-defined industrial activities were conducted in areas served by separate storm sewers.

Under the Phase II regulations, the threshold for needing a municipal permit has been lowered to include designated municipal separate storm sewers located within an "urbanized area" (defined by the Bureau of the Census). San Francisco's separate storm sewers are located within a defined urbanized area (see section 2.2 for a description and map of the City's MS4s).

Federal regulations allow two permitting options for storm water discharges (individual permits and general permits). The State Water Resources Control Board (State Board) along with its Regional Water Quality Control Boards (Regional Boards) have been delegated the authority by USEPA to implement and enforce the NPDES program in California. The State Board has elected to develop a statewide general permit in order to efficiently regulate the numerous Phase II storm water discharges under a single permit. State Board adoption of the General Permit for storm water discharges from Small MS4s is on hold pending legal determinations to be made by USEPA. The primary requirement under the General Permit is expected to be to develop and submit to the State a Storm Water Management Plan, and to implement, maintain, and enforce an effective Storm Water Management Program.

Combined Sewer Overflow Control Policy – Although San Francisco (other than the Port) was not formally subject to the Phase I storm water regulations in the early 1990s, the City's interest and a related Federal policy prompted the City to focus on storm water to reduce combined sewer overflows (CSOs) and their effects on receiving water quality. In 1994, USEPA promulgated its Final Combined Sewer Overflow Control Policy for combined sewer systems (USEPA, 1994). Elements of the policy – in development since 1989 – were incorporated into San Francisco's discharge permits starting in the early 1990s including the "nine minimum controls." The nine minimum controls, which are very similar to controls used to reduce storm water pollution under the storm water regulations, are as follows:

1. Proper operation and regular maintenance programs for the sewer system and the CSOs

¹ Draft State MS4 General Permit and 40 CFR §122.26(b)(8)

² (e.g., Southeast and Oceanside Water Pollution Control Plants)

- 2. Maximum use of the collection system for storage
- 3. Review and modification of pretreatment requirements to assure CSO impacts are minimized
- 4. Maximization of flow to the POTW for treatment
- 5. Prohibition of CSOs during dry weather
- 6. Control of solid and floatable materials in CSOs
- 7. Pollution prevention
- 8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts
- 9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls

1.4 Introduction to Plan and Section Descriptions

The Plan contains the following sections:

Glossary: Agency names, acronyms, and short names / Terms defined in the General Permit

Section 1: Introduction:

Describes the purpose and organization of the Storm Water Management Program, as well as the relevant permitting requirements

Section 2: Background:

Describes the City's combined sewer and storage/transport system, as well as the evolution of the City's storm water program

Section 3: Program Elements

- 3.1 Program Management Provides information on organizational structure, administration, key contacts, program resources, work planning, and record keeping and reporting
- 3.2 Legal Authority Discusses the current legal authority under with the SFPUC can conduct enforcement related to implementation of this Plan.
- 3.3 Six Minimum Measures Describes the Federal and State requirements for the minimum control measures, as well as their applicability to various audiences and MS4 geographic areas owned by the City
- 3.4 Information Sheets A series of information sheets describes current and planned activities including best management practices, measurable goals, and roles and responsibilities
 - 3.4.1 Public Education and Outreach on Storm Water Impacts Covers outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff
 - 3.4.2 Public Involvement / Participation Covers public noticing requirements
 - 3.4.3 Illicit Discharge Detection and Elimination Covers program to detect and eliminate both illicit connections to the storm drain and illegal dumping
 - 3.4.4 Construction Site Storm Water Runoff Control Covers activities to reduce pollutants in storm water runoff from construction activities

- 3.4.5 Post-Construction Storm Water Management in New Development and Redevelopment – Covers program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre
- 3.4.6 Pollution Prevention / Good Housekeeping for Municipal Operations Covers program to reduce pollutants in storm water runoff from City properties such as parks and corporation yards, and activities including street and catch basin cleaning, and pesticide usage

Section 4: References: Cited and uncited reports and plans, as well as useful web sites

Figures and Tables

Figure 1. San Francisco Separate Storm Sewer Areas

- Table 1. Six Minimum Control Measures
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Appendices

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Appendix B	Lake Merced Restoration - Pilot Storm water Enhancement Project
Appendix C	History of the City's Storm Water Program
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Appendix F	Summary Table of All Control Measure Goals

2. Background

San Francisco watersheds drain to both San Francisco Bay and the Pacific Ocean, as well as to various lakes within the geographic boundaries of the City. The health of these waters is aesthetically and economically important to San Francisco. San Franciscans swim, fish, surf, and sail on the Bay and ocean. These two water bodies define the City's location, affect its weather, and are an essential part of life.

2.1 The Combined Sewer System

During rainstorms, the effects of San Francisco's many hills combined with the high percentage of paved surfaces results in the generation of large volumes of storm water runoff in a very short period of time. The City is highly urbanized, with a large central business district. Combined sewers serve the vast majority of the City. Combined sewers collect and transport storm water in the same pipe as sewage, presenting special problems during wet weather when flows increase greatly in volume. Prior to the early 1980s, virtually every rain caused the sewers to overflow at the shoreline, contaminating the beaches and preventing swimming, surfing, and board sailing. The City posted health warnings at the shoreline from November through April.

Despite these complicating factors, the City has been responsible and active in the effort to clean up and restore San Francisco Bay. The situation began to turn around in 1981 with the start-up of the first component of the new wastewater system. March 1997 marked the completion of the City's wastewater facility improvement program, making San Francisco one of the first cities in the country with combined sewers to complete such a program. The construction program cost more than \$1.4 billion dollars over a twenty-year period and represents an expenditure of nearly \$1,900 for every person in the City and County of San Francisco. Today, San Francisco wastewater facilities in the combined sewer areas of the City capture, store, and treat all wet weather flows – sewage and storm water – thereby providing a high level of protection to the Bay and ocean.

San Francisco is unique in the Bay Area in providing treatment for storm water in addition to sewage. On a yearly basis, two thirds of San Francisco's storm water runoff is treated to the secondary treatment standards established by USEPA. No other community in the Bay Area provides a significant level of treatment to storm water.

For more information on the City's combined sewer system and its treatment of storm water, see Appendix A.

2.2 The Municipal Separate Storm Sewer System

Although the City is served almost exclusively by combined sewers, there have been and continue to be small areas of the City that are served by separate storm sewers. This area will increase as the City assumes jurisdiction over former Federal government lands and the MS4s that the Federal government owned and operated. The major areas historically served by separate storm sewers in the San Francisco urbanized area are listed in Table 2.

In preparation for its Phase II MS4 permit application, the City conducted initial investigations to identify all current MS4 areas owned by the City. As of September 30, 2003 San Francisco owned MS4s in the following areas:

- **Port of San Francisco** The Port of San Francisco manages approximately 7¹/₂ miles of San Francisco's waterfront, from Hyde Street Pier on the north to India Basin on the south. The majority of the Port is served by separate sanitary and storm drain systems. The Port will submit its own Notice of Intent (NOI) and SWMP on September 30, 2003.
- Lobos Creek Area The dead ends of a few municipal streets north from Lake Street drain to the slope above Lobos Creek.
- South Beach Harbor A portion of the parking lot and some landscaping drains to the Bay via catch basins. The Port's NOI and SWMP will cover this area as well.
- Golden Gate Park At least three of the park's 12 lakes have some type of MS4, although in each case the system is quite limited. These lakes are: Stow Lake, Middle Lake, and Elk Glen Lake.
- Stern Grove / Pine Lake Park Pine Lake receives landscaping and sheet runoff via a curbed asphalt path along the southern edge of Pine Lake Park and its parking lot, just west of Stern Grove.
- Lake Merced Lake Merced is the City's largest freshwater lake and is actually four lakes North, East, South, and Impound. Lake Merced receives runoff from various roads and facility parking lots via catch basins and asphalt paths that double as drainage channels. SFPUC and Daly City are investigating the feasibility of diverting, treating, and discharging storm water from the Vista Grande Storm Water Canal in Daly City to Lake Merced. This program is one of several options SFPUC is investigating to raise water levels in Lake Merced. In addition, diversion of Daly City storm water from the Vista Grande Canal may help to alleviate flooding that has occurred in the area adjacent to Lake Merced. A pilot study is underway to address concerns about the water quality of the storm water runoff transported in the canal. Refer to Appendix B for a history of Lake Merced, a discussion of key issues surrounding the Lake, and a summary of the Vista Grande Storm Water Pilot Investigation.

A map of the City's separate storm sewer system areas that were subject to the Phase II municipal General Permit as of September 30, 2003 is presented in Figure 1.

SFPUC plans to continue and complete the initial investigation mentioned above to identify all MS4 areas owned by the City. There are some indications that limited additional areas within the City and its parks may have small MS4 areas. If these areas are confirmed, SFPUC will revise and update their SWMP accordingly.

Also as mentioned above, the City is in the process of assuming jurisdiction of the separate storm sewer areas listed bellow. The timing of the conveyance of these areas from the current MS4 owners to the City is determined by many factors; therefore the exact date when the conveyance will take place is unknown at this time. The SFPUC currently expects that it will occur some time in 2004. As these areas, in whole or in part are conveyed to the City and SFPUC becomes the owner of additional MS4 areas, SFPUC will revise and update its SWMP accordingly.

• Treasure Island / Yerba Buena Island

Unlike most of mainland San Francisco, Treasure Island and Yerba Buena Island are served by separate storm water and wastewater systems. Naval Station Treasure Island complies with the statewide Industrial General Permit through a Notice of Intent and Storm water Pollution Prevention Plan (SWPPP) that covers the entire base as a single industrial site.

• Mission Bay–South (areas as built)

Although the drainage at this redevelopment will be a separated sewer system, the vast majority of that system has not been built. The redevelopment of Mission Bay is planned to occur over the next 15-20 years. Currently, Mission Bay–North is in a combined sewer system area. The rest of Mission Bay–South is a construction site, subject to the Construction General Permit and the Storm Water Pollution Prevention Plan (SWPPP) developed for the project by the property owner – Catellus Development Corporation.

• Hunters Point Shipyard

Unlike most of San Francisco, Hunters Point Shipyard is served by separate storm water and wastewater systems. The U.S. Navy complies with the statewide Industrial General Permit through a NOI and SWPPP that covers industrial activities at the former shipyard.

Also, it is important to note that both the State and Federal government own and operate separate storm sewer systems within the definition of an urbanized area within San Francisco including:

- Golden Gate National Recreation Area (GGNRA) including:
 - Alcatraz
 - Fort Mason
 - Presidio National Park
- Lake Merced Highway 35 (Skyline Boulevard)
- Candlestick Point

In addition, there are a number of industrial facilities that are not owned by the City and County of San Francisco that have obtained coverage under the State's Industrial General Permit including:

- Golden Gate Bridge
- Naval Station Treasure Island
- US Coast Guard Group Yerba Buena Island
- Fort Mason
- Hunters Point Shipyard

The separate storm sewer systems in these areas are not connected to the City's separate or combined sewer systems and therefore are not part of SFPUC's SWMP.

TABLE 2: MS4 AREAS WITHIN THE SAN FRANCISCO URBANIZED AREA

Area	Receiving Waters	MS4 Owner March 10, 2003	Type of MS4 [†]
Owned by City and	County of San	Francisco	
Port of San Francisco	San Francisco Bay	Port of San Francisco	Catch basins, conveyances, and outfalls
South Beach Harbor	San Francisco Bay	Port of San Francisco	Catch basins – Parking lot
Lobos Creek Area	Lobos Creek	SFPUC	Dead ends of few municipal streets
Golden Gate Park*	Stow Lake	SFPUC	Catch basins – Stow Lake Drive East
Golden Gate Park	Middle Lake	SFPUC	Catch basin – Chain of Lakes Drive East
Golden Gate Park	Elk Glen Lake	SFPUC	Catch basins – Middle Drive West and Transverse Drive/Overflow – MLK Jr. Drive
Stern Grove	Pine Lake	SFPUC	Asphalt path and curb – Parking lot
Lake Merced – Park	Lake Merced	SFPUC	Catch basins and asphalt paths – Parking lot at Boathouse; Catch basins – Parking lots at Harding Golf Course Clubhouse and Penguin's Prayer statue; Catch basins – surrounding roads
Owned by Other Ag	encies		
Alcatraz	San Francisco Bay	US Department of Interior (USDOI) / GGNRA	
Treasure Island / Yerba Buena Island	San Francisco Bay	U.S. Navy / California Department of Transportation (CalTrans) ³	
Fort Mason	San Francisco Bay	USDOI / GGNRA	
Mission Bay–South [^]	San Francisco Bay	Catellus	
Hunters Point Shipyard	San Francisco Bay	U.S. Navy	
Candlestick Point State	San Francisco	State Department of	
Recreation Area	Bay	Parks and Recreation	
China Beach	Pacific Ocean	USDOI / GGNRA	
Presidio	Mountain Lake	USDOI (Presidio Trust) / CalTrans ³	
Presidio	Lobos Creek	USDOI (Presidio Trust)	
Lake Merced - Highway 35	Lake Merced	CalTrans	

[†] Roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, storm drains

* There are other lakes located within Golden Gate Park, however, they do not fall under the purview of the SWMP because they do not meet the definition of a Small MS4. These lakes are: North Lake, South Lake, Spreckels Lake, Metson Lake, Mallard Lake, Lloyd Lake, Rainbow Falls and Pond, Lily Pond, and Alvord Lake

^ Mission Bay–North is in combined sewer system area

³ Caltrans' ownership of an MS4 in this area is currently unconfirmed by the City.





2.3 Chronology of City's Storm Water Program

Although most of the City was not subject to the 1990 Phase I Federal storm water regulations, San Francisco has initiated storm water pollution prevention activities through various programs since 1990. These activities and programs are described below, with more details presented in Appendix C.

BMP Implementation Program (1990) - On June 20, 1990 the San Francisco Bay Regional Board adopted Order No. 90-093 specifying the requirements for San Francisco to comply with NPDES permit CA0037681, issued by the USEPA, to discharge wastewater to the Pacific Ocean. The permit was for discharges from the Southwest Ocean Outfall (SWOO) and the Oceanside Water Pollution Control Plant. The 1990 Order included requirements for source control measures or best management practices (BMPs) very similar to those that were starting to be required of Phase I storm water programs.

BMP Study (1991-92) - In 1991, the City developed a work plan to study the cost-effectiveness of eight proposed BMPs (CCSF, 1991). The work plan allowed the City to study other BMPs in addition to the eight identified in Order 90-093. The work plan included a flowchart for screening and selecting BMPs based on the City's specific pollutant problems. Using the procedure, the City identified five of the eight BMPs in Order 90-093 for implementation.

Storm Water Pollution Prevention Pilot Program (1995) - The City's 20-year, \$1.4 billion dollar Master Plan for Wastewater Management significantly reduced the number of combined sewer overflows that occur during wet weather. In 1995, as completion of the Master Plan was drawing near, the City decided to expand its BMP Implementation Program into a more comprehensive Storm Water Pollution Prevention Program to reduce the potential impact of the few remaining overflows by minimizing the amount of pollutants that enter the combined sewer system from commercial sources during wet weather. The City implemented the storm water program as a pilot effort in one drainage basin (i.e., watershed) to test its efficacy and appropriateness for the City as a whole.

2.4 Other NPDES Permits

Prior to March 10, 2003, the City's dry and wet weather discharges were covered by three NPDES permits as listed below in Table 3. Besides NPDES permits issued to SFPUC by the San Francisco Bay Regional Board, the State Board regulates "storm water discharges associated with industrial activities" via a General Permit for industrial facilities. Industrial activities at the Port of San Francisco are covered by the State Board's General Permit. With additional coverage now under the Phase II Municipal General Permit, the City's sanitary and CSO discharges are covered by two permits and its storm water is covered by two permits.

Permit	Discharge Type	Geographic Area	Issuance Date	Permit No.	Lead City Dept / Agency		
Existing Permits							
Southeast, Northpoint, & Bayside Wet Weather Facilities	Sanitary / Combined sewer overflows	Bayside	June 2002	CA0037664	SFPUC		
Oceanside	Sanitary / CSOs	Oceanside	August 2003	CA0037681	SFPUC		
Industrial General Permit	Industrial Storm Water	Port of San Francisco	April 1997	97-03-DWQ	Port of San Francisco		
New Permits							
Phase II Municipal General Permit	Municipal Storm Water	Municipal separate storm sewer areas: • Port of San Francisco • South Beach • Lobos Creek Area • Golden Gate Park • Stern Grove • Lake Merced	April 2003	Order# 2003-0005- DWQ; Permit# CAS000004	SFPUC and Port of San Francisco		

TABLE 3: NPDES PERMITS COVERING CITY AND COUNTY OF SAN FRANCISCO DISCHARGES

3. Program Elements

3.1 Program Management

3.1.1 Organization / Administration – The San Francisco Public Utilities Commission will take the lead in developing and implementing the Phase II Storm Water Management Program for the non-Port MS4 areas of the City. SFPUC will coordinate the storm water-related efforts of the City departments that are significantly affected by the Phase II program or which have a vital role in its success.

SFPUC staff performed significant activities during FY2002-2003 to develop and implement the SWMP. These activities included:

- Reviewed the status and content of existing activities against requirements in the General Permit and information provided in guidelines and USEPA's measurable goals guidance.
- Gathered and organized information on current City policies, programs, and projects that address the six major elements of the Phase II General Permit.
- Based on information from the tasks above, identified existing activities that need revision and new activities that need to be developed to ensure that the SWMP meets the letter and intent of the General Permit.
- Developed fact sheet(s) for department heads on the Phase II storm water regulations and their likely impacts to City policies, procedures, and operations.
- Met with and made presentations to City department heads on the Phase II storm water regulations and their likely impacts.

The results of these activities provided the source material for and are reflected in this SWMP.

SFPUC will perform the following administrative tasks during FY2003-2004:

- Create a Memorandum of Understanding with the Port for interdepartmental coordination on storm water management issues.
- Continue to work with the Port to improve the narrative and format consistency between the two agency SWMPs.
- Establish a management committee across City departments that are significantly affected by the Phase II program or which have a vital role in its success. The management committee will address the major elements of the SWMP as well as geographic area-specific or element-specific work groups as necessary.
- Develop roles and responsibilities, communication pathways, and decision-making procedures for the management committee and specific work groups.
- Implement the planned activities for each minimum control measure.
- Join the Bay Area Storm water Management Agencies Association (BASMAA).

The contact information for the responsible person for implementation of each minimum control measure is listed in Table 4. Other key contacts for persons involved in the SWMP are also listed.

TABLE 4: CONTROL MEASURES CONTACT PERSONS

Minimum Control	SFPUC	Phone/	e-mail	Port *	Phone	e-mail
Measure	Contact	e-mail		Contact(s)		
Public Education and	Karen Hurst	415.695.7340	Khurst@sfwater.org	John Mundy	415.274.0256	john.mundy@sfport.com
Outreach on Storm Water						
Impacts						
Public Involvement /	Karen Hurst	415.695.7340	Khurst@sfwater.org	John Mundy	415.274.0256	john.mundy@sfport.com
Participation				David Beaupre	415.274.0539	david.beaupre@sfport.com
Illicit Discharge Detection	Karen Hurst	415.695.7340	Khurst@sfwater.org	John Mundy	415.275.0256	john.mundy@sfport.com
and Elimination						
Construction Site Storm	Karen Hurst	415.695.7340	Khurst@sfwater.org	John Mundy	415.274.0256	john.mundy@sfport.com
Water Runoff Control				Brad Wilson	415.274.0679	brad.wilson@sfport.com
Post-Construction Storm	Karen Hurst	415.695.7340	Khurst@sfwater.org	David Beaupre	415.274.0539	david.beaupre@sfport.com
Water Management in						
New Development and						
Redevelopment						
Pollution Prevention /	Karen Hurst	415.695.7340	Khurst@sfwater.org	Tom Petersen	415.597.7904	tom.petersen@sfport.com
Good Housekeeping for						
Municipal Operations						
Other Local Agencies						
SFPUC Bureau of	Main	415.695.7310	Issues permits for industries of	lischarging to sanit	tary sewer; investig	gates illicit discharges to the
Environmental Regulation			sanitary sewer, and to storm of	lrains outside Port	jurisdiction.	
and Management					-	
San Francisco Department	Main	415.252.3800	Issues hazardous materials us	e permits; investig	ates illicit discharg	ge and disposal of hazardous
of Public Health			materials.			
RWQCB Program	RWQCB	Phone	e-mail			
	Contact					
Municipal Storm Water	John West	510.622.2438	jrw@rb2.swrcb.ca.gov			
Program						

* Port contacts are provided because, even though the Port and the PUC will administer their storm water programs separately, they will continue to coordinate their efforts on issues of mutual concern.

3.1.2 SWMP Updating and Work Planning – Each year, SFPUC will review its SWMP for necessary changes to ensure that it remains up-to-date. Proposed changes will be clearly documented and circulated to identified stakeholders, and Plan revisions will be posted on the SFPUC website. In addition, each year SFPUC will develop an annual work plan that describes in more detail the tasks to be completed in the fiscal year. The work plan will describe tasks, responsible agencies, schedules, and expected results.

3.1.3 Record Keeping and Reporting – SFPUC will work with the other management committee members to develop standardized recordkeeping and reporting mechanisms to facilitate internal program tracking and evaluation, as well as external reporting to the Regional Board.

3.1.4 Measurable Goals and Evaluation – As demonstrated by its efforts over the years in its Water Pollution Prevention Program in the combined sewer system areas of the City, SFPUC is committed to evaluating and refining its pollution prevention efforts. For the non-Port MS4 areas, SFPUC will develop *an adaptive management process* for reviewing and refining its measurable goals starting in fiscal year 2003-2004. The goal of the process will be to continuously improve the measurable goals. This will be achieved through the development of specific work plans for each Control Measure, during which more quantifiable (i.e., numeric, measurable) goals for task completion and effectiveness will be defined (where feasible). This approach is reflected in each of the Control Measure Goal Sheets through a specific task entitled "Refinement of Measurable Goals."

3.1.5 Budget – SFPUC made funds available in fiscal year 2002-2003 to support the development of the *Initial* SWMP submittal and the rest of the General Permit application. The SFPUC has adopted a budget for the development and implementation of the program in fiscal year 2003-2004. Budget revisions and adjustments will be made annually as needed.

3.2 Legal Authority

Legal authority is an important aspect of the following three minimum control measures:

- Illicit Discharge Detection and Elimination (D.2.c.3) Ordinance
- Construction Site Storm Water Runoff Control (D.2.d.1) Ordinance
- Post-Construction Storm Water Management in New Development and Redevelopment (D.2.e.3) Ordinance

As described in the sections of this document detailing the above three control measures, the City Attorney's Office will review the San Francisco Municipal Code to ensure that the Municipal Code includes the appropriate authorities, prohibitions, requirements, and enforcement procedures necessary to provide sufficient legal authority to the City's Phase II Storm Water Management Program. If those reviews determine changes are necessary and achievable, the City Attorney's Office will work with the appropriate City departments to develop the proposed changes for consideration and adoption by the Board of Supervisors.

3.3 Six Minimum Measures & Target Audiences

The Federal Phase II storm water regulations and the State municipal General Permit require that the Storm Water Management Program include the following 6 elements or "minimum control measures:"

- Public Education and Outreach on Storm Water Impacts
- Public Involvement / Participation
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Post-Construction Storm Water Management in New Development and Redevelopment
- Pollution Prevention / Good Housekeeping for Municipal Operations

The SWMP must describe the best management practices, time schedules of implementation, and associated "measurable goals" that will fulfill specific regulatory requirements for each of the minimum control measures. Measurable goals will be used by SFPUC and the Regional Board to evaluate the effectiveness of individual control measures and the Storm Water Management Program as a whole. Both the Federal regulations and the State General Permit are written with the assumption that timely and effective implementation of best management practices will protect water quality, and constitutes compliance with the standard of reducing pollutants to the maximum extent practicable.

Although the best management practices apply to many sectors (or audiences) of society, there are primary audiences for each, as shown in Table 5. If an audience is not checked below it does not mean that they will not be involved in the element, it just means they are not one of the primary audiences or that the BMPs in that element will be conveyed to that audience as part of a different element. For example, contractors are an audience for illicit discharge detection and elimination BMPs, however, SFPUC will implement their BMPs via the Construction Site element.

Element	Public (general)	Businesses	Contractors / Developers	Municipal Employees
Public Education and Outreach on Storm Water Impacts	\checkmark	\checkmark		
Public Involvement / Participation	\checkmark			
Illicit Discharge Detection and Elimination	\checkmark	\checkmark		\checkmark
Construction Site Storm Water Runoff Control	\checkmark		\checkmark	\checkmark
Post-Construction Storm Water Management in New Development and Redevelopment		\checkmark	\checkmark	√
Pollution Prevention / Good Housekeeping for Municipal Operations				~

TABLE 5PRIMARY AUDIENCES FOR THE BMPS IN EACH ELEMENT

Based on the information gathered and presented in Table 2 on the area and type of MS4s owned by San Francisco as of March 10, 2003, and the focus and intent of the minimum control measures, Table 6, in the next section of this Plan, shows where minimum control measures are most likely to be applicable.

<u>Coordination with Non-MS4 Area Programs</u>: One obvious issue that will be considered by the SFPUC in developing the programs and materials called for in this SWMP is that the majority of the City and County of San Francisco is served by a combined sewer/storm system. It would be inefficient and confusing to residents, businesses, and City employees to develop completely different materials, messages, programs and procedures for the MS4 areas of the City. The SFPUC will evaluate how to best integrate the new MS4 area programs called for in this plan with existing programs that are already in place. For this reason, the basic message to residents, businesses, and City employees will be "Only Rain Down the Storm Drain" for all areas of the City. The SFPUC wants all target audiences to understand that, regardless of whether a drain goes directly to the Bay/Ocean or to a treatment plant, reducing or eliminating pollutants is key.

3.4 Cover Sheets and Information Sheets

The State General Permit lists about 20 specific regulatory requirements or elements across the six minimum control measures. In this document, for each minimum control measure a cover sheet has been provided that lists SFPUC's coordinator for that measure and provides an overview of SFPUC's approach for implementation of the control measure. Each of the six cover sheets is followed by a series of one or more information sheets organized by the specific elements (regulatory requirements). Each information sheet provides the following:

- Element (regulatory requirement) name
- General Permit section
- Regulatory requirement (excerpted verbatim from the General Permit)
- Existing activities, including BMPs, and roles and responsibilities. Except for one-time activities, existing activities will continue during the 2003-2004 fiscal year.
- Planned activities, including BMPs, and roles and responsibilities. Unless otherwise noted, planned activities, are scheduled for initiation during the 2003-2004 fiscal year.

Measurable goals for each element are provided at the end of each of the six minimum control measure sections. Appendix F contains a summary table with all of the control measure goal sheets combined.

Area	Public Educatio n and Outreach	Public Involvement/ Participation	Illicit Discharge Detection/ Elimination	Construction Site Control	Post- Construction Management	Pollution Prevention/ Good Housekeeping
Lobos Creek Area	✓	\checkmark	\checkmark			\checkmark
Golden Gate Park Stow Lake	~	~	\checkmark			✓
Golden Gate Park Middle Lake	~	\checkmark	\checkmark			✓
Golden Gate Park Elk Glen Lake	~	\checkmark	\checkmark			\checkmark
Stern Grove	✓	\checkmark	\checkmark			\checkmark
Lake Merced	~	~	✓	✓		\checkmark

TABLE 6APPLICABILITY OF MINIMUM CONTROL MEASURES BY SFPUC MS4 AREA & TYPE

3.4.1 COVER SHEET - Minimum Control Measure

PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

Coordinator: SFPUC: Karen Hurst

OVERVIEW: Over the last decade or more, SFPUC has developed and implemented one of the most significant public education programs addressing water pollution prevention in the country (CCSF, 2003a). The program has received several awards including:

- California Water Environment Association's Local Section and State Public Education Awards
- Association of Metropolitan Sewerage Agencies Public Education Program National Achievement Award
- Water Environment Federation's National Public Education Award
- Association of California Water Agencies Theodore Roosevelt Award for Environmental Excellence
- Telly Award for excellence in advertising

As a City with a primarily combined sewer system, the public education program has focused on both the sanitary as well as the storm water aspects of its discharges. SFPUC plans to continue those activities and to expand them to those areas covered by the Phase II General Permit. Depending on the audience and the messages, SFPUC may modify some of its existing activities and materials to emphasize storm water pollution prevention more explicitly. For example, since much of the initial Storm Water Management Program will be focused on the parks, the "public" in these cases may not be the traditional "general public" as much as it will be visitors and users in the City parks.

For more information, see the Information Sheet on Public Education and Outreach that follows.

3.4.1 A Element name: <u>PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS</u> - Program

General Permit section: D.2.a

REGULATORY REQUIREMENT

The Permittee must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

EXISTING ACTIVITIES

SFPUC's existing public education program is a comprehensive one and includes the following major elements:

- <u>Community events</u> (such as participation in neighborhood fairs to distribute information)
- <u>Business education and partnerships</u> (such as the citywide Community Clean Team events in which volunteers, residents, merchant and students, pick up litter and tend to neighborhood trees)
- <u>Schools program</u> (such as classroom presentations about water pollution prevention to 4th and 5th graders and a High School Mentor Program)
- <u>Media relations</u> (in which water pollution prevention related stories are pitched to the media (radio and print), such as through a regional partnership with other agencies)
- <u>*Paid advertising*</u> (such as newspaper or radio ads promoting the Our Water, Our World program or specific WPPP materials and programs)
- <u>*Publication development and distribution*</u> (of water pollution prevention educational guides)
- <u>*Program evaluation*</u> (such as an annual evaluation of the public education and outreach activities conducted during the year)

The SFPUC, as well as other City departments, also provide residents and businesses with information (through ads and website resources) on how to properly dispose of hazardous materials such as waste oil. The San Francisco Household Hazardous Waste Collection Facility, and other outlets that accept and properly dispose of materials, are promoted.

For more details on the above activities, see SFPUC's annual reports to the Regional Board.

PLANNED ACTIVITIES

Except for one-time activities, existing activities will continue during the 2003-2004 fiscal year.

Activity- or audience-specific education activities (such as storm drain marking) are discussed under the appropriate minimum control measure in this document, although many will have a public education impact. SFPUC's general public education and outreach activities on storm water impacts will include the following:

- Public opinion survey to gauge awareness of pollution prevention issues
- Public outreach strategies, campaigns, and materials to support community outreach for storm water pollution prevention
- Community outreach and education campaigns to address storm water target pollutants and reach target audiences
- Promotion of a Complaint/Response Hotline that the public can use to more easily report illicit discharges
- Web-based education and outreach
- Training of SFPUC Communications staff in the BMPs and activities related to implementing this Storm Water Management Plan and the role that they will play in related community outreach, media and press relations, interviewing and reporting, feature writing, campaign planning, graphic design, public meeting management, other program implementation methods.
- Storm water curriculum for schools
- Public involvement activities such as marking catch basins with a storm water pollution prevention message
- Effectiveness evaluation of promotional campaigns, printed materials, and press and media coverage

For more information, refer to the Public Education and Outreach Goals Sheet which follows.

3.4.1 B GOALS SHEET: PUBLIC EDUCATION AND OUTREACH MEASURABLE GOALS

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for the Public Education and Outreach on Storm Water Impacts minimum control measure.

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
1	PUBLIC EDUCATION & OUTREACH ON STORM WATER IMPACTS (Audience = General Public); General Permit D.2.a											
1A	Public Education & Outreach	Program	GENERAL MATERIALS DEVELOPMENT	Non- Port	SFPUC	Produce & distribute facts sheets with information related to SWMP development, status, implementation progress, etc. as needed. <u>Measurable Goal(s)</u> : # of Fact Sheets produced & distributed	С	О	0	0	0	0
1B	Public Education & Outreach	Program	PUBLIC OPINION SURVEY	Non- Port	SFPUC	Public Opinion survey to gauge the public's level of awareness regarding pollution prevention issues. <u>Measurable Goal(s):</u> Results of surveys			С			
1C	Public Education & Outreach	Program	WEB-BASED EDUCATION & OUTREACH	Non- Port	SFPUC	Development of web-accessible information implementation of control measures.	and re	sources	relatin	ig to th	e SWM	P and
1C.1	Public /Education & Outreach	Program	Develop conceptual design for web site	Non- Port	SFPUC	Measurable Goal(s): Conceptual design		С				
1C.2	Public Education & Outreach	Program	Review / revise design	Non- Port	SFPUC	Measurable Goal(s): Full design		С				
1C.3	Public 3Education & Outreach	Program	Conduct internal tests / Launch site	Non- Port	SFPUC	Measurable Goal(s): Web site content			С			
1C.4	Public Æducation & Outreach	Program	Run ∕ update site	Non- Port	SFPUC	Measurable Goal(s): Number of visitors / unique visitors; Number / type of requests			С	0	О	0

Information Sheet - Minimum Control Measure

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY & Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08	
1D	Public Education & Outreach	Program	SFPUC COMMUNICATIONS STAFF TRAINING	Non- Port	SFPUC	Train SFPUC Communications Department staff on the SWMP and their role in assisting in implementing the various Control Measures (e.g., campaign development, public meeting organization, etc).							
1D.1	Public Education & Outreach	Program	Identify applicable staff	Non- Port	SFPUC	<u>Measurable Goal(s)</u> : List of staff likely to work on SWMP projects		С					
1D.2	Public Education & Outreach	Program	Train staff	Non- Port	SFPUC	<u>Measurable Goal(s)</u> : Number/percentage of identified staff trained		С					
1E	Public Education & Outreach	Program	STORM WATER CURRICULUM	Non- Port	SFPUC	Develop and institute storm water curriculum materials for use in local schools.							
1E.1	Public Education & Outreach	Program	Develop curriculum	Non- Port	SFPUC	<u>Measurable Goal(s)</u> : Curriculum		С					
1E.2	Public Education & Outreach	Program	Implement curriculum use in schools	Non- Port	SFPUC	<u>Measurable Goal(s)</u> : Number/percentage of schools using curriculum & # of students taught with the materials		С	0	0	0	0	
1F	Public Education & Outreach	Program	VISITOR EDUCATION	Parks	SFPUC / RPD	Development and implementation of educational messages for visitors/tourists on prevention storm water pollution.							
1F.1	Public Education & Outreach	Program	Develop conceptual design	Non- Port	SFPUC / RPD	Measurable Goal(s): Conceptual design			C				
1F.2	Public Education & Outreach	Program	Review / revise design	Non- Port	SFPUC / RPD	Measurable Goal(s): Full design			С				
1F.3	Public Education & Outreach	Program	Product and install signage	Non- Port	SFPUC / RPD	Measurable Goal(s): Signage produced & installed			С				

Information Sheet - Minimum Control Measure

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
1G	Public Education & Outreach	Program	COMPLAINT/REPORTING HOTLINE (<i>see task 3H in the Illicit</i> <i>D&E section for a related task)</i>	Non- Port	SFPUC	Promotion of a reporting hotline for the public to call in reports of illegal discharges to storm drains. This program will tie into an existing hotline used by residents to report other issues. SFPUC will work with hotline administrator (DPW) to ensure procedures are followed and phone trees used are up to date. <u>Measurable Goal(s)</u> : Number/percentage of incidents/complaints handled		E	С	0	0	Ο
1H	Public Education & Outreach	Program	EFFECTIVENESS EVALUATION (of promotional campaigns, printed materials, and press & media coverage)	Non- Port	SFPUC	Evaluate the effectiveness of Control Measure activities/BMPs implemented. <u>Measurable Goal(s):</u> Comparison of results versus goals for each BMP		С	0	0	0	0
11	Public Education & Outreach	Goals Assessment	REFINEMENT OF MEASURABLE GOALS	Non- Port	SFPUC	Review goals for this control measure. With information gained (in program planning, working groups, work plan development, and implementation), revise and refine goals (as needed) to make them more measurable/numeric and to address both task completion and task effectiveness. <u>Measurable Goal(s):</u> Evaluation of Public Education & Outreach goals and revised goals (where applicable)		С	0	0	0	0

Table Notes:

[1] ALL* is used in the MS4 Area column only for those tasks that will be done (or have already been done) together for all MS4 areas (that is, Port and non-Port areas).

[2] IMPACTED DEPARTMENTS:

SFPUC - San Francisco Public Utilities Commission	
Port - Port of San Francisco	
SFRA - San Francisco Redevelopment Agency	

RPD - Recreation and Parks Department **DPW** - Department of Public Works **DOE** = Department of the Environment DPH = Department of Public Health DBI = Department of Building Inspection TIDA = Treasure Island Development Authority MUNI = Municipal Railway

Fiscal Year Column Codes:

E = Existing Program (a program that was in place prior to SWMP development will continue to be implemented)

C = Completion of Task/Implementation Begins

 $C^* =$ Indicates that this activity could begin in the first FY indicated. However this is not firm since it depends on when an applicable project is initiated in a non-Port MS4 area.

O = Ongoing implementation of previously completed task/program continues

3.4.2 **COVER SHEET -** Minimum Control Measure

PUBLIC INVOLVEMENT / PARTICIPATION

Coordinator: SFPUC: Karen Hurst

OVERVIEW: The City and SFPUC have a number of existing public advisory, interested party, and citizen volunteer groups with which they currently work in the MS4 areas of the City, including those listed below. SFPUC will continue to work with the groups to ensure that San Francisco citizens are informed about and have the opportunity to participate in the development and implementation of SFPUC's storm water program. In addition, the City has an ordinance – the Sunshine Ordinance – that prescribes how City business will be conducted before the public.

Advisory Groups (listed with City agency)

- Park, Recreation and Open Space Advisory Committee (PROSAC)(Recreation & Park Department)(RPD)
- Dog Advisory Committee (RPD)
- Natural Areas Program Citizen's Advisory Committee (RPD)
- Rincon Point-South Beach Citizens Advisory Committee (San Francisco Redevelopment Agency [SFRA])
- Mission Bay Citizens Advisory Committee (San Francisco Redevelopment Agency)

Interested Environmental and Community Groups

- BayKeeper
- The Alliance for a Clean Waterfront
- Bayview Hunters Point Community Advocates
- Literacy for Environmental Justice (LEJ)
- Friends of Recreation and Parks
- Neighborhood Parks Council
- San Francisco Dog Owners Club
- Friends of Stern Grove / Pine Lake
- Lake Merced Task Force / Friends of Lake Merced

Citizen Volunteer Groups

- The San Francisco Clean City Coalition (SFCCC) encourages residents to take pride in the City and their neighborhood, and to be motivated to keep them clean. In partnership with the Department of Public Works (DPW), the SFCCC operates a web site that directs residents to cleanup opportunities around the city, including monthly "Volunteer in the Parks" cleanup events that rotate from park to park in the City.
- San Francisco League of Urban Gardeners (SLUG) is a grassroots organization that empowers communities and individuals with education and employment. SLUG makes this possible through community gardens, horticultural education, landscape construction, open space maintenance, habitat restoration, job training, youth programs, and membership services.

For more information, see the Information Sheet on Public Involvement/Participation that follows.

3.4.2 A Element name: <u>PUBLIC INVOLVEMENT / PARTICIPATION</u> - Noticing

General Permit section: D.2.b

REGULATORY REQUIREMENT

The Permittee must at a minimum comply with State and local public notice requirements when implementing a public involvement/participation program.

EXISTING ACTIVITIES

The City's Sunshine Ordinance (Chapter 67 of the San Francisco Administrative Code) assures that deliberations are conducted before the people and that City operations are open to public review. The Sunshine Ordinance Task Force exists to provide information on rights under the Ordinance and for reporting violations.

The City complies with State public notice requirements as well as the following local requirements contained in the Sunshine Ordinance:

Section 67.7-1 Public Notice Requirements

- (a) Any public notice that is mailed, posted or published by a City department, board, agency or commission to residents residing within a specific area to inform those residents of a matter that may impact their property or that neighborhood area, shall be brief, concise and written in plain, easily understood English.
- (b) The notice should inform the residents of the proposal or planned activity, the length of time planned for the activity, the effect of the proposal or activity, and a telephone contact for residents who have questions.
- (c) If the notice informs the public of a public meeting or hearing, then the notice shall state that persons who are unable to attend the public meeting or hearing may submit to the City, by the time the proceeding begins, written comments regarding the subject of the meeting or hearing, that these comments will be made a part of the official public record, and that the comments will be brought to the attention of the person or persons conducting the public meeting or hearing. The notice should also state the name and address of the person or persons to whom those written comments should be submitted. (Added by Ordinance 185-96, App. 5/8/96; amended by Proposition G, 11/2/99)

SFPUC staff developed a work plan that complied with provisions of the public involvement component of the Phase II General Permit. During the time between the submittal of the *Initial* SWMP (CCSF, 2003b) in March and submittal of the Final 2003-2004 SWMP, SFPUC and the Port made presentations and facilitated discussions at the following meetings:

- June 4 Northeast Waterfront Advisory Group
- June 17 Fisherman's Wharf Waterfront Advisory Group
- June 18 Southern Waterfront Advisory Committee
- July 31 Fisherman's Wharf Environmental Quality Advisory Committee
- August 20 Friends of Lake Merced
- August 26 General meeting with interested parties

At these meetings, the *Initial* SWMP was presented and reviewed, and comments solicited from the participants. Appendix D presents the materials used at these meetings including Power Point presentations and fact sheets. This Final 2003-2004 SWMP reflects input from those meetings related to MS4 areas owned by SFPUC.

PLANNED ACTIVITIES

Except for one-time activities, existing activities will continue during the 2003-2004 fiscal year. SFPUC's plan for continuing public involvement is divided into two main areas:

- Meetings SFPUC plans to conduct interested party meetings on a regular basis during the year to present program information and solicit feedback from individuals and organizations interested in the program. In addition, public involvement activities have been and will continue to be organized to take advantage of various existing advisory panels and interest groups for specific areas of the City (e.g., Pine Lake) or specific issues.
- Materials Public involvement materials will continue to include items such as Power Point presentations for meetings and workshops, as well as fact sheets (including translations in Spanish and Chinese, as needed). Program plans and reports will also be shared and discussed with interested parties.

3.4.2 B GOALS SHEET: PUBLIC INVOLVEMENT/PARTICIPATION MEASURABLE GOALS

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for the Public Involvement / Participation minimum control measure.

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
2	PUBLIC INVOLVEMEN	T/PARTIC	CIPATION (Audience = Generation	al Publi	c); General	Public D.2.b						
2A	Public Involvement./Participation	Noticing	INITIAL SWMP WORK PLAN DEVELOPMENT	Non- Port	SFPUC / Port	Development of plan for preparing informational materials and holding public meetings to solicit input on the SWMP from the public and address comments in the SWMP document. <u>Measurable</u> <u>Goal(s)</u> : Work plan; Summary of actions taken	С	0				
2B	Public Involvement./Participation	Noticing	INTERESTED PARTY DATABASE DEVELOPMENT	All*	SFPUC / Port	Establishment of a database of parties that would be interested in the development of the SWMP in order to contact them regarding public meetings and comment opportunities. <u>Measurable Goal(s)</u> : Interested parties database (revised as needed)		С	0	0	0	0
2C	Public Involvement./Participation	Noticing	PRESENTATION MATERIALS PREPARATION	All*	SFPUC / Port	Create materials for use and distribution in public meetings on the SWMP. <u>Measurable Goal(s):</u> Power Point presentation / fact sheet(s); Number of presentations/fact sheets distributed	С	0				

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
2D	Public Involvement./Participation	Noticing	INITIAL SWMP	All*	SFPUC / Port	Draft and submit SWMP to the State (RW interested parties, holding meetings with pa input, addressing comments in drafting of comment, and completing SWMP.	QCB). 1 arties to SWMP,	dentify presen docum	adviso t plan c enting	ry pane concept meeting	l and and ob gs and	otain
2D.1	Public Involvement./Participation	Noticing	Existing advisory panel and interest group meetings	All*	SFPUC / Port	<u>Measurable Goal(s)</u> : List/database of potentially interested parties; Number of meetings attended; Number of attendees; Documentation of questions/comments	С	0				
2D.2	Public Involvement./Participation	Noticing	Information meetings with interested parties	All*	SFPUC / Port	<u>Measurable Goal(s)</u> : Number of meetings held; Number of attendees; Documentation of questions/comments		С				
2D.3	Public Involvement./Participation	Noticing	Final presentation meeting with interested parties	All*	SFPUC / Port	<u>Measurable Goal(s)</u> : Number of attendees; Documentation of questions/comments/responses		С				
2D.4	Public Involvement./Participation	Noticing	Draft SWMP, circulate, address comments and submit final initial SWMP to State for approval	All*	SFPUC / Port	<u>Measurable Goal(s)</u> : Final Initial SWMP submitted to RWQCB.		С				
2E	Public Involvement./Participation	Noticing	REGULAR MEETINGS WITH INTERESTED PARTIES (working groups, mtgs with agencies, etc)	Non- Port	SFPUC / RPD	Plan and hold regular meetings with parties interested in participating/hearing about design and implementation of BMPs to be implemented per the SWMP. <u>Measurable Goal(s):</u> # of meetings held; # of attendees; Documentation of comments		C	0	0	0	0
2F	Public Involvement./Participation	Goals Assessment	REFINEMENT OF MEASURABLE GOALS	Non- Port	SFPUC	Review goals for this control measure. With information gained (in program planning, working groups, work plan development, and implementation), revise and refine goals (as needed) to make them more measurable/numeric and to address both task completion and task effectiveness. <u>Measurable Goal(s):</u> Evaluation of Public I/P goals and revised goals (where applicable)		С	0	0	0	ο

--> See Appendix F or the Goals Table in Section 3.4.1B for table notes and code key

3.4.3 **COVER SHEET -** Minimum Control Measure

ILLICIT DISCHARGE DETECTION AND ELIMINATION

Coordinator: SFPUC: Karen Hurst

OVERVIEW: SFPUC will continue and expand its existing activities to detect and eliminate illicit discharges including non-storm water discharges into the non-Port MS4 areas of the City. SFPUC will work with the Department of Public Works and the Recreation and Park Department to ensure that discharges of materials other than storm water or authorized non-storm water are effectively prohibited in parks with MS4 areas.

For more information, see the Information Sheets on Illicit Discharge Detection and Elimination that follow.

3.4.3 A Element name: <u>ILLICIT DISCHARGE DETECTION AND ELIMINATION</u> - Program

General Permit section: D.2.c.1

REGULATORY REQUIREMENT

The Permittee must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at 40 CFR §122.26(b)(2)) into the regulated Small MS4.

EXISTING ACTIVITIES

Emergency response to spills and other incidents is coordinated among City departments. Contact information for these departments and other emergency response agencies is provided below.

ГA	BL	E	7:	Emergency	Response	Agencies	&	Contact Numbers
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Agency	Contact	Phone
SFPUC	Main	(415) 695-7310
Bureau of Environmental Regulation and Management		
	After Business	(415) 695-2020
	Hours	Citywide Hotline
CCSF Department of Public Health – Environmental Health Section	Main	(415) 252-3800
Regional Water Quality Control Board	Complaint Response	(510) 622-2369
Office of Emergency Services Warning Center	Main	(800) 852-7550

Complaints of Illegal Discharges:

The SFPUC Bureau of Environmental Regulation and Management (BERM) frequently receives telephone calls from residents or concerned citizens complaining of illegal discharges to the City's sewerage system. These discharges may be in the form of water pumped from excavation sites, concrete wastewater from construction sites, paint or paint rinse water from building refurbishing sites, and waste automotive fluids from residential or commercial sources etc.

As a matter of procedure, one of BERM's inspectors will visit the site after receiving the report in order to photograph any evidence of the discharge. The inspector then attempts to personally contact the suspected responsible person in order to advise him or her that such disposal practices are prohibited under Section 123(e) and (f) of Article 4.1, Chapter X, Part II of the San Francisco Municipal Code (hereinafter referred to as "Article 4.1"). The inspector also explains that under Section 133(c)(2) of Article 4.1 the responsible party may be liable civilly to the City in an amount up to \$2,000 per day for each violation. The inspector also provides the person with a copy of Article 4.1 (with the relevant sections highlighted), along with the appropriate

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pollution prevention brochure (e.g. "Keep It On Site – Pollution Prevention Tips For Construction Sites").

If the inspector is unable to make personal contact with the suspected responsible person, he or she makes note of the address of the suspected source of the illegal discharge. Back in the office the inspector checks the City's water account records in order to identify the owner of the suspected source address, and prepares a warning letter to that owner. The letter is mailed to the owner along with a highlighted copy of Article 4.1, the appropriate pollution prevention brochure, and photographs of the evidence. Finally the inspector prepares a report and files it in BERM's Complaint Log.

<u>Parks</u>

In May 2002, the San Francisco Recreation and Park Commission finalized its off-leash dog policy, which designated specific park areas throughout the City as off-leash dog areas. Off-leash dog areas must contain adequate signage, waste disposal bags, and garbage cans. RPD publishes a pamphlet – *Exercising Your Dog in San Francisco Parks: A Guide for Your Dog's Best Friend* that describes the policy, and lists relevant City ordinances, tips, and who to contact for more information. Currently, in addition to the off-leash dog policy, RPD implements the following BMPs at its parks to one degree or another:

- Signage highlighting:
 - off-leash dog policy and areas
 - general dumping prohibitions
 - entry / access prohibitions to lakes
- Pet waste stations
- Solid waste receptacles (both regular and recyclables) and regular pick-ups

PLANNED ACTIVITIES

Except for one-time activities, existing activities will continue during the 2003-2004 fiscal year.

• Improvement of the existing process for responding to complaints of illegal discharges. This will include fielding of calls that will come the through a Complaint/Response hotline discussed in the Public Education and Outreach Section of this SWMP (per Task 1G of the measurable goals table). The hotline will be part of SFPUC's enforcement response system for identifying and remediating illicit discharges.

Parks

- SFPUC will work with RPD to implement their current BMPs consistently at the parks with MS4 areas (such as providing pet waste stations and solid waste receptacles).
- DPW will mark storm drain catch basins with a water pollution prevention message and an illicit discharge reporting number.

Lobos Creek Area

• DPW will mark storm drain catch basins with a water pollution prevention message and an illicit discharge reporting number.

3.4.3 B Element name: <u>ILLICIT DISCHARGE DETECTION AND ELIMINATION</u> - Storm Sewer System Map

General Permit section: D.2.c.2

REGULATORY REQUIREMENT

The Permittee must develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the U.S. that receive discharges from those outfalls.

EXISTING ACTIVITIES

The City and County of San Francisco has been using Geographic Information Systems (GIS) within individual departments to enhance both operational and analytical functions since 1994. The Department of Public Works was the initial creator of spatial "basemap" information, including a sewer basemap. For the next five years DPW developed and maintained the City's basemap activities. The City uses ESRI's ArcIMS product to share map information among city employees. Appendix E contains maps of the storm sewer systems in the non-Port areas.

PLANNED ACTIVITIES

Based on results from the continuing investigation and confirmation of MS4 areas owned by SFPUC described in Section 2.2 of this document, SFPUC will periodically update the sewer basemap and provide a current map of the non-Port MS4 areas. As the City becomes the owner of additional MS4 areas, SFPUC will update the maps accordingly.

3.4.3 C Element name: <u>ILLICIT DISCHARGE DETECTION AND ELIMINATION</u> - Ordinance

General Permit section: D.2.c.3

REGULATORY REQUIREMENT

The Permittee must, to the extent allowable under State or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges into the MS4 and implement appropriate enforcement procedures and actions.

EXISTING ACTIVITIES

Chapter X of the San Francisco Municipal Code, directs that all dischargers must comply with all state and federal orders issued to the City including all the City's NPDES permits. The Municipal Code also prohibits the discharge of hazardous waste and other pollutants that would violate the City's federal and state discharge permits (Public Works Code, Article 4.1).

PLANNED ACTIVITIES

The City Attorney's Office will review Chapter X of the San Francisco Municipal Code to ensure that the City's authority includes the ability to effectively prohibit non-storm water discharges into MS4 areas and to implement appropriate enforcement procedures and actions. The City Attorney's Office will also review other portions of the Municipal Code for potential conflicts with the Phase II requirements. If the reviews determine changes are necessary and achievable, the City Attorney's Office will work with the appropriate City departments to develop the proposed changes for consideration and adoption by the Board of Supervisors.

3.4.3 D Element name: <u>ILLICIT DISCHARGE DETECTION AND ELIMINATION</u> – Plan

General Permit section: D.2.c.4

REGULATORY REQUIREMENT

The Permittee must develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the system that are not authorized by a separate NPDES permit.

EXISTING ACTIVITIES

Activities are described in the "Existing activities" section of the Information Sheet for General Permit section D.2.c.1 – Illicit Discharge Detection and Elimination – Program.

PLANNED ACTIVITIES

<u>Parks</u>

SFPUC's plans are described in the Planned activities section of the Information Sheet for General Permit section D.2.c.1 – Illicit Discharge Detection and Elimination – Program.

Lobos Creek Area

SFPUC's plans are described in the Planned activities section of the Information Sheet for General Permit section D.2.c.1 – Illicit Discharge Detection and Elimination – Program.

3.4.3 E Element name: <u>ILLICIT DISCHARGE DETECTION AND ELIMINATION</u> - Education

General Permit section: D.2.c.5

REGULATORY REQUIREMENT

The Permittee must inform public employees, businesses, and the general public of the hazards that are generally associated with illegal discharges and improper disposal of waste.

EXISTING ACTIVITIES

The following activities have been conducted in the non-Port MS4 areas of the City:

• The SFPUC, as well as other City departments, provide residents and businesses with information (through ads and website resources) on how to properly dispose of hazardous materials such as waste oil. The San Francisco Household Hazardous Waste Collection Facility, and other outlets that accept and properly dispose of materials, are promoted.

Parks

- Pamphlet *Exercising Your Dog in San Francisco Parks: A Guide for Your Dog's Best Friend* describes the City's off-leash dog policy, and lists relevant City ordinances, tips, and who to contact for more information.
- Signage at its parks highlighting:
 - off-leash dog policy and areas
 - general dumping prohibitions
 - entry / access prohibitions to lakes

PLANNED ACTIVITIES

Except for one-time activities, existing activities will continue during the 2003-2004 fiscal year.

• Promotion of the Complaint/Response hotline discussed in the Public Education and Outreach Section of this SWMP (per Task 1G of the measurable goals table).

Parks

- SFPUC will work with RPD to ensure signage is consistently displayed at parks with MS4 areas.
- DPW will mark storm drain catch basins with a water pollution prevention message and an illicit discharge reporting number.

Lobos Creek Area

• DPW will mark storm drain catch basins with a water pollution prevention message and an illicit discharge reporting number.

3.4.3 F GOALS SHEET: ILLICIT DISCHARGE DETECTION AND ELIMINSATION MEASURABLE GOALS

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for the Illicit Discharge Detection and Elimination minimum control measure.

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
3	ILLICIT DI	SCHARGE D	DETECTION & ELIMINATION	(Audien	ces = Gen Pu	b. / Businesses / Municipal Employees);	Gen Pe	rmit D.	2.c.1 th	rough D	.2.c.5)	
3A	Illicit Discharge D&E	Plan	DETECTION & ELIMINATION PROGRAM FOR MS4 AREAS (Gen Permit D.2.c.4)	Non- Port	SFPUC	Continued implementation of current activitie discharges to the system (including illegal dum NPDES permit. Development and implemen D&E process addresses MS4 areas.	s to deten ping) th tation of	ect and a lat are no f a progr	ddress r ot autho ram to e	ion-stori rized by nsure tha	n water a separa at the ex	ıte cisting
3A.1	Illicit Discharge D&E	Plan	Identify / evaluate existing related plans/ programs/activities	Non- Port	SFPUC	<u>Measurable Goal(s)</u> : Report documenting review methods, results, and recommendations for changes (as necessary)	E	С				
3A.2	Illicit Discharge D&E	Plan	Develop work plan for integrating plans/ programs/activates with new MS4 areas	Non- Port	SFPUC	<u>Measurable Goal(s)</u> : Work plan for integrating plans / programs with new MS4 areas			С			
3A.3	Illicit Discharge D&E	Plan	Implement revised D&E program processes to address MS4 areas	Non- Port	SFPUC	<u>Measurable Goal(s)</u> : Revised program/process with MS4 areas being addressed			С			
3B	Illicit Discharge D&E	Education	SIGNAGE DEVELOPMENT (Gen Permit D.2.c.5)	Parks	RPD / Planning	Development of the content/educational mes Program (3C) .	sage to l	be used i	n the ill	icit disch	arge Sig	nage
3B.1	Illicit Discharge D&E	Education	Develop conceptual design for new signage	Parks	RPD / Planning	<u>Measurable Goal(s)</u> : Conceptual design		С				
3B.2	Illicit Discharge D&E	Education	Review / revise design	Parks	RPD / Planning	<u>Measurable Goal(s)</u> : Full design		С				
3B.3	Illicit Discharge D&E	Education	Fabricate signage	Parks	RPD / Planning	<u>Measurable Goal(s)</u> : Signage			С			

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Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
3C	Illicit Discharge D&E	Program	SIGNAGE PROGRAM (Gen Permit D.2.c.1)	Parks	RPD	Continuation (and expansion as needed) of sig areas.	gnage reg	garding r	10 illegal	dumpin	g in apj	olicable
3C.1	Illicit Discharge D&E	Program	Conduct needs survey	Parks	RPD	<u>Measurable Goal(s)</u> : Inventory/needs survey results	E	С				
3C.2	Illicit Discharge D&E	Program	Install signs	Parks	RPD	<u>Measurable Goal(s)</u> : Number/percentage of signs installed; Change in number of illegal dumping incidents			С	Ο	0	0
3D	Illicit Discharge D&E	Education	STORM DRAIN MARKER DEVELOPMENT (Gen Permit D.2.c.5)	Parks / Lobos Creek Area	SFPUC / RPD	Development of the content/educational mes Program (3E)	sage to l	be used i	n the St	orm Dra	in Mark	ting
3D.1	Illicit Discharge D&E	Education	Develop conceptual design	Parks / Lobos Creek Area	SFPUC / RPD	<u>Measurable Goal(s)</u> : Conceptual design		С				
3D.2	Illicit Discharge D&E	Education	Review / revise design	Parks / Lobos Creek Area	SFPUC / RPD	<u>Measurable Goal(s)</u> : Full design		С				
3D.3	Illicit Discharge D&E	Education	Purchase markers	Parks / Lobos Creek Area	SFPUC / RPD	<u>Measurable Goal(s)</u> : Drain markers produced		С				
3E	Illicit Discharge D&E	Program	STORM DRAIN MARKING PROGRAM (Gen Permit D.2.c.1)	Parks / Lobos Creek Area	SFPUC / RPD	Continuation (and expansion as needed) of a s dumping into storm drains and where compla	storm dr ints are t	ain mark to be rep	ting prog ported.	gram reg	arding 1	ıot
3E.1	Illicit 'Discharge D&E	Program	Identify / confirm storm drains	Parks / Lobos Creek Area	SFPUC / RPD	Measurable Goal(s): Inventory		С				
3E.2	Illicit Discharge D&E	Program	Conduct marking	Parks / Lobos Creek Area	SFPUC / RPD	<u>Measurable Goal(s)</u> : Number / percentage of marked storm drains in MS4 areas		С	0	Ο	0	0

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Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
3F	Illicit Discharge D&E	Program	PET WASTE STATIONS (Gen Permit D.2.c.1)	Parks	RPD	Continuation (and expansion as needed) of pe	t waste s	stations i	n applic	able are	as.	
3F.1	Illicit Discharge D&E	Program	Conduct current inventory & needs survey	Parks	RPD	<u>Measurable Goal(s)</u> : Inventory/survey results	Е	С				
3F.2	Illicit Discharge D&E	Program	Fabricate / install stations	Parks	RPD	<u>Measurable Goal(s)</u> : Number/percentage of stations; Frequency of resupply (indicating usage trends)			С	0	0	0
3G	Illicit Discharge D&E	Program	SOLID WASTE RECEPTACLES (Gen Permit D.2.c.1)	Parks	RPD	Continuation (and expansion as needed) of pr areas.	ogram p	oroviding	; waste r	eceptacl	es in app	olicable
3G.1	Illicit Discharge D&E	Program	Conduct current inventory & needs survey	Parks	RPD	Measurable Goal(s): Inventory/survey results	E	С				
3G.2	Illicit Discharge D&E	Program	Install receptacles	Parks	RPD	Measurable Goal(s): Number / percentage of waste receptacles; Frequency of collection			С	0	0	0
3H	Illicit Discharge D&E	Program	COMPLAINT RESPONSE PROCESS IMPROVEMENT (Gen Permit D.2.c.1)	Non- Port	SFPUC / DPW / DPH	Design and implementation of an improved co in applicable areas. Incorporate into this impr Complaint/Reporting Hotline detailed in Tasl	omplain oved pr < 1G.	t respon: ocess ha	se proce ndling c	ss for ill alls rout	egal disc ed throu	harges gh the
3H.1	Illicit Discharge D&E	Program	Train staff	Non- Port	SFPUC / DPW / DPH	<u>Measurable Goal(s)</u> : Number / percentage of staff trained		С	0	0	0	0
3H.2	Illicit Discharge D&E	Program	Respond to incidents	Non- Port	SFPUC / DPW / DPH	<u>Measurable Goal(s)</u> : Number of reportable quantity incidents handled	Е	С	0	0	0	0

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
31	Illicit Discharge D&E	Storm Sewer System Map	UPDATE SEWER BASEMAP (Gen Permit D.2.c.2)	Non- Port	SFPUC	Investigation, confirmation and updating of st all outfalls and the names and locations of all those outfalls.	orm sew waters o	ver base f the US	map sho that rec	owing the eive disc	e locatio charges	n of from
3I. i	Illicit Discharge D&E	Storm Sewer System Map	Conduct survey / records review	Non- Port	SFPUC	Measurable Goal(s): Inventory		С				
31.2	Illicit Discharge D&E	Storm Sewer System Map	Create revised map	Non- Port	SFPUC	<u>Measurable Goal(s)</u> : Current map of MS4 areas		С				
3J	Illicit Discharge D&E	Ordinance	MUNICIPAL CODE REVIEW - effectively prohibit non-storm water discharges (Gen Permit D.2.c.3 & D.2.c.1)	All*	City Attorney's Office	Review of Chapter X of the SF Municipal Code to ensure that the City's authority includes the ability to effectively prohibit non-storm water discharges into MS4 areas and to implement appropriate enforcement procedures and actions. <u>Measurable Goal(s)</u> : Memo documenting review methods, results, and recommendations for changes (as necessary)		С				
3K	Illicit Discharge D&E	Goals Assessment	REFINEMENT OF MEASURABLE GOALS	Non- Port	SFPUC	Review goals for this control measure. With information gained (in program planning, working groups, work plan development, and implementation), revise and refine goals (as needed) to make them more measurable/numeric and to address both task completion and task effectiveness. <u>Measurable Goal(s):</u> Evaluation of Illicit Discharge D&E goals and revised goals (where applicable)		С	Ο	0	Ο	0

[1] ALL* is used in the MS4 Area column only for those tasks that will be done (or have already been done) together for all MS4 areas (that is, Port and non-Port areas).

[2] IMPACTED DEPARTMENTS: SFPUC - San Francisco Public Utilities Commission Port - Port of San Francisco SFRA - San Francisco Redevelopment Agency

Fiscal Year Column Codes:

RPD - Recreation and Parks Department **DPW** - Department of Public Works **DOE** = Department of the Environment DPH = Department of Public Health DBI = Department of Building Inspection TIDA = Treasure Island Development Authority MUNI = Municipal Railway

E = Existing Program (a program that was in place prior to SWMP development will continue to be implemented)

C = Completion of Task/Implementation Begins

C* = Indicates that this activity could begin in the first FY indicated. However this is not firm since it depends on when an applicable project is initiated in a non-Port MS4 area.

O = Ongoing implementation of previously completed task/program continues

3.4.4 COVER SHEET - Minimum Control Measure

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

Coordinator: SFPUC: Karen Hurst

OVERVIEW: To-date, the need for an extensive construction site control program in San Francisco has not been significant because:

- the City's predominantly combined sewer system is designed to handle the most common pollutant from construction sites sediment, and
- in those areas with separate storm drains, the few construction projects that have occurred have been covered by the State's Construction General Permit and SWPPPs

Despite this, the City has conducted construction site control programs for water pollution prevention purposes and these activities will be expanded under the Phase II General Permit program.

Public projects

The Department of Public Works' Bureau of Construction Management (BCM) manages construction projects on public property including City's parks while the Port's Engineering and Maintenance Division oversees construction on Port property.

Private projects

The City's Department of Building Inspection's (DBI) Permit Services Program oversees plan review and permit issuance to assure that proposed construction work meets the safety requirements of the City's Municipal Code including the Building, Housing, and Plumbing codes. Among several duties, DBI's Major Projects and UMB (Unreinforced Masonry Bearing Wall Buildings) Plan Check Division (MPC/UMB) is responsible for plan review of all types of new construction permits, grading and demolition permits for prominent projects in San Francisco including permit processes for Special Projects such as Mission Bay. Overall however, DBI's duties are restricted to buildings and their footprints.

Although the City does not currently own the storm drain system being constructed at Mission Bay, a Risk Management Plan (RMP) (Regional Board and Department of Toxic Substances Control, 1999) does exist that presents a decision framework and specific protocols for managing chemicals in soil and groundwater at Mission Bay. The RMP delineates specific risk management measures that must be implemented prior to, during, and after development of each parcel within the Mission Bay area, including measures for the control of storm water pollution. The RMP is also being used to some extent to cover activities at Port construction projects between Piers 50 and 60. Regional Board staff retain direct enforcement authority over Mission Bay construction projects.

Although currently no construction projects that meet the one acre size criterion are expected in the non-Port MS4 areas of the City, SFPUC has scoped out general activities to comply with this

minimum control measure when it becomes applicable, either through new projects or the conveyance of MS4 areas to the City. Program activities beyond existing ones or ones that will be conducted as part of other activities anyway are generally scheduled to begin either in 2004-2005 or with the first project in the non-Port MS4 areas.

For more information, see the Information Sheets on Construction Site Storm Water Runoff Control that follow.

3.4.4 A Element name: <u>CONSTRUCTION SITE STORM WATER RUNOFF CONTROL</u> - Ordinance

General Permit section: D.2.d.1

REGULATORY REQUIREMENT

The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more.

The program must include development and implementation of an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions, or other effective mechanisms, to ensure compliance, to the extent allowable under State, or local law.

EXISTING ACTIVITIES

Chapter X of the San Francisco Municipal Code, directs that all dischargers must comply with all state and federal orders issued to the City including all the City's NPDES permits. The Municipal Code also prohibits the discharge of hazardous waste and other pollutants that would violate the City's federal and state discharge permits (Public Works Code, Article 4.1). Chapter I includes requirements governing activities that disturb or remove painted surfaces containing lead-based paint on the exterior of any residential, commercial, or public building, or steel structure.

PLANNED ACTIVITIES

The City Attorney's Office will review the San Francisco Municipal Code to ensure that the City's authority includes the ability to require erosion and sediment controls, as well as sanctions, or other effective mechanisms, to ensure compliance, to the extent allowable under State, or local law. The City Attorney's Office will also review the Municipal Code for potential conflicts with the Phase II requirements. If the reviews determine changes are necessary and achievable, the City Attorney's Office will work with the appropriate City departments to develop the proposed changes for consideration and adoption by the Board of Supervisors.

3.4.4 B Element name: <u>CONSTRUCTION SITE STORM WATER RUNOFF CONTROL</u> – Erosion and Sediment Controls

General Permit section: D.2.d.2

REGULATORY REQUIREMENT

The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more.

The program must include development and implementation of requirements for construction site operators to implement appropriate erosion and sediment control best management practices.

EXISTING ACTIVITIES

DPW requires implementation of appropriate erosion and sediment control best management practices and, as necessary, coverage under the Construction General Permit at public (e.g., Harding Park Golf Course) construction sites.

To date, SFPUC's construction site control program has resulted in the development and publication of another of its pollution prevention booklets for businesses – *Keep It On-Site – Pollution Prevention Tips for Construction Sites*.

The City's Recycling Program provides free information and assistance to promote waste reduction, reuse, and recycling in the City and County of San Francisco, including directories of recycling providers for construction and demolition debris, including clean fill dirt. The Recycling Program's web page is referenced in SFPUC's *Keep It On-Site* booklet.

PLANNED ACTIVITIES

- SFPUC will work with DPW to continue their requirements for construction site operators to implement appropriate erosion and sediment control best management practices in the City's non-Port MS4 areas.
- SFPUC will ensure that their *Keep It On-Site Pollution Prevention Tips for Construction Sites* booklet is distributed to construction site operators in the City's non-Port MS4 areas.

3.4.4 C Element name: <u>CONSTRUCTION SITE STORM WATER RUNOFF CONTROL</u> – Waste Controls

General Permit section: D.2.d.3

REGULATORY REQUIREMENT

The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more.

The program must include development and implementation of requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.

EXISTING ACTIVITIES

DPW requires implementation of appropriate waste control best management practices and, as necessary, coverage under the Construction General Permit at public (e.g., Harding Park Golf Course) construction sites.

SFPUC's pollution prevention booklet for construction businesses – *Keep It On-Site – Pollution Prevention Tips for Construction Sites* includes waste control BMPs.

The City's Recycling Program provides free information and assistance to promote waste reduction, reuse, and recycling in the City and County of San Francisco, including directories of recycling providers for construction and demolition debris, including asphalt, concrete, brick, glass, lumber, metal, plaster, drywall, vinyl siding, windows, doors and appliances. The Recycling Program's web page is referenced in SFPUC's *Keep It On-Site* booklet. The Hazardous Waste Management Program provides free services, including its Very Small Quantity Generator (VSQG) Program to help businesses to reduce hazardous waste and to comply with regulatory requirements. Since 1992, VSQG businesses have been able to use a drop-off program by making an appointment to take their own waste to the City's Household Hazardous Waste Facility. Builders and painters are two of the more common VSQGs. The VSQG Program is referenced in SFPUC's *Keep It On-Site* booklet.

PLANNED ACTIVITIES

- SFPUC will work with DPW to continue their requirements for construction site operators to implement appropriate waste control best management practices in the City's non-Port MS4 areas.
- SFPUC will ensure that their *Keep It On-Site Pollution Prevention Tips for Construction Sites* booklet is distributed to construction site operators in the City's non-Port MS4 areas.

3.4.4 D Element name: <u>CONSTRUCTION SITE STORM WATER RUNOFF CONTROL</u> – Site Plan Review

General Permit section: D.2.d.4

REGULATORY REQUIREMENT

The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more.

The program must include development and implementation of procedures for site plan review which incorporate consideration of potential water quality impacts.

EXISTING ACTIVITIES

Development projects requiring City approvals are subject to environmental review pursuant to the California Environmental Quality Act (CEQA). For projects requiring CEQA review, the San Francisco Planning Department reviews CEQA documentation and requires appropriate mitigation measures for construction-related water quality and hydrology impacts. Additional mitigation requirements may be included during environmental permitting performed after completion of CEQA review (e.g., Bay Conservation and Development Commission (BCDC) and U.S. Army Corps of Engineers permits, Regional Board 401 certifications).

DPW's Bureau of Engineering (BOE) reviews plans for impacts in the rights-of-way and to the City's sewerage and drainage systems.

Within the boundaries of buildings and their footprints only, DBI's Commercial Plan Check Division and Residential Plan Check Division are responsible for review of building plans and for assuring that the proposed work complies with all State and local requirements. For Special Projects such as Mission Bay, DBI's Major Projects and UMB Plan Check Division is responsible for plan review of new construction permits, and grading and demolition permits.

As mentioned in the Overview to this minimum control measure, a Risk Management Plan presents a decision framework and specific protocols for managing storm water runoff during construction at Mission Bay.

PLANNED ACTIVITIES

For the non-Port MS4 areas of the City, SFPUC will work with the Planning Department, as well as DPW and DBI to ensure that procedures for site plan review incorporate consideration of potential water quality impacts from construction sites, and appropriate project conditioning. Procedures and conditions developed by other agencies and organizations will be incorporated, as appropriate. Conditions will include development and implementation by construction site operators of erosion and sediment controls as well as waste controls, and as appropriate coverage under the State's Construction General Permit including preparation and implementation of a SWPPP.

3.4.4 E Element name: <u>CONSTRUCTION SITE STORM WATER RUNOFF CONTROL</u> – Public Reporting

General Permit section: D.2.d.5

REGULATORY REQUIREMENT

The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more.

The program must include development and implementation of procedures for receipt and consideration of information submitted by the public.

EXISTING ACTIVITIES

Reporting and response procedures are as follows:

The City has a number of emergency phone numbers listed in the phone book and posted on the City web site for public reporting. Response duties are the purview of specific departments depending on the situation:

- Hazardous waste, hazardous materials, leaking containers Department of Public Health
- Sediment, oil, paint San Francisco Public Utilities Commission
- Trash, litter, construction debris Department of Public Works
- Removal of exterior lead-based paint Department of Building Inspection

DPW's Bureau of Street and Environmental Services (BSES) is responsible for keeping the City's streets and sidewalks clean, including those near construction sites, through a program of regularly scheduled street sweeping. BSES also responds to complaints of construction debris on City streets and sidewalks.

PLANNED ACTIVITIES

Except for one-time activities, existing activities will continue during the 2003-2004 fiscal year. Although no construction projects are expected in the non-Port MS4 areas of the City, when the first project is implemented, SFPUC will:

- ensure that signage is posted at construction sites in MS4 areas that provides contact information for the public to use to report incidents to the City.
- review phone trees to ensure that reports are routed to the appropriate City agency and to ensure that ultimate responsibility for a response rests with one agency in each case.

3.4.4 F Element name: <u>CONSTRUCTION SITE STORM WATER RUNOFF CONTROL</u> – Site Inspection and Enforcement

General Permit section: D.2.d.6

REGULATORY REQUIREMENT

The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more.

The program must include development and implementation of procedures for site inspection and enforcement of control measures.

EXISTING ACTIVITIES

DPW's Bureau of Construction Management manages construction projects on public property including City's parks.

The San Francisco Department of Public Health (DPH) enforces State and San Francisco environmental health laws, including hazardous materials storage and the lead-based paint exterior work practices section of the City Municipal Code.

PLANNED ACTIVITIES

For the non-Port MS4 areas of the City:

- SFPUC will work with DPW on non-Port public property and rights-of-way projects, and the Bureau of Environmental Regulation and Management (SFPUC-BERM) will work on non-Port private property projects to ensure that procedures for site inspection and enforcement of storm water pollution control measures are in place. Inspectors will check and evaluate erosion and sediment controls as well as waste controls, and as appropriate check to see that the site owner / operator has filed a NOI for coverage under the State's Construction General Permit including preparation and implementation of a SWPPP.
- Training in construction site storm water pollution prevention will be provided to DPW resident engineers and construction inspectors.

3.4.4 G GOALS SHEET: CONSTRUCTION SITE STORM WATER RUNOFF CONTROL MEASURABLE GOALS

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for the Construction Site Storm Water Runoff Control minimum control measure.

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
4	CONSTRUCT D.2.d.6)	ION SITE ST	ORM WATER RUNOFF CONT	ROL (Au	diences = Gen P	ub/Contractors-Developers/Munic.	Employ	ees); Ge	n Permi	t D.2.d.	1 throug	gh
4A	Construction Site Control	Ordinance	MUNICIPAL CODE REVIEW - erosion and sediment controls / sanctions (Gen Permit D.2.d.1)	All*		Review of the SF Municipal Code to ensure that the City's authority includes the ability to require erosion and sediment controls, as well as sanctions, or other effective mechanisms, to ensure compliance, to the extent allowable under State or local law. <u>Measurable Goal(s)</u> : Memo documenting review methods, results, and recommendations for changes (as necessary)		С				
4B	Construction Site Control	Erosion & Sediment Controls	TRAINING <u>ON EROSION &</u> <u>SEDIMENT CONTROLS</u> (Gen Permit D.2.d.2) - In coordination with 4C	Non-Port	SFPUC / DPW	Dissemination of <i>Keep It On Site</i> guide fo construction sites can minimize erosion the guide as needed. To be done in conjworkshops.	r constr and sedi junction	uction site ment run with site	es the off. Rev inspection	guide ad vise exist ons and/	ldresses ing vers ⁄or cont	how ion of ractor
4B.1	Construction Site Control	Erosion & Sediment Controls	Identify staff / create work group	Non-Port	SFPUC / DPW	<u>Measurable Goal(s)</u> : Designated staff / work group		С				
4B.2	Construction Site Control	Erosion & Sediment Controls	Evaluate existing training & inspection processes / procedures / forms	Non-Port	SFPUC / DPW	<u>Measurable Goal(s)</u> : Report documenting review methods, results, and recommendations for changes (as necessary)			С			
4B.3	Construction Site Control	Erosion & Sediment Controls	Revise existing training & inspection processes / procedures / forms	Non-Port	SFPUC / DPW	<u>Measurable Goal(s)</u> : Revised / institutionalized processes / procedures / forms			С			
4B.4	Construction Site Control	Erosion & Sediment Controls	Train staff on new procedures & Implement procedures	Non-Port	SFPUC / DPW	<u>Measurable Goal(s)</u> : Number / percentage of staff trained; Number/% of sites provided with information			С	0	0	0

Information Sheet - Minimum Control Measure

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
4C	Construction Site Control	Waste Controls	TRAINING ON <u>SITE WASTE</u> <u>CONTROLS</u> (Gen Permit D.2.d.3) - In coordination with E&S Controls 4B	Non-Port	SFPUC / DPW / DPH	Dissemination of Keep It On Site guide for construction sites the guide addresses how construction sites can control wastes to minimize water runoff pollution. To be done in conjunction with 4B. This task pertains to proper waste controls, whereas 4B pertains to erosion & sediment controls. <u>Measurable Goal(s)</u> : Number/percentage of sites provided information			C	0	0	0
4D	Construction Site Control	Erosion & Sediment Controls	PROJECT TRACKING <u>RE:</u> <u>EROSION & SEDIMENT</u> (BMP conditioning / General Permit coverage / SWPPP / grading plan review In coordination with Waste Controls (4E)	Non-Port	SFPUC / DPW / Planning / RPD	Review (and revise as needed) existing p construction projects to inspect and enfo BMPs. To be done in with 4E.	rocess fo orce app	or identifi ropriate e	cation a crosion a	nd track and sedir	ing of nent coi	ntrol
4D.1	Construction Site Control	Erosion & Sediment Controls	Identify staff / create work group	Non-Port	SFPUC / DPW / Planning / RPD	<u>Measurable Goal(s)</u> : Designated staff / work group			С			
4D.2	Construction Site Control	Erosion & Sediment Controls	Evaluate existing processes / procedures / forms	Non-Port	SFPUC / DPW / Planning / RPD	<u>Measurable Goal(s)</u> : Report documenting review methods, results, and recommendations for changes (as necessary)			С			
4D.3	Construction Site Control	Erosion & Sediment Controls	Revise existing processes / procedures / forms	Non-Port	SFPUC / DPW / Planning / RPD	<u>Measurable Goal(s)</u> : Revised / institutionalized processes / procedures / forms			С			
4D.4	Construction Site Control	Erosion & Sediment Controls	Train staff and implement inspection process	Non-Port	SFPUC / DPW / Planning / RPD	<u>Measurable Goal(s)</u> : Number / percentage of staff trained			С*	0	0	0

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
4E	Construction Site Control	Waste Controls	PROJECT TRACKING <u>RE:</u> WASTE CONTROLS (BMP conditioning / General Permit coverage / SWPPP review) - In coordination with 4D	Non-Port	SFPUC / DPW / DPH / Planning / RPD	Review (and revise as needed) existing p construction projects to inspect and enfo (such as discarded building materials, con sanitary waste waters). This BMP will be pertains to focus on proper waste contro controls).	rocess fo orce app ncrete tr e done in ols, wher	or identifi ropriate v uck wash 1 conjunc reas 4D p	cation a waste con out, che tion with ertains to	nd tracki ntrols fo micals, li h 4D (th o erosion	ing of r materi itter, and is task n & sedi	als d iment
4E.1	Construction Site Control	Waste Controls	Identify staff / create work group	Non-Port	SFPUC / DPW / DPH / Planning / RPD	<u>Measurable Goal(s)</u> : Designated staff / work group			С			
4E.2	Construction Site Control	Waste Controls	Evaluate existing training & inspection processes / procedures / forms	Non-Port	SFPUC / DPW / DPH / Planning / RPD	<u>Measurable Goal(s)</u> : Report documenting review methods, results, and recommendations for changes (as necessary)			С			
4E.3	Construction Site Control	Waste Controls	Revise existing processes / procedures / forms	Non-Port	SFPUC / DPW / DPH / Planning / RPD	<u>Measurable Goal(s)</u> : Revised / institutionalized processes / procedures / forms			С			
4E.4	Construction Site Control	Waste Controls	Train staff and implement inspection process	Non-Port	SFPUC / DPW / DPH / Planning / RPD	<u>Measurable Goal(s)</u> : Number / percentage of staff trained			С*	0	0	0
4F	Construction Site Control	Waste Controls	WASTE REDUCTION, REUSE & RECYCLING INFORMATION (Gen Permit D.2.d.3)	Non-Port	SFPUC / DOE / DPW / DPH / Planning / RPD	Evaluate (and improve as needed) existir implement solid & hazardous waste redu	ng requin Iction, re	rements f euse and i	or contra recycling	actors si at cons	te opera truction	tors to sites.
4F.1	Construction Site Control	Waste Controls	Evaluate existing information	Non-Port	SFPUC / DOE / DPW / DPH / Planning / RPD	<u>Measurable Goal(s)</u> : Report documenting review methods, results, and recommendations for changes (as necessary)			С			
4F.2	Construction Site Control	Waste Controls	Revise existing information	Non-Port	SFPUC / DOE / DPW / DPH / Planning / RPD	<u>Measurable Goal(s)</u> : Revised / uniform information			С			
4F.3	Construction Site Control	Waste Controls	Train staff & use new information	Non-Port	SFPUC / DOE / DPW / DPH / Planning / RPD	<u>Measurable Goal(s)</u> : Number / percentage of staff trained			С*	0	0	0

Information Sheet - Minimum Control Measure

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
4G	Construction Site Control	Site Plan Review	ADMINISTRATIVE PROCESS/procedure/form review, revision, and training (Gen Permit D.2.d.4)	Non-Port	SFPUC / DPW / Planning / RPD	Assess and improve (as needed) current oversight and enforcement of storm wat sites that fall under the purview of the S	site plan er runof WMP.	review p f pollutio	rocess f n prevei	or identi ntion at (fication construc	, ction
4G.1	Construction Site Control	Site Plan Review	Evaluate existing processes / procedures / forms	Non-Port	SFPUC / DPW / Planning / RPD	<u>Measurable Goal(s)</u> : Report documenting review methods, results, and recommendations for changes (as necessary)			С			
4G.2	Construction Site Control	Site Plan Review	Revise existing processes / procedures / forms	Non-Port	SFPUC / DPW / Planning / RPD	<u>Measurable Goal(s)</u> : Revised / institutionalized processes / procedures / forms			С			
4G.3	Construction Site Control	Site Plan Review	Train staff and implement process	Non-Port	SFPUC / DPW / Planning / RPD	<u>Measurable Goal(s)</u> : Number / percentage of staff trained			С	0	0	0
4H	Construction Site Control	Public Reporting	RESPONSE PROCESS REVIEW (Gen Permit D.2.d.5)	Non-Port	SFPUC / DPW / DPH / DBI	Assess (and revise as needed) current pr information submitted by the public reg required BMPs and programs to reduce	ocedures arding co storm w	s for recei ompliance ater runo	pt and c e of con ff pollut	onsidera struction ants.	ation of n sites w	vith
4H.1	Construction Site Control	Public Reporting	Identify staff / create work group	Non-Port	SFPUC / DPW / DPH / DBI	<u>Measurable Goal(s):</u> Designated staff / work group			С			
4H.2	Construction Site Control	Public Reporting	Evaluate existing processes / procedures / forms	Non-Port	SFPUC / DPW / DPH / DBI	<u>Measurable Goal(s)</u> : Report documenting review methods, results, and recommendations for changes (as necessary)			С			
4H.3	Construction Site Control	Public Reporting	Revise existing processes / procedures / forms	Non-Port	SFPUC / DPW / DPH / DBI	<u>Measurable Goal(s)</u> : Revised / institutionalized processes / procedures / forms			С			
4H.4	Construction Site Control	Public Reporting	Train staff and implement new process	Non-Port	SFPUC / DPW / DPH / DBI	<u>Measurable Goal(s)</u> : Number / percentage of staff trained			С	0	0	0

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
4I	Construction Site Control	Public Reporting	SIGNAGE (Gen Permit D.2.d.5)	Non-Port	SFPUC / DPW	Design, produce and install signs for poswater runoff pollution prevention BMP to call in observed violations.	sting at o s and pr	constructi oviding a	on sites contact	about re number	quired s for the	torm public
4I.1	Construction Site Control	Public Reporting	Develop conceptual design	Non-Port	SFPUC / DPW	<u>Measurable Goal(s)</u> : Conceptual design			С			
41.2	Construction Site Control	Public Reporting	Review / revise design	Non-Port	SFPUC / DPW	<u>Measurable Goal(s)</u> : Full design			С			
41.3	Construction Site Control	Public Reporting	Fabricate signage	Non-Port	SFPUC / DPW	<u>Measurable Goal(s)</u> : Signage			С			
4I.4	Construction Site Control	Public Reporting	Require installation	Non-Port	SFPUC / DPW	<u>Measurable Goal(s):</u> Number/percentage of signs; Number of housekeeping violations; Calls in response to signs			С	0	0	О
4J	Construction Site Control	Public Reporting	COMPLAINT RESPONSE (Gen Permit D.2.c.5)	Non-Port	SFPUC / DPW / DPH / DBI	Review (and revise as needed) current procedure for receiving, handling and tracking complaints received about construction sites violating storm water runoff pollution prevention requirements. <u>Measurable Goal(s):</u> Number / percentage of incidents / complaints handled			<i>C</i> *	0	0	0

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
4K	Construction Site Control	Site Inspection and Enforcement	INSPECTION/ENFORCEM ENT PROCEDURES REVIEW (General Permit sec. D.2.d.6)	Non-Port	SFPUC / DPW / DPH / DBI	Review (and revise as needed) current pr enforcement of requirements of control runoff.	rocedure measure	e for cons es to redu	truction ce pollut	site insp ants in s	ections storm w	and ater
4K.1	Construction Site Control	Site Inspection and Enforcement	Identify staff / create work group	Non-Port	SFPUC / DPW / DPH / DBI	<u>Measurable Goal(s)</u> : Designated staff / work group			С			
4K.2	Construction Site Control	Site Inspection and Enforcement	Evaluate existing processes / procedures / forms	Non-Port	SFPUC / DPW / DPH / DBI	<u>Measurable Goal(s)</u> : Report documenting review methods, results, and recommendations for changes (as necessary)			С			
4K.3	Construction Site Control	Site Inspection and Enforcement	Revise existing processes / procedures / forms	Non-Port	SFPUC / DPW / DPH / DBI	<u>Measurable Goal(s)</u> : Revised / institutionalized processes / procedures / forms			С			
4K.4	Construction Site Control	Site Inspection and Enforcement	Train inspectors	Non-Port	SFPUC / DPW / DPH / DBI	<u>Measurable Goal(s)</u> : Number / percentage of inspectors trained			С	0	0	0
4L	Construction Site Control	Site Inspection and Enforcement	INSPECTIONS (General Permit sec. D.2.d.6)	Non-Port	SFPUC / DPW / DBI	Conduct construction site inspections to enforce implementation of BMPs to reduce pollutants in site water runoff. <u>Measurable Goal(s)</u> : Number/percentage of sites inspected; Number of significant violations			<i>C</i> *	Ο	0	0
4M	Construction Site Control	Site Inspection and Enforcement	WORKSHOPS (General Permit sec. D.2.d.6)	Non-Port	SFPUC/ DPW	Conduct workshops to train DPW resident engineers and construction site inspectors. <u>Measurable Goal(s):</u> Number of attendees			С*	0	0	0
4N	Construction Site Control	Goals Assessment	REFINEMENT OF MEASURABLE GOALS	Non-Port	SFPUC	Review goals for this control measure. With information gained (in program planning, working groups, work plan development, and implementation), revise and refine goals (as needed) to make them more measurable/numeric and to address both task completion and task effectiveness. <u>Measurable Goal(s)</u> : Evaluation of Construction Site Control goals and revised goals (where applicable)		С	0	Ο	0	0

--> See Appendix F or the Goals Table in Section 3.4.1B for table notes and code key

3.4.5 **COVER SHEET -** Minimum Control Measure

POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Coordinator: SFPUC: Karen Hurst

OVERVIEW: Existing activities aimed at developing and testing controls for storm water runoff from new and redevelopment projects will be very instructive as SFPUC develops this minimum control measure. As part of its waterfront planning effort, the Port initiated in June 2001 a Storm Water Management Study (Study) investigating various options (including structural controls) for managing runoff associated with land uses proposed under the Southern Waterfront Supplemental Environmental Impact Report (SEIR)(CCSF, 2002). Structural BMPs and approaches to site design considered in the Study were consistent with requirements of the Phase II storm water regulations. In addition, the Phase I municipalities in the Bay Area are beginning to implement the "C.3" provision in their individual storm water permits – a process which is expected to take about three years to fully implement (2005-2006).

RPD and DPW are gaining some practical experience with recent efforts in some of the parks. In Golden Gate Park, storm drain piping into a couple of lakes has been replaced with "french drains" (gravel sumps) to allow for percolation into the ground. And as part of the Harding Park Golf Course renovation, the Design Services group of the Professional Golfers Association of America (PGA) worked with RPD and DPW to design and install numerous gravel sumps of varying size to localize drainage and allow for percolation into the ground.

SFPUC will integrate the results of this practical experience along with information from the Port Study, the experience of the Phase I municipalities, and the Phase II requirements for post-construction storm water management into a storm water management program for development projects.

The program that will result from this Control Measure will ensure that storm water runoff from new development and redevelopment projects within the non-Port MS4 areas is addressed. Once specific design guidelines have been developed, these guidelines will be integrated into the implementation process of this program.

Although currently no construction (and hence no post-construction) projects that meet the one acre size criterion are expected in the non-Port MS4 areas of the City, SFPUC has scoped out general activities to comply with this minimum control measure when it becomes applicable, either through new projects or the conveyance of MS4 areas to the City. Program activities beyond existing ones, or ones that will be conducted as part of other activities anyway, are generally scheduled to begin with notification of the first project in the non-Port MS4 areas.

For more information, see the Information Sheets on Post-Construction Storm Water Management in New Development and Redevelopment that follow.

3.4.5 A Element name: <u>POST-CONSTRUCTION STORM WATER MANAGEMENT</u> <u>IN NEW DEVELOPMENT AND REDEVELOPMENT</u> – Program

General Permit section: D.2.e.1

REGULATORY REQUIREMENT

The Permittee must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the Small MS4 by ensuring that controls are in place that would prevent or minimize water quality impacts.

EXISTING ACTIVITIES

Parks

As part of the 1992 Golden Gate Park Infrastructure Bond Act passed by San Franciscans, twelve lakes were identified as areas of physical deterioration that were in need of restoration. A Concept Design Report (CCSF, 1994a) prepared in conjunction with a Master Plan (CCSF, 1994b) identified excessive sediments and nutrients as problems in Golden Gate Park lakes. The report and the plan made recommendations for drainage improvements including eliminating urban runoff discharges into the lakes or capturing and infiltrating/treating the runoff before it entered the lakes. Since that time, RPD has been implementing the recommendations as time and funding have allowed.

PLANNED ACTIVITIES

Except for one-time activities, existing activities will continue during the 2003-2004 fiscal year.

For the following MS4 areas that are currently owned by others, but which are expected to be conveyed to the City, SFPUC will track the development plans and provide comments relative to the requirements of the General Permit: Treasure Island / Yerba Buena Island; Mission Bay–South; and Hunters Point Shipyard.

Although no construction (and hence no post-construction) projects are expected to begin in the non-Port MS4 areas of the City for several years, the City will develop a Post-Construction Storm Water Management Program for New Development & Redevelopment that will entail the following:

- Tracking development plans and providing appropriate comments and oversight;
- Researching and learning from related activities of the Port and Phase I municipalities, and from practical experience in City parks, in order to develop specific design guidelines;
- Working with the City Planning Department to develop informational materials for the program; and
- Training employees involved on the program and educating planning consultants, developers, and construction companies working in the City.

3.4.5 B Element name: <u>POST-CONSTRUCTION STORM WATER MANAGEMENT</u> <u>IN NEW DEVELOPMENT AND REDEVELOPMENT</u> - Strategies

General Permit section: D.2.e.2

REGULATORY REQUIREMENT

The Permittee must develop and implement strategies, which include a combination of structural and/or non-structural BMPs appropriate for your community.

EXISTING ACTIVITIES

<u>Parks</u>

The elimination or infiltration and treatment of urban runoff entering lakes in Golden Gate Park are part of an overall strategy described in the 1994 Concept Design Report and Master Plan documents. The strategy includes the installation of structural treatment controls (i.e., french drains) as well as non-structural source controls (e.g., catch basin cleaning).

PLANNED ACTIVITIES

Except for one-time activities, existing activities will continue during the 2003-2004 fiscal year.

Although no construction (and hence no post-construction) projects are expected in the non-Port MS4 areas of the City, when notification of the first project is made the SFPUC will work with other City departments to implement post-construction controls consistent with the new storm water management program for development projects (General Permit section D.2.e.1 – Post-Construction – Program.). This Program, and the strategies that will be involved in its implementation, such as development of design guidelines, are describe in Section 3.4.5A of this SWMP.

3.4.5 C Element name: <u>POST-CONSTRUCTION STORM WATER MANAGEMENT</u> <u>IN NEW DEVELOPMENT AND REDEVELOPMENT</u> - Ordinance

General Permit section: D.2.e.3

REGULATORY REQUIREMENT

The Permittee must use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law. The requirements must at least include the design standards in Attachment 4 of the General Permit.

EXISTING ACTIVITIES

Chapter X of the San Francisco Municipal Code, directs that all dischargers must comply with all state and federal orders issued to the City including all the City's NPDES permits. The Municipal Code also prohibits the discharge of hazardous waste and other pollutants that would violate the City's federal and state discharge permits (Public Works Code, Article 4.1).

PLANNED ACTIVITIES

The City Attorney's Office will review Chapter X of the San Francisco Municipal Code to ensure that the City's authority includes the ability to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law. The City Attorney's Office will also review other portions of the Municipal Code for potential conflicts with the Phase II requirements. If the reviews determine changes are necessary and achievable, the City Attorney's Office will work with the appropriate City departments to develop the proposed changes for consideration and adoption by the Board of Supervisors. 3.4.5 D Element name: <u>POST-CONSTRUCTION STORM WATER MANAGEMENT</u> <u>IN NEW DEVELOPMENT AND REDEVELOPMENT</u> – Operation and Maintenance

General Permit section: D.2.e.4

REGULATORY REQUIREMENT

The Permittee must ensure adequate long-term operation and maintenance of BMPs.

EXISTING ACTIVITIES

Parks 1 4 1

As described in the cover sheet, at Golden Gate Park and Harding Park, RPD and DPW have designed, installed, and tested french drains (gravel sumps) that allow for percolation into the ground. In some cases, testing revealed operational deficiencies, which have been addressed or are being addressed as part of long-term operation and maintenance of the BMPs.

PLANNED ACTIVITIES

Except for one-time activities, existing activities will continue during the 2003-2004 fiscal year. Although no construction (and hence no post-construction) projects are expected in the non-Port MS4 areas of the City, SFPUC will start this effort when notification of the first project is made. Based on practical experience with recent efforts in Golden Gate Park and Harding Park, SFPUC will work with DPW to develop an operation and maintenance verification program. The verification program will include maintenance requirements, which will be based on existing information including the California Storm water Quality Association (CASQA) BMP handbooks. SFPUC will develop criteria for deciding if long-term operation and maintenance should be conducted by the City or by private property owners/tenants. If private property owners or tenants are required to maintain the facilities, the verification program will likely involve development of maintenance agreements between the City and private property owners/tenants.

3.4.5 E GOALS SHEET: POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT CONTROL MEASURABLE GOALS

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for the Post-Construction Storm Water Management in New Development and Redevelopment minimum control measure.

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08		
5	POST-CONSTRUCTION STORM WATER MAN. IN NEW DEV. & REDEV. (Audiences = Business/Contractors-Developers/Munic.Employees) (Gen Permit D.2.e.1 to D.2.e.4)													
5A	Post Construction SW Management	Program	PROGRAM DEVELOPMENT (Gen Permit D.2.e.1)	Non-Port	SFPUC / DPW / Planning / SFRA / TIDA	Development, implementation and enforcement from new development and redevelopment pro The design guidelines developed per Task 5B w indicated in Task 5D.	it of a pi jects tha vill be inv	rogram to at fall und corporate	address er the p d into th	storm v urview o nis progr	vater run f the SV am, as	10ff VMP.		
5A.1	Post Construction SW Management	Program	Track development plans / provide comments on MS4 areas to be conveyed to City	Non-Port	SFPUC / DPW / Planning / SFRA / TIDA	<u>Measurable Goal(s)</u> : Comments relative to General Permit requirements for post- construction controls	E	C*	0	0	0	0		
5A.2	Post Construction SW Management	Program	Identify staff / create work group / design interested party involvement process	Non-Port	SFPUC / DPW / Planning / SFRA / TIDA / MUNI / DPH	<u>Measurable Goal(s)</u> : Designated staff / work group / interested party involvement process		С*	0	0	0	0		
5A.3	Post Construction SW Management	Program	Review / integrate (as appropriate) existing planning efforts	Non-Port	SFPUC / DPW / Planning / SFRA / TIDA / MUNI / DPH	<u>Measurable Goal(s)</u> : Report documenting review methods, results, and recommendations for changes (as necessary)			<i>C</i> *	0	0	0		
5A.4	Post Construction SW Management	Program	Establish administrative processes / procedures	Non-Port	SFPUC / DPW / Planning / SFRA / TIDA / MUNI / DPH	<u>Measurable Goal(s)</u> : Revised / institutionalized processes / procedures / forms				<i>C</i> *	0	0		

Information Sheet - Minimum Control Measure

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
5B	Post Construction SW Management	Program	DESIGN GUIDELINES DEVELOPMENT (Gen Permit D.2.e.1)	Non-Port	SFPUC / DPW / Planning / SFRA / TIDA / MUNI / DPH	Development of design guidelines for reduction of storm water runoff pollution in new development and redevelopment projects. <u>Measurable Goal(s):</u> Materials including potentially forms, checklists, guidance, outreach, and reports. See 5D for implementation of guidelines.				С		
5C	Post Construction SW Management	Program	TRAINING/EDUCATION (Gen Permit D.2.e.1)	Non-Port	SFPUC / DPW / Planning / SFRA / TIDA / MUNI / DPH	Develop materials and train City employees, consultants, developers and construction companies on design guidelines for reduction of storm water runoff pollution in new development and redevelopment projects <u>Measurable Goal(s)</u> : Number / percentage of employees trained and planning consultants, developers, and construction companies educated				С	0	0
5D	Post Construction SW Management	Strategies	IMPLEMENTATION OF GUIDELINES (Gen Permit D.2.e.2)	Non-Port	SFPUC / DPW / Planning / SFRA / TIDA / MUNI / DPH	Implement design guidelines to address storm water runoff (generated per Task 5B) that include a combination of structural and non- structural BMPs in new development and redevelopment projects. Implementation will be done through the program detailed in Task 5A. <u>Measurable Goal(s)</u> : Number/percentage of post-construction controls implemented					<i>C*</i>	0

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
5E	Post Construction SW Management	Ordinance	MUNICIPAL CODE REVIEW - post-construction runoff from new development and redevelopment projects (Gen Permit D.2.e.3)	All*	City Attorney's Office	Review (and modify as needed) ordinances and other regulatory mechanisms to address post-construction runoff from new development and redevelopment projects to the extent allowable under State and local law. The requirements must at least include the design standards in Att. 4 of the General Permit. <u>Measurable Goals</u> : Memo documenting review methods, results, and recommendations for changes (as necessary).		С				
5F	Post Construction SW Management	Operation and Maintenance	OPERATION & MAINTENANCE AGREEMENTS (Gen Permit D.2.e.4)	Non-Port	SFPUC / DPW / SFRA / TIDA / MUNI / DPH	Develop and implement a program to ensure long-term operation and maintenance of BMPs used in development and redevelopment projects. <u>Measurable Goal(s)</u> : Development of boilerplate O&M agreement					С*	0
5G	Post Construction SW Management	Operation and Maintenance	VERIFICATION PROGRAM (Gen Permit D.2.e.4)	Non-Port	SFPUC / DPW / SFRA / TIDA / MUNI / DPH	Develop and implement a verification program to ensure O&M agreements related to BMPs used are being followed. <u>Measurable Goal(s):</u> O&M responsibility criteria; Report documenting O&M activities					С*	0
5H	Post Construction SW Management	Goals Assessment	REFINEMENT OF MEASURABLE GOALS	Non-Port	SFPUC	Review goals for this control measure. With information gained (in program planning, working groups, work plan development, and implementation), revise and refine goals (as needed) to make them more measurable/numeric and to address both task completion and task effectiveness. <u>Measurable Goal(s)</u> : Evaluation of Post-Construction SW Management goals and revised goals (where applicable)		С	0	0	0	0

--> See Appendix F or the Goals Table in Section 3.4.1B for table notes and code key
3.4.6 COVER SHEET - Minimum Control Measure

POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Coordinator: SFPUC: Karen Hurst

OVERVIEW: In the current MS4 areas of the City, municipal operations are limited primarily to the Port and the few parks with MS4s. The City's municipal employees already conduct a number of pollution prevention and good housekeeping BMPs for reasons other than the Phase II regulations. These BMPs will be reviewed, and if necessary, revised to meet the letter and intent of the Phase II General Permit.

For more information, see the Information Sheets on Post-Construction Storm Water Management in New Development and Redevelopment that follow. 3.4.6 A Element name: <u>POLLUTION PREVENTION / GOOD HOUSEKEEPING</u> <u>FOR MUNICIPAL OPERATIONS</u> – Program

General Permit section: D.2.f.1

REGULATORY REQUIREMENT

The Permittee must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

EXISTING ACTIVITIES

During 2001-2002, as part of the implementation of the City's Integrated Pest Management (IPM) Ordinance and Program the City's Department of the Environment (DOE) hosted a meeting to develop a rain policy. The meeting included City staff, community members, and outside experts on pesticide application. The policy outlined procedures and precautions for use of pesticides during the rainy season to minimize potential draft or runoff (CCSF, 2003c).

On a monthly basis, a Technical Advisory Committee convenes to exchange information, discuss current pest control techniques, and representatives from the major City departments meet to discuss implementation of the IPM Program. Participants include departmental IPM coordinators, safety and environmental compliance staff, pest control contractors, independent IPM experts, and community members.

Parks

The potential impact and performance of operation and maintenance activities relative to storm water are addressed by the following at the parks with MS4 areas:

- Implementation of San Francisco's IPM Ordinance and Program In 1997, San Francisco
 was one of the first cities in the nation to adopt an IPM Ordinance. RPD is the biggest
 user of chemical pesticides in the City, reflecting the large acreage of landscaped areas
 under their management. Since 1997, RPD has eliminated all use of the most toxic
 pesticides (including diazinon and chlorpyrifos), and all trends point toward reductions in
 the use of other toxic pesticides. RPD has demonstrated their support of the IPM
 Ordinance through several activities in addition to reducing their pesticide usage. These
 include staff training, pilot projects dealing with compost tea, a successful pilot IPM
 program at Sharp Park Golf Course, extensive use of mulch to prevent weeks, use of
 beneficial insects, and manual removal efforts for aquatic weeks.
- Sweeping of roads in parks on regular schedules
- Cleaning of catch basins on an as needed basis
- Regular cleanup of trash

Lobos Creek Area

- BSES sweeps streets on a regular schedule and parking restrictions are enforced to ensure access for street sweeping equipment
- DPW cleans catch basins on an as needed basis

PLANNED ACTIVITIES

- DPW and RPD will continue to implement their existing BMPs.
- SFPUC will work with DPW, RPD, and DPH to distribute its new referral sheet to municipal employees *Who Ya Gonna Call? Water Pollution Prevention Busters!*, which includes photographs of typical storm water pollutants (hazardous waste, sediment, leaks and spills, trash) and provides City department phone numbers to call for a response.

3.4.6 B Element name: <u>POLLUTION PREVENTION / GOOD HOUSEKEEPING</u> <u>FOR MUNICIPAL OPERATIONS</u> - Employee Training

General Permit section: D.2.f.2

REGULATORY REQUIREMENT

The Permittee must, using training materials that are available from EPA, the State, or other organizations, your program must include employee training to prevent or reduce storm water pollution from activities such as park and open space maintenance, fleet building maintenance, new construction and land disturbances, and storm water system maintenance.

EXISTING ACTIVITIES

RPD conducts regular training sessions for their employees that cover environmental health issues including brief "tailgate" trainings in the field, annual facility inspections, and annual pest control/IPM trainings.

PLANNED ACTIVITIES

SFPUC will work with the training staff at DPW, RPD, and DPH to supplement the existing trainings with information on:

- how to recognize potential storm water pollution activities and situations
- ways municipal employees can prevent or reduce storm water pollution from municipal operations
- the referral sheet Who Ya Gonna Call? Water Pollution Prevention Busters!

3.4.6 C GOALS SHEET: POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS MEASURABLE GOALS

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for the Pollution Prevention / Good Housekeeping for Municipal Operations minimum control measure.

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
6	POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS (Audience = Municipal Employees); Gen Permit D.2.f.1 and D.2.f.2											
6A	Munic Ops P2/Good Housekeeping	Program	IPM ORDINANCE/PROGRAM (Gen Permit D.2.f.1)	Parks	RPD / DOE	Continue & track (and improve as needed) implementation of the City's IPM ordinance and program. <u>Measurable Goal(s):</u> Summary of actions taken		Е	С	Ο	Ο	о
6B	Munic Ops P2/Good Housekeeping	Program	STREET SWEEPING (Gen Permit D.2.f.1)	Parks	DPW	Continue & track (and improve as needed) implementation of the City's street sweeping program. <u>Measurable Goal(s):</u> Amount/content of collected material (Port); Frequency of sweeping		Е	С	0	0	0
6C	Munic Ops P2/Good Housekeeping	Program	CATCH BASIN CLEANING (Gen Permit D.2.f.1)	Parks	DPW	Continue & track (and improve as needed) implementation of the City's catch basin cleaning program. <u>Measurable Goal(s):</u> Number / percentage of catch basins cleaned; Frequency of cleanings; Number of blocked catch basin incidents		Е	С	0	0	0
6D	Munic Ops P2/Good Housekeeping	Program	TRASH CLEANUP (Gen Permit D.2.f.1)	Parks	DPW	Continue & track (and improve as needed) implementation of the City's trash clean up programs. <u>Measurable Goal(s)</u> : Amount/content of collected material; Frequency of collection		Е	С	О	0	0

Prog #	PROGRAM AREA (Control Measure)	TASK TYPE	BMP/ ACTIVITY (& Significant Subactivities)	MS4 Area [1]	IMPACTED DEPTS [2]	CONTROL MEASURE DETAIL & MEASURABLE GOALS	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08	
6E	Munic Ops P2/Good Housekeeping	Program	INTER-DEPARTMENTAL CONTACT SHEET (Gen Permit D.2.f.1)	Non-Port	SFPUC	Revise and distribute inter-departmental contact sheet which educates City employees on who/which dept to call regarding storm water pollution related violations. <u>Measurable Goal(s):</u> Number/percentage of employees provided sheet			С	0	0	0	
6F	Munic Ops P2/Good Housekeeping	Employee Training	REQUIRED TRAININGS (e.g., Hazwoper, HMUPA, IPM) (Gen Permit D.2.f.2)	Non-Port	SFPUC / RPD / DPW / DPH	Evaluate existing non-storm water trainings which have some relation to storm water pollution prevention to determine if storm water pollution prevention elements can be incorporated (such as IPM training, hazardous waste training, etc). <u>Measurable</u> <u>Goal(s)</u> : Number/% of staff trained		Е	С	0	0	0	
6G	Munic Ops P2/Good Housekeeping	Employee Training	SUPPLEMENTAL TRAININGS (i.e., storm water specific) (Gen Permit D.2.f.2)	Non-Port	SFPUC / RPD / DPW / DPH	Continue (and improve as needed) training of prevent or reduce storm water pollution from maintenance, fleet building maintenance, new water system maintenance.	eeded) training of employees on storm water specific topics to ter pollution from activities such as park and open space maintenance, new construction and land disturbances, and storm						
6G.1	Munic Ops P2/Good Housekeeping	Employee Training	Review / evaluate training materials	Non-Port	SFPUC / RPD / DPW / DPH	<u>Measurable Goal(s)</u> : Report documenting review methods, results, and recommendations for changes (as necessary)		С					
6G.2	Munic Ops P2/Good Housekeeping	Employee Training	Revise training materials, as needed	Non-Port	SFPUC / RPD / DPW / DPH	Measurable Goal(s): Revised materials		С					
6G.3	Munic Ops P2/Good Housekeeping	Employee Training	Train staff	Non-Port	SFPUC / RPD / DPW / DPH	<u>Measurable Goal(s)</u> : Number / percentage of staff trained			С	0	0	0	
6H	Munic Ops P2/Good Housekeeping	Goals Assessment	REFINEMENT OF MEASURABLE GOALS	Non-Port	SFPUC	Review goals for this control measure. With information gained (in program planning, working groups, work plan development, and implementation), revise and refine goals (as needed) to make them more measurable/numeric and to address both task completion and task effectiveness. <u>Measurable Goal(s):</u> Evaluation of Municipal Operations P2/Good Housekeeping goals and revised goals (where applicable)		С	0	0	0	0	

---> See Appendix F or the Goals Table in Section 3.4.1B for table notes and code key

4. References

Documents

- CCSF, 1990. *Best Management Practices Program for Pollution Prevention*. Prepared by Uribe & Associates.
- CCSF, 1991. *Best Management Practices Study Plan for Water Pollution Prevention*. Prepared by Uribe & Associates.
- CCSF, 1992. *Best Management Practices Study*. Prepared by James M. Montgomery and Uribe & Associates.
- CCSF, 1994a. *Concept Design Report for Lakes Rehabilitation, 1992 Golden Gate Park Bond.* Prepared by Department of Public Works-Bureau of Engineering for Recreation and Park Department
- CCSF, 1994b. *Golden Gate Park Sewer and Drainage System, Master Plan.* Prepared by Department of Public Works-Bureau of Engineering for Recreation and Park Department
- CCSF, 1997. Summary Report. Facility Audits Storm Water Pollution Prevention Program. Prepared by Geoff Brosseau.
- CCSF, 1998. 1997-98 Storm Water Pollution Prevention Program Final Report. Prepared by Geoff Brosseau.
- CCSF, 1999. *Storm Water Pollution Prevention Activities Technical Memorandum*. Prepared by Daniel Rourke.
- CCSF, 2000. Screening of Feasible Technologies (SOFT). Prepared by Brown and Caldwell.
- CCSF, 2002. Storm Water Management Study for Port of San Francisco, Southern Waterfront, Pier 70 to Pier 96 – Revised Draft. Prepared by Treadwell and Rollo, and Watershed Resources Collaboration Group.
- CCSF, 2003a. *Water Pollution Prevention Program, 2002-2003 Annual Report*. Prepared by Bureau of Environmental Regulation and Management, San Francisco Public Utilities Commission.
- CCSF, 2003b. Initial Storm Water Management Plan, 2003-2004. Prepared by Geoff Brosseau.
- CCSF, 2003c. Integrated Pest Management Program, 2001/2002 Annual Report. Prepared by Department of the Environment.

- North San Mateo County Sanitation District, a subsidiary of the City of Daly City, 2003. Supplemental Environmental Project Proposal, Lake Merced Restoration – Pilot Storm water Enhancement Project. Revised Draft, September 5, 2003.
- Regional Water Quality Control Board and Department of Toxic Substances Control, 1999. *Risk Management Plan, Mission Bay Area, San Francisco, California*. Prepared by ENVIRON.
- USEPA, 1994. *Combined Sewer Overflow (CSO) Control Policy*, Federal Register Notice (59) 18688, April 19, 1994, Part 7, EPA-833-Z-94-001.

Web Sites

BASMAA (<u>www.basmaa.org</u>)

California BMP Handbooks (www.cabmphandbooks.org)

Caltrans Storm water Management Program (www.dot.ca.gov/hq/env/stormwater/index.htm)

CASQA (www.casqa.org)

Center for Watershed Protection (www.cwp.org)

Clean Estuary Partnership (www.cleanestuary.org)

Regional Board (www.swrcb.ca.gov/rwqcb2)

San Francisco Storm water Management Program (<u>http://stormwater.sfwater.org</u>)

State Board Storm water Program (www.swrcb.ca.gov/stormwtr/index.html)

Storm water Managers Resource Center (<u>www.stormwatercenter.net</u>)

USEPA Storm water Program (http://cfpub1.epa.gov/npdes/home.cfm?program_id=6)