

San Diego County Regional Airport Authority

Fiscal Year 2009-2010

Municipal Stormwater Permit Annual Report

September 2010



Statement of Certification for the 2009-2010 San Diego County Regional Airport Authority Municipal Permit Annual Report

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Date:

September 29, 2010

Signature:

Paul Manasjan

Printed Name:

Title:

Director, Environmental Affairs Department



SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY

INTER-OFFICE COMMUNICATION

Date:

June 27, 2003

To:

Thella F. Bowens
President/CEO

From:

Ted Sexton

Vice President, Operations

Subject:

Authorization to Sign National Pollutant Discharge Elimination System

(NPDES) Documents

NPDES Permits (including General NPDES Permits) require submission of various reports and certifications, which must be prepared and signed by a principal executive office or duly authorized representative. A person is a duly authorized representative if: (1) the authorization is made in writing by the executive officer and (2) a copy of the authorization is retained as part of the permit records for each facility. The authorized representative must be the individual or position having overall responsibility for environmental matters.

This is to request your approval, evidenced by your signature below, authorizing the Director of Environmental Affairs for the Authority to serve as the duly authorized representative for purposed of executing all documents related to the NPDES Permit requirements.

Thella F. Bowens
President/CEO

San Diego County Regional Airport Authority

Cc: Paul Manasjan, Director, Environmental Affairs

Zane Gresham, Morris & Foerster





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ACKNOWLEDGMENTS

The San Diego County Regional Airport Authority Fiscal Year 2009-2010 Municipal Stormwater Permit Annual Report has been prepared by the Authority Environmental Affairs Department with the assistance of many other Authority departments. Staff from these departments is integral to implementation of the Authority's stormwater management program and to ensuring compliance with the Municipal Stormwater Permit.

The development and production of this report is a result of the talent and experience of several individuals. Special recognition and acknowledgement are given to the following individuals for their contribution to this document.

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Storm Water Management Plan - Municipal Stormwater Permit

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Executive Summary

The San Diego County Regional Airport Authority (Authority) submits the fiscal-year 2009-2010 (FY09-10) Annual Report in compliance with California Regional Water Quality Control Board, San Diego Region (RWQCB), Order No. R9-2007-0001, NPDES Permit No. CAS0108758 (Municipal Permit). The FY09-10 Annual Report describes all the stormwater management activities conducted by the Authority between July 1, 2009 and June 30, 2010 to ensure compliance with the Municipal Permit.

The Authority has owned and operated San Diego International Airport (SDIA) since January 1, 2003. SDIA is located on approximately 660 acres adjacent to San Diego Bay, north of downtown San Diego, in San Diego County. The entire jurisdictional area of the Authority, namely, SDIA, discharges into San Diego Bay through 14 storm drain outfalls. Airport operations include two main airline terminals, a commuter terminal, one main runway area, taxiways, fueling facilities, ancillary support facilities, and a closed landfill site.

The Authority controls a number of operations/activities/facilities that are defined by the Municipal Permit as "municipal activities," including: roads and parking lots; the closed Naval Training Center (NTC) landfill; the municipal storm sewer system (MS4) or stormwater conveyance system; the grounds and buildings; the maintenance and storage facilities operated by the Authority; and the airfield itself. All municipal activities at SDIA are subject

to the Authority Storm Water Management Plan (SWMP) and are required to implement the best management practices (BMPs) described therein relative to municipal activities. Of the municipal activities and areas listed above, only the landscaped areas of the facility grounds and the buildings are identified as low priority threats to surface water quality. During FY09-10, the Authority conducted MS4 and municipal facility maintenance activities which included quarterly and annual inspection, cleaning, implementation of measures to prevent waste discharges to receiving waters during maintenance activities, and proper disposal of sediment and debris. The annual site inspections found that the BMPs required for use with municipal operations were, in general, being properly implemented and no formal enforcement actions were initiated.

The Authority's pollution prevention efforts included a waste reduction, diversion, and recycling program. The Authority has also maintained its quarterly electronic and universal waste collection events open to all airport tenants and Authority staff. The Authority has implemented an integrated pest management (IPM) program designed to minimize the amount of pesticides and herbicides used to maintain the buildings and grounds at SDIA.

Thirty (30) airport tenants (including the Authority itself) conduct activities that are subject to the Industrial/Commercial Component of the Municipal Permit. These 30 entities are considered high priority threats to water quality. All are required to implement the BMPs listed in the SWMP. During the reporting period, the Environmental Affairs Department inspection program consisted of both quarterly inspections and an annual inspection (which consisted of an Annual Comprehensive Site Compliance Evaluation and an evaluation of tenant stormwater educational needs) for all industrial and commercial activities at SDIA. These inspections resulted in 50 recorded enforcement actions. All issues of concern were resolved.

During the reporting period, there were 16 active construction projects at SDIA and the Environmental Affairs Department conducted regular site inspections of each project. No written enforcement actions were issued to any construction projects during FY09-10.

The Authority conducts an illicit discharge detection and elimination (IDDE) program that incorporates site monitoring methods, visual inspections, and a 24-hour telephone hotline (as a public reporting mechanism) in attempting to



detect illegal discharges. Elements of the IDDE Program as implemented during FY09-10 will be described in the Annual IDDE Report to be submitted to the RWQCB on December 15th, 2010. The Authority also conducts a dry weather monitoring program and a wet weather monitoring program. The results of these programs will also be reported in the FY09-10 IDDE Annual Report in December 2010.

The Authority's stormwater education and outreach program is designed to reach the target audiences required by the Municipal Permit. The overall goal of the education component is to increase understanding of stormwater management issues and to help promote behavioral changes that will reduce stormwater pollution and enhance water quality. Elements of the education program include: the Authority web page, airport storm drain stenciling, posters, signage, brochures, public service announcements, news releases, meetings, and focused training sessions. The FY09-10 Annual Report documents the continued improvement of the Authority's education and outreach efforts, as well as their effectiveness.

The Authority's stormwater management public participation program is primarily directed at airport tenants and Authority staff, but also includes the general public. Public participation opportunities during this reporting period included: regular meetings of the San Diego County Regional Airport Authority Board; regular meetings of the Lindbergh Airport Managers Committee; regular meetings of the Tenant Safety Committee; a 24hour telephone hotline; the Authority web page; and outreach events in collaboration with local environmental groups.

Using "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs," the Authority presents an assessment of each component of the stormwater management program implemented during FY09-10. Based on the results of current program implementation and the findings of the effectiveness assessment, the majority of the management measures currently being implemented by the Authority have proven to be effective. Taken as a whole, the Authority's program is in compliance with the Municipal Permit.

This report presents a fiscal analysis of the Authority's FY09-10 stormwater management program in accordance with the Standardized Fiscal Analysis Method and Format adopted by the Copermittees.

Storm Water Management Plan - Municipal Stormwater Permit

The FY09-10 Annual Report documents the Authority's compliance with the Municipal Permit. The majority of the management measures implemented by the Authority have proven to be effective. The program generally fulfills the requirements of the Municipal Permit. The FY09-10 Annual Report clearly demonstrates that the stormwater management program at SDIA is adequately planned, executed, reviewed, and funded.





1 Introduction

The San Diego County Regional Airport Authority (Authority) continually strives to operate San Diego International Airport (SDIA) in a manner that demonstrates the utmost respect for our unique natural setting - an urban center on the shore of San Diego Bay. The Authority conducts airport activities in a manner that protects the natural resources, the health and well-being of the people that work here, the surrounding neighborhoods and communities, and the traveling public as they pass through our facility. Potential stormwater impacts are just one characteristic of the airport's "environmental footprint" that the Authority aims to minimize.

This report describes the stormwater management activities of the Authority during the period of July 1, 2009 to June 30, 2010 - the fiscal year 2009-2010 (FY09-10). The Authority submits this FY09-10 Annual Report in compliance with California Regional Water Quality Control Board, San Diego Region (RWQCB), Order No. R9-2007-0001, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego (County), the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority (the Municipal Permit).

This report has been prepared by the Authority Environmental Affairs Department with the assistance of the Facilities Management Department, the Landside Operations Department, the Airside Operations Department, the Facilities Development Department, and the Real Estate Management Department. These departments are responsible for the implementation of the Storm Water Management Plan (SWMP) for SDIA. Staff from these departments are integral to eliminating and reducing pollutants in stormwater runoff and to ensuring the Authority's compliance with the NPDES permits applicable at SDIA, including the Municipal Permit.

The FY09-10 Annual Report presents a compilation of the Authority's stormwater management efforts in the following order:

- 1. Statement of Certification
- 2. Acknowledgements
- **3.** Table of Contents
- **4.** Executive Summary
- 5. Introduction
- **6.** Development Planning Component
- 7. Construction Component
- 8. Municipal Component
- 9. Industrial and Commercial Component
- 10. Residential Component
- 11. Illicit Discharge Detection and Elimination Component
- **12.** Education Component
- 13. Public Participation Component
- **14.** Fiscal Analysis Component
- 15. Effectiveness Assessment Component
- **16.** Special Investigations
- 17. Non-Emergency Fire Fighting
- **18.** WURMP Revisions
- 19. Conclusions and Recommendations

1.1 BACKGROUND

The Authority became the owner and operator of SDIA on January 1, 2003. With approximately 350 employees, the Authority expends an annual budget of approximately \$148 million. SDIA is located on approximately 660 acres



adjacent to San Diego Bay and just north of downtown San Diego in San Diego County. Approximately 85-90% of the airport property is covered by impervious surfaces. Airport operations include two main airline terminals, a commuter terminal, a fixed base operation facility, one main runway area, taxiways, and ancillary support facilities which include a remote fueling facility, air cargo, ground support, an airplane wash-rack, overnight airplane parking areas, and the Airport Rescue and Fire Fighting (ARFF) Facility. The Terminal Development Program (TDP) is currently underway, which will expand the existing Terminal 2 West to include ten new gates and a dual level road way system.

The climate at SDIA is generally mild with an average temperature of 71°F and extremes ranging from the high 40's during the winter to the low 80's during the summer. The majority of the 12 inch-average-annual rain falls during the period from October to April. SDIA lies within the Pueblo San Diego (908.00) hydrologic unit of the San Diego Basin Plan and within the San Diego Bay Watershed of the Municipal Permit. Stormwater runoff from SDIA discharges into San Diego Bay through 14 storm drain outfalls.

Presently, the Authority's operations must comply with two NPDES Stormwater Permits. Since 1992, the operations of the airport have been subject to State Water Resources Control Board (SWRCB) Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities (the General Industrial Storm Water Permit). The Authority has also been subject to the Municipal Permit since August of 2003. The Authority has prepared a single document, the Storm Water Management Plan (SWMP, March 2008), to fulfill the requirements of these two permits.

The entire jurisdictional area of the Authority consists of the airport itself. In regards to the Municipal Permit, there are three notable characteristics of the Authority jurisdiction: a) the absence of private property ownership within the Authority's jurisdictional boundaries; b) the absence of a residential population within the Authority's jurisdictional boundaries; and c) the absence of hillsides as defined in the Municipal Permit.

1.2 PURPOSE AND OBJECTIVES

Presently, the Authority's operations must comply with two NPDES Stormwater Permits. The Authority has prepared a single document, the SWMP, to fulfill the requirements of these two permit.

Since 1992, the operations of the airport have been subject to State Water Resources Control Board (SWRCB) Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities (the General Industrial Storm Water Permit);

Under the General Industrial Storm Water Permit, specific industrial facilities (dischargers), of which SDIA is one, are required to control and eliminate sources of pollutants in stormwater through the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is a tool for recognizing and evaluating potential sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-stormwater discharges from the facility. The SWPPP is also a guide to help identify site-specific BMPs required to reduce or prevent pollutants associated with industrial activities in stormwater discharges and authorized non-stormwater discharges. The SWMP fulfills the General Industrial Storm Water Permit requirement to prepare a SWPPP.

In 2003, the California Regional Water Quality Control Board, San Diego Region (RWQCB), amended Order No. 2007-01 to name the Authority as subject to NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District (the 2001 Municipal Permit). The 2001 Municipal Permit was reissued in January of 2007 as RWQCB Order No. R9-2007-0001, and now specifically names the Authority in the title.

The Municipal Permit specifies the waste discharge requirements for discharges of urban runoff from the MS4s of the jurisdictions named. The Municipal Permit outlines the responsibilities of the jurisdictions (referred to as the Copermittees) to implement stormwater management programs, best management practices (BMPs), and monitoring programs. The permit



requires that these efforts be outlined in a Jurisdictional Urban Runoff Management Program (JURMP) Document. The SWMP fulfills the Municipal Permit requirement to prepare a JURMP Document.

1.3 ANNUAL REPORT HIGHLIGHTS

Several chapters of the FY09-10 Annual Report contain items of note. The discussion of Development and Planning activities in Chapter 2 briefly highlights the status of the Terminal Development Program (TDP - also called the Green Build), which is a near 1 billion dollar project to expand Terminal 2 West and add an additional 10 gates. The 16 construction projects underway at SDIA during FY09-10 are discussed in Chapter 3. Chapter 4 -Municipal Component - highlights the continuation of our electronic waste recycling events and universal waste collection program for Authority staff. Chapter 8 - Education Component - discusses the educational efforts of the Environmental Affairs Department throughout the month of April, which has been dedicated as Earth Month. The Effectiveness Assessment Component in Chapter 11 continues to evolve as more data and information are gathered over 6 years of program implementation. The Authority's procedures and methods have begun to allow for a more complete evaluation of the program and more robust conclusions and recommendations for improvement.

Storm Water Management Plan - Municipal Stormwater Permit





2 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

The Municipal Permit requires the Authority to implement policies, principles, programs, and practices that ensure land-use development, planning, environmental review, and project approval decisions consistently apply effective water quality and watershed protection measures to avoid, minimize, and mitigate the short- and long-term impacts of land development activities on runoff and receiving water quality. The Municipal Permit requires evaluation of the SDIA Master Plan and modification of the development project approval process and environmental review process, as necessary, to reduce pollutants and runoff flows from development and redevelopment projects to the maximum extent practicable. The Municipal Permit required the Authority to update the Standard Urban Runoff Mitigation Plan (SUSMP) processes for priority development projects and to update the Authority review and approval processes to ensure incorporation of source control and low impact development (LID) BMPs into the design of new development and redevelopment projects. Section 4.0 of the SWMP outlines the elements that satisfy these requirements. This chapter of the Annual Report discusses compliance activities relative to land use planning and development/redevelopment activities at SDIA during FY09-10.

2.2 LAND USE PLANNING

2.2.1 BACKGROUND

The Authority Airport Planning Department is responsible for development and implementation of the Airport Master Plan and the environmental review processes required by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The Authority Board adopted the Airport Master Plan on May 1, 2008. Adoption of the Airport Master Plan ensures that a responsible program for development and redevelopment will be implemented at SDIA. The Airport Master Plan identifies specific physical improvements for SDIA that will allow the airport to effectively continue its mission of serving San Diego's commercial air transportation needs. The plan includes consideration of a broad range of development possibilities, cumulative impacts, and mitigation opportunities related to water quality and stormwater runoff pollution prevention.

2.2.2 SOURCE CHARACTERIZATION

Every land use at SDIA has the potential to generate stormwater pollutants. As noted in Section 4.2.2 of the SWMP, pollutants found in runoff at SDIA typically include: sediment, nutrients (fertilizers), oxygen-demanding substances (for example, decaying vegetation), bacteria, heavy metals, synthetic organics (fuels, oils, solvents, lubricants), pesticides, and other toxic substances. In addition to the information presented in Section 4.0 of the SWMP, descriptions of the pollutant sources to be addressed through land use planning are further described in Section 3.0 (Non-Storm Water Discharges), Section 5.0 (Construction Component), Section 6.0 (Municipal Component), Section 7.0 (Industrial and Commercial Component), and Section 9.0 (Illicit Discharge Detection and Elimination Component) of the SWMP.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

In making land use decisions, the Authority evaluates the effect of proposed uses on receiving water quality and requires the application of effective water quality and watershed protection measures to avoid, minimize, and mitigate



detrimental impacts. Land uses are evaluated to ensure that: source control BMPs can be implemented to reduce stormwater pollutants of concern in urban runoff; LID BMPs can be incorporated, where feasible; buffer zones can be established between development and natural water bodies (where feasible); and that SUSMP requirements are properly established.

2.2.4 PROGRAM IMPLEMENTATION

The Airport Master Plan envisions near-term (Phase I) and long-term (Phase II) improvements at SDIA. The Authority prepared Phase I of the Airport Master Plan to guide the development of SDIA to the year 2030. The proposed improvements in Phase I are: the addition of 10 gates that will accommodate the expected increase in travelers; additional airport ramp (tarmac) parking area for remaining-over-night (RON) aircraft; improvements to the aircraft taxiway system to improve aircraft movement; and a second-level roadway system to provide separate departure and arrival areas at Terminal 2.

In April 2009, the Authority Board authorized the execution of two design-build contracts for the implementation of these Phase I improvements, referred to as the Green Build. Preliminary estimates for the cost of design and construction of the Green Build are approximately \$875 million. There are two contract teams or joint ventures tasked with design and construction of the improvements. They are referred to Contract 1 (airside and terminal improvements) and Contract 2 (landside/roadway improvements). Both Green Build-Contract 1 and Green Build-Contract 2 began actual construction work in FY09-10.

The Authority has implemented education programs to educate the Authority staff and airport tenants of water quality issues associated with land use planning. The Education Component of the SWMP is described in Section 10.0 of that document. The education and outreach efforts of the Authority during FY09-10 are described in Chapter 8 of this Annual Report.

ENVIRONMENTAL REVIEW PROCESS

The Authority's environmental review processes for both land use development and specific improvements is described in Section 4.3 of the SWMP. Authority

planning and development review staff, in the Airport Planning Department, use the CEQA (and NEPA, when required by law) to review proposed land use and development projects. Authority staff use a combination of questions pertaining to hydrology and water quality from the "CEQA Environmental Checklist Form" and from RWQCB Order R9-2001-01 (the 2001 Municipal Permit) to evaluate the potential stormwater impacts of any particular proposed land use or development project.

2.3 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.3.1 BACKGROUND

During the planning and review process and prior to project approval and/or permit issuance for all proposed Development Projects, the Authority prescribes the requirements necessary to ensure that discharges of pollutants from the project and to the storm drain system are prevented, reduced, or eliminated. The Authority's development review process incorporates appropriate stormwater management controls into standard conditions of approval, use permits, lease agreements, and/or other suitable project approval mechanisms.

2.3.2 SOURCE CHARACTERIZATION

Development projects may generate any number of pollutants, including sediment, nutrients, oxygen-demanding substances, bacteria, heavy metals, synthetic organics, pesticides, and other toxic substances. In addition to the information presented in Section 4.0 of the SWMP, descriptions of the pollutant sources to be addressed through the development project review and approval process are further described in Section 3.0 (Non-Storm Water Discharges), Section 5.0 (Construction Component), Section 6.0 (Municipal Component), Section 7.0 (Industrial and Commercial Component), and Section 9.0 (Illicit Discharge Detection and Elimination Component) of the SWMP.



In accordance with the Municipal Permit, the Authority developed a SUSMP based on the Model SUSMP developed by the Copermittees for projects that are determined to be Priority Development Projects. The Municipal Permit also requires that the Model SUSMP be further updated during the life of the Municipal Permit. In a letter dated March 25, 2009, the RWQCB found that the January 2, 2009 Model SUSMP prepared by the Copermittees adequately addressed the RWQCB's previous comments and met the requirements of the Municipal Permit. The letter also required the Copermittees to update their local jurisdictional SUSMP prior to March 25, 2010. As such, the Authority revised and updated the Authority SUSMP on March 24, 2010. The Authority SUSMP is included in Appendix C of the SWMP. The SUSMP describes procedures to identify pollutants and conditions of concern for proposed Priority Development Projects and Table 1-2 of the SUSMP document (see Appendix C of the SWMP) provides a guide to identifying anticipated and potential pollutants generated by land use types and proposed improvements.

2.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The Authority's development project review and approval processes are designed to ensure that applicable LID BMPs are evaluated and incorporated, where feasible, so that the potential for infiltration and/or retention is maximized, runoff rates are slowed as much as possible, the impervious footprint of the project is minimized, runoff from impervious areas is directed into landscaping, and impervious surfaces are constructed to minimum widths necessary. In addition, the Authority's SUSMP process requires the use of site design, source control, and treatment control BMPs. The SUSMP describes the selection and design criteria for the source control, LID, and treatment control BMPs to be implemented at Priority Development Projects.

The Authority's development project review and approval process verifies that any project subject to the General Construction Permit does indeed obtain coverage under that permit. The process also requires that designated construction BMPs are implemented at time of construction.

2.4 PROGRAM IMPLEMENTATION

During FY09-10, there were 11 projects that completed the development review process and began construction. Four (4) of these 11 projects were tenant improvement projects, and the other 7 were Authority improvement projects. These 11 projects are identified and discussed in Chapter 3 of this Annual Report. Three (3) of these projects were subject to the Authority's SUSMP requirements, namely: the Landmark Aviation Parking Lot/Gate; Green Build-Contract 1 (airside and terminal); and Green Build-Contract 2 (landside). The Landmark Aviation Parking Lot/Gate Project completed both the SUSMP process and construction during FY09-10. A portion of the project SUSMP document is provided in Appendix A as an example of a priority development project that was condition to meet SUSMP requirements, including a description of the required BMPs. The Green Build-Contract 1 (airside and terminal) Project completed the SUSMP Process and began construction during FY09-10, but the project was not completed during FY09-10. The SUSMP documents related to the Green Build-Contract 2 (landside) Project were still under development and review during FY09-10, even though a portion of the Green Build-Contract 2 Project did get undeway during FY09-10 - that portion being the demolition of existing structures. The design and approval of the new structures to be constructed by Green Build-Constract 2 was still underway at the end of FY09-10.

With the completion of one project subject to the Authority SUSMP during FY09-10, there are now a total of three sites in the Authority's watershed-based inventory of approved SUSMP treatment control BMPs. These 3 sites are listed as: 1) the NTC Parking Lot Project, as previously noted in the FY03-04 Annual Report; 2) the EMAS Project, as previously noted in the FY05-06 and FY06-07 Annual Reports; and 3) the Landmark Aviation Parking Lot/Gate Project. All three of these projects (and the entire jurisdictional boundary of the Authority) lie in the Pueblo San Diego hydrologic unit, San Diego Mesa hydrologic area, Lindbergh hydrologic subarea (908.21).

Since the NTC Parking Lot Project and the EMAS Project were Authority projects, the inspection and maintenance of the SUSMP treatment control BMPs associated with each are the responsibility of the Authority. The current tenant, Landmark Aviation, constructed the Landmark Aviation Parking Lot/Gate Project SUSMP treatment control BMP and, under the



existing lease with the Authority is responsible for inspection and maintenance of the BMP. The treatment controls associated with all three of these projects are inspected as part of the Authority's routine, annual inspection of the MS4 (as discussed in Chapter 4 of this Annual Report).

The Authority has implemented education programs to educate the Authority staff and airport tenants of water quality issues associated with new development and redevelopment. The Education Component of the SWMP is described in Section 10.0 of that document. The education and outreach efforts of the Authority during FY08-09 are described in Chapter 8 of this Annual Report.

The development project approval and verification process activities conducted by the Authority during FY09-10 did not identify any violations, and therefore, no enforcement actions were initiated during the reporting period.

2.5 PROGRAM REVIEW AND MODIFICATION

The Authority last revised the SWMP on March 24, 2008. However, as noted in this chapter above, the Authority revised and updated the Authority SUSMP on March 24, 2010. The Authority SUSMP is included in Appendix C of the SWMP.

Storm Water Management Plan - Municipal Stormwater Permit





3 Construction Component

3.1 INTRODUCTION

The Municipal Permit requires the Authority to: a) review and update its grading ordinances and other ordinances, as necessary, to ensure compliance with the Municipal Permit; b) maintain and update, on a monthly basis, a watershed-based inventory of all construction sites; c) designate BMPs and other pollution prevention measures required for implementation at all construction sites year-round; d) develop limitations of grading to a maximum disturbed area before either temporary or permanent erosion controls are implemented to prevent stormwater pollution; e) require implementation of advanced treatment for sediment at construction sites that are determined by the Authority to be an exceptional threat to water quality; f) require implementation of additional controls for construction sites tributary to CWA section 303(d) water body segments impaired for sediment and additional controls for construction sites within or adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas; g) conduct construction site inspections for compliance with its local ordinances (grading, stormwater, etc.), permits (construction, grading, etc.), and the Municipal Permit; h) develop and implement an escalating enforcement process that achieves prompt corrective actions at construction sites for violations of the Authority's water quality protection permit requirements and ordinances; and i) notify the RWQCB when the Authority issues a stop work order or other high level enforcement

to a construction site as a result of stormwater violations. Section 5.0 of the SWMP addresses these Municipal Permit requirements.

This chapter of the Annual Report discusses compliance activities relative to construction activities at SDIA during FY09-10.

3.2 SOURCE CHARACTERIZATION

Chapter 5 of the SWMP notes that construction activities (namely, demolition, grading, excavation, clearing, and structure and road construction) can result in the disturbance of soil and/or the generation of stormwater pollutants such as sediment, trash, debris, chemicals associated with the work, and contaminants associated with the historic uses of the construction site. Based on the criteria described in Section 5.0 of the SWMP, the Authority categorized all construction sites as posing a high, medium, or low threat to water quality.

The Authority maintains a monthly watershed-based inventory of active construction projects at SDIA. The inventory is updated during the first week of each month. Up-to-date information is obtained from the Authority Facilities Development Department. All construction projects at SDIA lie in the same watershed, specifically, the Pueblo San Diego hydrologic unit, San Diego Mesa hydrologic area, Lindbergh hydrologic sub-area (908.21).

There were 16 construction projects underway at SDIA during the FY09-10 reporting period that required the implementation of stormwater management controls. All other construction activities were conducted either entirely indoors or without elements that required the implementation of BMPs. Eleven (11) of these projects were initiated by the Authority and four were initiated by airport tenants and one was initiated by the Port of San Diego. The Authority determined that six of these projects are high priority sites, and that the remaining 10 projects were medium priority threats to water quality in accordance with the Municipal Permit. The 16 projects subject to the Construction Component requirements of the Authority SWMP during FY09-10 are listed in Table 3-1 below. Table 3-1 presents the project name, the project sponsor, a description of the project, the project priority, and the months during which the project was active (essentially a monthly inventory).



TABLE 3-1 SDIA CONSTRUCTION PROJECTS – FY09-10

#	Project Name	Sponsor	Project Description	Priority	Status during FY09-10
1	NTC Landfill Phase II CIP# 103044	Authority	Relocate trash to per- mitted landfill	High	Continued from June 2009 and completed in July 2009
2	12kV Electrical Upgrade CIP# 201622	Authority	Airport-wide 12kV electrical upgrades	Medium	Continued from June 2009 and completed in Novermber 2009
3	T1 - Electrical Equipment Upgrade CIP# 103097	Authority	Electrical equipment upgrades, Terminal 1 East (1st & 2nd floor & roof), Terminal 1 West (1st & 2nd floor & roof)	Medium	Continued from June 2009 and completed in April 2010
4	Improve Baggage Screening Capacity - T1W, T2E, & T2W CIP# 103096O	Authority	Improve baggage screening facilities in Terminal 1 West, Termi- nal 2 East and Terminal 2 West	Medium	Started July 2009 and completed in January 2010
5	NTC Landfill Phase III - 96" Sewer Line Upgrade CIP# 103044	Authority	Improve structural strength of the 96" sewer line below ground at the former NTC Landfill Site	Medium	Started July 2009 and completed in October 2009
6	Tawiway C Rehabilitation CIP# 104026	Authority	Rehabilitate Taxiway C pavement	High	Started July 2009 and continued through June 2010
7	UPS Pavement Repair/Upgrade TIP #015-030-10010	Tenant	Upgrade pavement at UPS Leasehold	Medium	Started September 2009 and completed in October 2009
8	Airfield Information Signs & RGLs and Replace/Upgrade Taxiway Lights CIP#s 104059/104061	Authority	Install pilot information signs and runway guidance lights and improve taxiway edge lights.	Medium	Started September 2009 and continued through June 2010
9	Landmark Aviation Parking Lot/Gate TIP# 016-045-5978	Tenant	Replace area of former building foundation with parking lot and gate at Landmark Leasehold	Medium	Started December 2009 and completed in February 2010

TABLE 3-1 SDIA CONSTRUCTION PROJECTS – FY09-10 (CONTINUED)

#	Project Name	Sponsor	Project Description	Priority	Status during FY09-10
10	NTC Access Improvements CIP# 103097	Authority	Add traffic turn lane pockets and signalize the intersection at North Harbor Drive and McCain Road	High	Started December 2009 and completed in April 2010
11	Green Build - Contract 1 (airside and terminal) CIP# 201201	Authority	Terminal 2 West airside expansion and ancillary support facilities	High	Started December 2009 and continued through June 2010
12	FAA Transformer Upgrade TIP# 3202-000-10015	Tenant	Install new transformer and pad near west end of runway	Medium	Started March 2010 and completed in March 2010
13	Landmark Airfield Pavement Repairs TIP# 106-045-10037	Tenant	Repair airfield pavement at Landmark Leasehold	Medium	Started April 2010 and completed in April 2010
14	Green Build - Contract 2 (landside) CIP# 201401	Authority	Terminal 2 West landside expansion and ancillary support facilities	High	Started April 2010 and continued through June 2010
15	T2 East Waterline-Fire Suppression CIP# 104056-1	Authority	Install waterline and fire suppression waterline at Terminal 2 East	Medium	Started in May 2010 and continued through June 2010
16	TDY Demolition	Port of San Diego	Demolition of building at former Teledyne Ryan Facility	Medium	Started June 2010 and continued through June 2010

3.3 UPDATES TO ORDINANCES AND APPROVAL PROCESS

The Authority's construction project approval process is discussed in Section 5.3 of the SWMP. As noted in the FY08-09 Annual Report, during that year the Authority streamlined the intake process for tenant improvement project review and approval, but there have been no changes since then. There have been no updates made to any Authority ordinances related to construction or grading activities.



3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

Section 5.4 of the SWMP lists the minimum and activity-specific BMPs required to control construction activities at SDIA. The minimum BMP requirements are applicable year-round and are the same for each construction project regardless of the project's threat to water quality. Depending on the specific activities being conducted at a construction site, the Authority requires the use of BMPs designed to control those particular activities. The Authority may require the implementation of multiple BMPs to provide "multiple lines of defense" for high priority construction sites. In addition, the Authority requires implementation of advanced treatment for sediment at construction sites that are determined by the Authority to be an exceptional threat to water quality, in accordance with Municipal Permit Section D.2.c.(2).

At a minimum, these BMPs must be employed to the industry standards as listed in the California BMP Handbook for Construction Activity or in the Caltrans Construction Site BMP Manual.

3.5 PROGRAM IMPLEMENTATION

The three major steps of program implementation for the Construction Component of the SWMP are education, inspection, and enforcement. The activities conducted by the Authority relative to each of these steps is described below.

3.5.1 EDUCATION

The Authority's stormwater construction education efforts are directed at construction project proponents/sponsors/managers, construction site personnel, and inspection staff. The education program focuses on awareness of 1) pollution causing activities related to construction, and 2) the methods used to minimize these pollutants. The topics addressed by the construction education program are presented in Section 5 (Construction Component) and 10 (Education Component) of the SWMP.

The Environmental Affairs Department continues to provide stormwater pollution prevention training to construction project managers, developers, and contractors, both on-site and during project meetings. One of the earliest opportunities for education with those involved in any particular construction project occurs at the pre-construction meeting. Staff from the Authority Environmental Affairs Department participated in the preconstruction meetings for each of the 11 projects initiated by the Authority in FY09-10. Staff from the Environmental Affairs Department also attended the regularly-scheduled (typically weekly) construction progress meetings for each project. Construction BMP requirements and pollution prevention measures were also discussed, as necessary, with Authority staff and the construction contractors performing the work during inspections. Staff from the Environmental Affairs Department use inspections and meetings to reinforce stormwater pollution prevention principles and to discuss BMPs specific to the project. The Environmental Affairs Department participated in a total of 179 construction project-related meetings during FY09-10.

Chapter 8 of this Annual Report also presents information relative to the construction education activities conducted by the Authority in FY09-10.

3.5.2 INSPECTIONS

The Environmental Affairs Department inspects all construction sites to monitor compliance with the Authority's ordinances, permits, approvals, the Municipal Permit, and the General Construction Permit (if applicable). During the FY09-10 reporting period, the Environmental Affairs Department conducted regular inspections of the 16 construction projects listed in Table 3-1 above. The dates of inspection are shown in Table 3-2 below. The Authority intended to inspect each of these projects on a weekly basis during both the wet and dry seasons, however, staffing and budget issues in the Environmental Affairs Department prevented the Authority from reaching this goal in FY09-10. A total of 185 inspections were conducted during FY09-10.

Table 3-3 identifies the construction activities for which BMPs were not properly implemented at the time of inspection. Poor materials management and poor spill prevention and cleanup were the two issues of concern most frequently identified. Poor materials management has consistently been identified as an issue of concern (see the FY04-05, FY05-06, and FY06-07,



TABLE 3-2 CONSTRUCTION ACTIVITY INSPECTIONS AT SDIA DURING FY09-10

#	Project Name	Inspection Dates		
1	NTC Landfill Phase II	July 1, 2009	July 7, 2009	July 11, 2009
	CIP# 103044	July 2, 2009	July 8, 2009	July 13, 2009
		July 3, 2009	July 9, 2009	July 14, 2009
		July 6, 2009	July 10, 2009	
2	12kV Electrical Upgrade	July 1, 2009	August 26, 2009	October 21, 2009
	CIP# 201622	July 8, 2009	September 2, 2009	October 28, 2009
		July 13, 2009	September 10, 2009	November 4, 2009
		July 22, 2009	September 15, 2009	November 12, 2009
		July 29, 2009	September 24, 2009	November 18, 2009
		August 5, 2009	October 1, 2009	December 2, 2010
		August 12, 2009	October 7, 2009	January 9, 1900
		August 19, 2009	October 14, 2009	
3	T1 - Electrical Equipment	July 14, 2009	September 24, 2009	February 24, 2010
	Upgrade	August 20, 2009	November 12, 2009	
	CIP# 103097			
4	Improve Baggage Screening	July 1, 2009		
	Capacity - T1W, T2E, & T2W			
	CIP# 103096O			
5	NTC Landfill Phase III - 96"	July 16, 2009	August 27, 2009	September 24, 2009
	Sewer Line Upgrade	July 23, 2009	September 3, 2009	October 1, 2009
	CIP# 103044	July 30, 2009	September 10, 2009	October 8, 2009
		August 6, 2009	September 17, 2009	October 22, 2009

TABLE 3-2 CONSTRUCTION ACTIVITY INSPECTIONS AT SDIA DURING FY09-10 (CONTINUED)

#	Project Name	Inspection Dates		
6	Tawiway C Rehabilitation	November 5, 2009	January 26, 2010	April 20, 2010
	CIP# 104026	November 10, 2009	February 2, 2010	April 27, 2010
		November 17, 2009	February 9, 2010	May 4, 2010
		November 24, 2009	February 16, 2010	May 11, 2010
		December 1, 2009	February 23, 2010	May 18, 2010
		December 8, 2009	March 2, 2010	May 25, 2010
		December 15, 2009	March 9, 2010	June 1, 2010
		December 22, 2009	March 16, 2010	June 8, 2010
		December 29, 2009	March 23, 2010	June 15, 2010
		January 5, 2010	March 30, 2010	June 22, 2010
		January 12, 2010	April 6, 2010	June 29, 2010
		January 19, 2010	April 13, 2010	
7	UPS Pavement Repair/ Upgrade	September 23, 2009	October 7, 2009	October 14, 2009
	TIP #015-030-10010			
8	Airfield Information Signs &	September 24, 2009	December 31, 2009	April 1, 2010
	RGLs and Replace/upgrade	October 1, 2009	January 7, 2010	April 8, 2010
	Taxiway Lights	October 8, 2009	January 14, 2010	April 15, 2010
	CIP#s 104059/104061	October 22, 2009	January 21, 2010	April 29, 2010
		October 29, 2009	January 28, 2010	May 6, 2010
		November 5, 2009	February 4, 2010	May 13, 2010
		November 12, 2009	February 11, 2010	May 20, 2010
		November 19, 2009	February 18, 2010	May 27, 2010
		December 3, 2009	February 25, 2010	June 10, 2010
		December 10, 2009	March 11, 2010	June 17, 2010
		December 17, 2009	March 18, 2010	June 25, 2010
		December 24, 2009	March 25, 2010	
)	Landmark Aviation Parking	December 29, 2009	January 21, 2010	February 19, 2010
	Lot/Gate TIP# 016-045-5978	January 14, 2010	February 4, 2010	



TABLE 3-2 CONSTRUCTION ACTIVITY INSPECTIONS AT SDIA DURING FY09-10 (CONTINUED)

#	Project Name	Inspection Dates		
10	NTC Access Improvements	January 21, 2010	March 3, 2010	April 15, 2010
	CIP# 103097	January 28, 2010	March 9, 2010	April 22, 2010
		February 4, 2010	March 18, 2010	April 29, 2010
		February 11, 2010	March 25, 2010	May 6, 2010
		February 19, 2010	April 2, 2010	
		February 25, 2010	April 8, 2010	
11	Green Build - Contract 1	December 18, 2009	March 3, 2010	May 12, 2010
	(airside and terminal)	January 6, 2010	March 10, 2010	May 26, 2010
	CIP# 201201	January 13, 2010	March 17, 2010	June 2, 2010
		January 20, 2010	March 24, 2010	June 9, 2010
		January 27, 2010	March 31, 2010	June 16, 2010
		February 3, 2010	April 17, 2010	June 23, 2010
		February 10, 2010	April 21, 2010	June 30, 2010
		February 17, 2010	April 28, 2010	
		February 24, 2010	May 5, 2010	
12	FAA Transformer Upgrade TIP# 3202-000-10015	March 10, 2010	March 18, 2010	
13	Landmark Airfield Pavement Repairs TIP# 106-045-10037	April 15, 2010		
14	Green Build - Contract 2	April 23, 2010	May 21, 2010	June 23, 2010
	(landside) CIP# 201401	April 30, 2010	May 28, 2010	June 30, 2010
		May 7, 2010	June 4, 2010	
		May 14, 2010	June 11, 2010	
15	T2 East Waterline-Fire Suppression CIP# 104056-1	May 17, 2010		
16	TDY Demolition	None		

FY07-08, and FY08-09 Annual Reports). It is an issue that requires constant attention from construction site supervisors. While concrete waste management was not identified as frequently as other material and waste management concerns during site inspections, concrete waste management and storm drain inlet protection also require the constant attention of construction site supervisors and inspectors.

TABLE 3-3 TYPES OF CONSTRUCTION ACTIVITY FOR WHICH BMPS WERE MOST FREQUENTLY
NOT PROPERLY IMPLEMENTED AS DETERMINED DURING SITE INSPECTIONS – FY09-10

Construction Activity	BMPs Required in SAN SWMP*
Materials not properly managed or stored	WM-1 Material Delivery Storage
Spill not properly contained/cleaned	WM-4 Spill Prevention and Control

^{*.} As noted in the SWMP, required Construction BMPs are generally those listed in the CASQA California Stormwater Best Management Practice Handbook for Construction Activity.

3.5.3 FOLLOW-UP AND ENFORCEMENT

Staff from the Environmental Affairs Department discussed the results of each inspection with the construction contract site supervisor, typically at the end of each inspection and again during regular progress meetings. When necessary, inspectors required corrective actions and/or modifications to the BMPs being employed on the project. In addition to inspections and meeting attendance by the Environmental Affairs Department, the Facilities Development Department (FDD - responsible for project management) has dedicated inspection staff on site for each project, during every day of construction activity. The FDD construction inspectors are familiar with proper stormwater BMP implementation and are trained to raise immediate stormwater concerns with the construction contract site supervisor. Stormwater concerns that require additional follow-up are brought to the attention of the Environmental Affairs Department.

The construction oversight conducted by the Environmental Affairs
Department generally found these 16 projects to be in substantial compliance
with the requirements of the SWMP and the Municipal Permit Construction
Component. In general, all the issues and concerns identified during
inspections were corrected as soon as they were brought to the attention of
the construction contract supervisor. No unauthorized discharges to



receiving waters were identified during construction site inspections in FY09-10. The issues of concern identified during site inspections, and noted in Table 3-3 above, were generally resolved through verbal communication with the construction contract site supervisor in the field and at weekly progress meetings. No further enforcement actions were initiated during the reporting period.

3.6 PROGRAM REVIEW AND MODIFICATION

The Authority last revised the SWMP on March 24, 2008. Since that time, the only revisions to the Construction Component of the SWMP has been an update of the inventory of construction projects. The Authority keeps a monthly inventory of active construction projects, and this Annual Report includes an updated inventory as of June 30, 2010 (the end of the reporting period).

Storm Water Management Plan - Municipal Stormwater Permit





4 MUNICIPAL COMPONENT

4.1 INTRODUCTION

The Municipal Permit requires the Authority to: a) prepare and annually update a watershed based inventory of municipal areas and activities that could generate pollutants and the significant materials in or generated by those areas; b) designate, describe and implement pollution prevention methods and BMPs for all municipal areas and activities; c) properly operate, inspect and maintain its MS4s and structural controls; d) implement BMPs to reduce the contribution of pollutants associated with the application, storage, and disposal of pesticides, herbicides, and fertilizers from municipal areas and activities to MS4s; e) implement sweeping programs for roads and parking facilities designed to reduce pollutant discharges to its MS4s to the maximum extent practicable (MEP); f) implement controls and measures to prevent and eliminate infiltration of seepage from municipal sanitary sewers to MS4s through thorough, routine preventative maintenance of the MS4 that will include overall sanitary sewer and MS4 surveys and thorough, routine preventative maintenance of both; g) inspect high priority municipal areas and activities annually, with other municipal areas and activities inspected as needed, and implement all follow-up actions necessary to comply with the Municipal Permit; h) enforce its stormwater ordinance for all municipal areas and activities as necessary to comply with the Municipal Permit; i) describe the steps that will be taken to require and verify the implementation of

designated BMPs at municipal facilities and activities. Section 6 (Municipal Component) of the SWMP has been prepared, in part to outline the means and methods used to ensure the these requirements are satisfied.

Since the operation of the airport is also subject to the General Industrial Permit, many of the activities classified as municipal activities by the Municipal Permit are also considered to be industrial activities by the General Industrial Permit. As such, many of the municipal activities listed above are also detailed in Section 7 (Industrial and Commercial Component) of the SWMP. For instance, inspection and maintenance of the storm drain system is discussed in both sections, as well as the management of pesticides, herbicides and fertilizers, and the sweeping of municipal areas.

Section 6 of the SWMP presents information regarding the municipal source areas and activities, and associated significant materials at SDIA that could generate stormwater pollutants. The SWMP describes the following specific municipal activities, namely: 1) the storm drain system and associated structural controls; 2) the management of pesticides, herbicides, and fertilizers; 3) the sweeping of impervious municipal areas; 4) the infiltration from the sanitary sewer system into the storm drain system and preventive maintenance for both systems; 5) activities deemed high priority by the Municipal Permit or determined to be high priority by the Authority. Additional high priority municipal areas/activities discussed in Section 6 of the SWMP are the closed municipal landfill (the NTC landfill) and special event venues. Again, given the overlap between the Municipal Permit and the General Industrial Permit, Section 7 of the SWMP also discusses some of these high priority municipal areas/activities, as well as the Authority's corporate yards and power washing activities.

This chapter of the Annual Report discusses compliance activities relative to municipal activities at SDIA during FY09-10. Since many aspects of the Authority's Municipal Component are similar for the each of the various municipal activities discussed below, the content of this chapter has been drafted to remove redundancies and facilitate reporting. As such, the outline of this chapter varies slightly from the Standardized Format for Jurisdictional Urban Runoff Management Plan Annual Reports, adopted by the Copermittees. Presented below as combined topics for the whole of the Authority's municipal activities are: a brief background; a characterization of municipal sources; and the BMP requirements applicable to municipal areas,



activities, or operations. Inspection, maintenance, and enforcement actions relative to the various municipal activities are presented under the heading of "Program Implementation."

4.2 BACKGROUND

There have been no changes in the inventory of municipal areas and activities/operations since the SWMP was prepared in March of 2008. The Authority's MS4 consists of roads with drainage systems, curbs, catch basins, gutters, 210 inlets, culverts, trench drains, and 86,000 feet of stormwater conveyance pipe of varying materials and widths. The structural treatment controls incorporated into the MS4 include 6 oil water separators, 1 Vortech hydrodynamic separator unit, and numerous drain inlet inserts. In FY09-10 one new storm drain outfall was built within the airports jurisdiction as a part of the Terminal Two expansion project. Since this outfall is not yet operational, it has not yet been added to the municipal inventory.

As discussed in Section 6.3 of the SWMP, important municipal areas and activities associated with the application, storage, and disposal of pesticides, herbicides, and fertilizers at SDIA include municipal facility structures/buildings and landscaped areas. The Authority Facilities Management Department maintains the 12.5 acres of landscaping at the airport. The Facilities Management Department implements an Integrated Pest Management (IPM) program that encourages the use of native plant species in the landscaped areas to help minimize the need for excessive irrigation and application of fertilizers and/or herbicides. The IPM also encourages the use of natural pest control mechanisms, limits the need for and inventory of man-made biocides, and ensures the proper use of any biocides.

Section 6.4 of the SWMP discusses the Authority's sweeping programs for roads and parking facilities. The Authority's program for airfield ramp sweeping is described in Section 7.2.3 of the SWMP. The entities responsible for implementing BMPs for roads and parking facilities are the Authority and the parking lot management service provider. The parking lot management service provider manages the short-term and long-term public parking facilities and the airport employee parking lots.

As noted in Section 6.5 of the SWMP, the Authority does not own or manage a municipal sanitary sewer system. The City of San Diego Metropolitan Wastewater Department (MWWD) provides municipal sanitary sewer service to the airport. However, the Authority is responsible for those portions of the on-site sanitary sewer system that connect to the MWWD system. As such, the Authority has implemented controls and measures to prevent and eliminate infiltration of seepage from airport sanitary sewers to the storm drain systems through thorough routine inspection and preventative maintenance of the sanitary sewer system and inspection of the stormwater conveyance system.

Section 6.6 of the SWMP identifies the closed NTC landfill area as a high priority municipal area, although most of the landfill was excavated and properly disposed at other facilities in preparation for a major expansion of the airfield and terminals. Currently, the site is still listed as a landfill by the agencies responsible for regulating solid waste disposal sites.

The size of the several parking lots at the airport, along with the general public's familiarity with the location, makes the airport a potential venue for large special events. Although rare, some large events (such as the Rock-n-Roll Marathon) have made use of the Authority's parking areas. Section 6.7 of the SWMP discusses the potential pollutant sources and BMPs implemented to mitigate pollutants to the storm drain system from special event venues.

4.3 SOURCE CHARACTERIZATION

As a consequence of its function, the stormwater conveyance system collects and transports stormwater runoff at SDIA that may contain certain pollutants if adequate BMPs are not being implemented or adequate inspections and maintenance of the storm drain system are not being performed. At SDIA, these potential pollutants include: sediment, trash and debris, oil and grease, hydrocarbons/fuels, hydraulic fluids, solvents, soap/cleaning fluids, lavatory chemicals and waste, paints, pet wastes, used batteries and battery acid, anti-freeze, hazardous wastes (mostly oils), metals, deicing chemicals, herbicides and pesticides, adhesives, rust preventers, aircraft fire



fighting foam, and sealants. Structural treatment controls that are not properly maintained can also be sources of sediment, oil and grease, trash and debris, and associated pollutants such as metals.

The Authority generally uses pesticides and/or herbicides to control pest and weeds. The limited use of these chemicals at SDIA suggests that this activity presents a low potential for impacting stormwater discharge.

Littering by the general public can create trash and debris pollutants on roadways and in public parking facilities at SDIA. Fluid leaks from vehicles on roads or in parking facilities are a potential source of pollutants such as oils, fuel, and antifreeze. Atmospheric deposition, vehicle use and emissions, asphalt and concrete surface deterioration, peeling or crumbling roadway and parking lot painted surfaces, and eroding landscaped surfaces can generate particulate pollutants.

Infiltration from sanitary sewers to the storm drain system may potentially introduce the following pollutants: sediments, nutrients, bacteria, organics, and oxygen demanding substances.

As noted above, over the last few years, the vast majority of the solid waste buried at the NTC landfill site has been excavated and properly disposed at other facilities. This work was done to prepare the site for a major expansion of the airfield and terminal facilities. Both the effort to remove the waste (the NTC landfill remediation project) and the effort to initiate construction of the expansion (the Terminal Development Project) are discussed further in the construction component chapter of this report.

Potential pollutants of concern generated by large special events are trash, litter, and debris.

4.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

Descriptions of the BMPs required by the Authority to address maintenance and operation of the MS4 and structural controls can be found in Appendix B of the SWMP. The applicable BMPs include SC17 "Storm Drain Maintenance" and TC01 "Treatment Controls." These BMPs are aimed at mitigating pollutant sources from the operation and maintenance of the storm drain system and from structural treatment controls.

BMPs applicable to the management of pesticides, herbicides, and fertilizers by the Authority are summarized in Appendix B of the SWMP and include BMP categories SC06 "Outdoor Loading/Unloading of Materials," SC09 "Building and Grounds Maintenance," SC10 "Employee Training," SC18 "Housekeeping," SC19 "Safer/Alternative Products," and SR01 "Spill Prevention, Control, and Clean-up."

The Authority requires the use of BMP SC16 "Parking Lots" aimed at mitigating pollutant sources in parking areas, and BMP SC12 "Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing)" covering BMPs aimed at mitigating pollutant sources in not only the airfield ramp areas, but also from roads. Descriptions of these BMPs can be found in Appendix B of the SWMP. The Authority's Storm Water Code (see Appendix F of the SWMP) requires parking lot operators to clean the areas frequently. Additional controls that have been added to parking lot facilities include a series of drain inlet inserts at the transportation islands, cell phone parking area, cargo area, rental car hold lot, Terminal 1 waste disposal area, near the triturator, the California least tern nesting area, and SAN Park on Harbor Drive.

The Authority requires the use of BMPs SC01 "Non-Storm Water Management," SC11 "Lavatory Service Operation," SC17 "Storm Drain Maintenance," and SR01 "Spill Prevention, Control and Cleanup" to mitigate pollutant sources from sewage spills or seepage. Descriptions of these BMPs can be found in Appendix B of the SWMP.

Special events sponsored/coordinated by Authority staff and/or airport tenants are required to implement the following BMPs (summarized in Appendix B of the SWMP): BMP SC06 "Outdoor Loading/Unloading of Materials," SC08 "Waste Handling and Disposal," SC09 "Building and Grounds Maintenance," SC10 "Employee Training," SC12 "Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing)," SC16 "Parking Lots," SC18 "Housekeeping," and SR01 "Spill Prevention, Control, and Clean-up." If the special event sponsors/coordinators are not Authority staff or airport tenants, they must generally obtain Authority approval in the form of a "use permit." The conditions of the "use permit" typically include the following additional controls: fencing and barricades as necessary to delineate the event area; appropriate signage regarding recycling, trash disposal, and stormwater pollution prevention; adequate number of recycling containers and trash cans; portable restrooms, as necessary; adequate number of on-site



event management staff to monitor and control trash and litter; adequate number of on-site event staff to promptly cleanup after event; and street sweepers, as necessary.

4.5 PROGRAM IMPLEMENTATION

4.5.1 EDUCATION AND STAFF TRAINING

All Authority staff attend an annual mandatory stormwater training session to cover topics such as pollution prevention, good housekeeping, prohibited discharges, inspections, spill response, implementation of BMPs, and record-keeping. In 2009, a more intensive storm water pollution prevention training program was created and implemented solely for the Facilities Management Department staff due to the nature of their duties. This intensive program was continued in FY09-10. In addition, the Facilities Management Department staff attends an annual mandatory training session on proper pesticide and herbicide storage, application, and disposal. Details on the staff training are presented in Section 10.0 (Education Component) of the SWMP and Chapter 8 of this Annual Report.

4.5.2 POLLUTION PREVENTION

As in prior years, the Authority continued its pollution prevention efforts during FY09-10. These efforts include a waste reduction and recycling program. The Authority's recycling campaign is designed to educate staff about the single-stream recycling program used at the airport. The Authority has a bilingual (English-Spanish) Recycling Guide used to describe and promote the program to Authority staff and airport tenants. Approximately 11.6% of the municipal solid waste generated at SDIA (including e-waste) was recycled during the reporting period (501 tons recycled of 4,309 tons of waste generated).

The Authority also continued to provide education about Universal Waste to staff and tenants. Since 2006, the Authority has maintained a universal waste collection program for Authority staff. Containers are provided in designated areas where Authority employees may dispose of alkali or rechargeable

batteries, cell phone batteries, and electronic devices. The universal waste is collected and properly disposed/recycled. In FY05-06, the Authority began hosting one-day Electronic and Universal Waste Collection Events which were open to all staff and tenants. In FY07-08, the frequency of these Electronic and Universal Waste Collection Events was expanded to four times per year – once each quarter. These events have allowed staff and tenants to drop off unwanted electronic and universal waste (such as batteries, fluorescent light bulbs, televisions, and computers) for proper recycling or disposal. During this reporting period, collection events were held August 20-21, 2009, January 21, 2010, and April 23, 2010. A combined total of approximately 7.8 tons of electronic waste was collected at these events during FY09-10. The Authority Procurement Department also gathers and properly disposed of electronic waste throughout the year. On April 16, 2010 the Authority Procurement Department sent an additional 2.2 tons of electronic waste for proper disposal and recycling.

The Authority also continues to provide two Service Animal and Pet Relief Areas for those animals that are traveling with passengers. The areas provide a place for animals to have a water or restroom break while waiting for departure or upon arrival. The popularity and usage of these areas has increased as is measured by the use of the pet waste bag dispensers that are located in these areas. Approximately 733 pet waste bags were dispensed in FY09-10 at the two Service Animal and Pet Relief Areas, which is an increase from the 690 bags dispensed in FY08-09.

As noted above, the Authority has established an integrated pest management (IPM) program designed to minimize the use of herbicides, pesticides, and fertilizers in maintaining the buildings and grounds at SDIA. Table 4-1 shows that a total of 51.5 gallons of pesticides and/or herbicides were applied at SDIA during FY09-10.

The results of these 4 pollution prevention efforts in FY09-10 are presented in Table 4-1 below..

4.5.3 INSPECTIONS

In general, the Authority Environmental Affairs Department inspects all municipal operations as described in Sections 6.0 and 7.0 of the SWMP. The inspections include: 1) quarterly inspections of all municipal operations areas;



TABLE 4-1 MUNICIPAL ACTIVITIES - POLLUTION PREVENTION DURING FY07-08

Type of Activity	Quantity
Recyclable Waste Recovery	491 tons
Electronic and Universal Waste Collection	10 tons
Universal Waste Collection (events and ongoing program)	4.5 tons
Pet Waste Bags Dispensed	300
Pesticide/Herbicide Application, as needed	51.5 gallons
Landscape Maintenance	1,000 cubic yards of landscape waste collected
Municipal Solid Waste Disposal (total includes waste, recycle, and e-waste)	4,309 tons

2) frequent municipal land use area-specific inspections; 3) monthly inspections of the entire facility and storm drain inlets during the wet weather season (October 1-May 31); and 4) a comprehensive annual inspection. All areas of municipal land use and activity are inspected during the monthly, quarterly, and annual inspections. These inspections confirm that site specific BMPs are properly implemented. The program includes timely follow-up inspections whenever BMP deficiencies are found.

The Facilities Management Department performs or contracts for regular inspection and maintenance of the MS4 and structural controls. On an as-needed-basis, the Facilities Development Department may also perform inspections of various components of the MS4. The Environmental Affairs Department generally assists with these types of inspections. A comprehensive MS4 inspection is conducted annually during the period from May 1 through September 30, to identify areas that need cleaning or maintenance. In addition, the Authority contracts with professional services that perform: 1) monthly or as-needed inspection and maintenance of storm drain inlet filter inserts in the rental car lot, cell phone parking area, cargo area, across from the triturator, and the California least tern nesting area; 2) quarterly inspection and cleaning program for the MS4 slit trench inlets on

the ramp areas near the terminal gates; and 3) annual inspection and cleaning of the MS4 components in the vicinity of the terminal transportation islands and the oil/water separators found on the airfield.

The Facilities Management Department and/or service providers contracted to the Facilities Management Department also inspect the sanitary sewer system as part of their routine duties. These routine inspections can be used to identify any impacts from the sanitary sewer system to the storm drain system and to recommend any needed improvements. The Facilities Management Department also regularly inspects the pesticide, herbicide, and fertilizer storage areas as part of their normal routine. The Environmental Affairs Department conducts inspections of all special event venues prior to and after each event. All the inspections of municipal activities conducted by the Authority in FY09-10 are presented in Table 4-2 below.

4.5.4 CLEANING AND MAINTENANCE

There are some facilities maintenance activities that are considered routine and others that are conducted in response to an inspection. In addition to the MS4 maintenance activities noted in the Section 4.5.3 above, routine maintenance activities at the airport include road, parking lot, and airfield sweeping and cleaning. The Authority hires a contractor to sweep the roads into and out of the airport 5 days a week. The sweepings/debris are vacuumed up into the sweeping unit and properly disposed. The parking lot management service provider sweeps the terminal parking lots daily using a motorized sweeper unit, and the employee parking lots are swept weekly. Roads, parking lots, and curbs at SDIA are generally inspected continuously to identify the need for maintenance and/or cleaning. Authority and tenant employees are encouraged to identify areas that should be cleaned and to contact the Facilities Management Department or Ground Transportation regarding such issues. Section 7.2.2 and 7.2.3 of the SWMP describes the routine sweeping program the Authority has implemented to reduce pollutant discharges to its storm drain system from the airfield gate, ramp, runway, and taxiway. The frequency and amount of material collected by the Authority's cleaning and maintenance activities during FY09-10 are presented in Table 4-3 below.



TABLE 4-2 MUNICIPAL ACTIVITY SITE INSPECTIONS CONDUCTED DURING FY09-10

Date	Inspection Element	# of Activities Inspected / # Requiring Inspection	Activity Types and Number
08/17/09 through 08/20/09	MS4 Inspection	1 / 1	MS4 (slit trenches/drains and inlet filters at transportation islands)
08/21/09	Site-specific Inspection	1 / 1	Special Event – United Way Carnival (West Wing parking lot)
09/29/09 through 09/30/09	Quarterly Site Inspection	37/37	Roads (1), Parking Lots (12), MS4 (various inlets) (1), Closed Landfill (1), Maintenance and Storage Areas (3), Solid Waste Operations (4), Airside Operations Area (1), Grounds (1), Buildings (13)
09/28/09 through 09/30/09	MS4 Inspection	1 / 1	MS4 (slit trenches/drains and inlet filters at transportation islands)
11/9/09 through 11/12/09	MS4 Inspection	1 / 1	MS4 (slit trenches/drains and inlet filters at transportation islands)
12/15/09 and 12/ 16/09	Quarterly Site Inspection	37/37	Roads (1), Parking Lots (12), MS4 (various inlets) (1), Closed Landfill (1), Maintenance and Storage Areas (3), Solid Waste Operations (4), Airside Operations Area (1), Grounds (1), Buildings (13)
04/26/10 and 04/ 29/10	Quarterly Site Inspection	37/37	Roads (1), Parking Lots (12), MS4 (various inlets) (1), Closed Landfill (1), Maintenance and Storage Areas (3), Solid Waste Operations (4), Airside Operations Area (1), Grounds (1), Buildings (13)
06/21/10 through 06/23/10	MS4 Inspection	1 / 1	MS4 (slit trenches/drains and inlet filters at transportation islands)
04/16/10 through 06/21/10	Annual Comprehensive Site Inspection	37/37	Roads (1), Parking Lots (12), MS4 (various inlets) (1), Closed Landfill (1), Maintenance and Storage Areas (3), Solid Waste Operations (4), Airside Operations Area (1), Grounds (1), Buildings (13)

TABLE 4-3 MS4 AND MUNICIPAL OPERATION MAINTENANCE ACTIVITIES DURING FY09-10

Municipal Element	# or Distance/ # or Distance Cleaned or Swept	Frequency of Cleaning	Quantity of Material Collected and Properly Disposed*
Roads	4 miles / 4 miles	5 days per week	119 cubic yards
Parking lots (terminal/employee)	12 lots /12 lots	Terminal - Daily/ Employee - weekly	4,274 cubic yards
Airfield Cleaning (sweeping, scrubbing, and rubber removal)	NA	Daily	76 tons
MS4	210 inlets 86,000 feet of pipe 450 feet of channel 7 oil/water separators	As needed based on annual inspections	7 tons

^{*.} All metrics are approximated.

4.5.5 FOLLOW-UP AND ENFORCEMENT

No unauthorized discharges or other concerns associated with municipal operations, areas, or activities were identified during routine inspections. The annual comprehensive stormwater site inspection found that, overall, the BMPs required for municipal operations, as listed in the SWMP, were adequate and properly implemented. Inspections conducted during FY09-10 found municipal operations, areas, and activities to be in compliance with the SWMP and the Municipal Permit. As such, no enforcement actions were initiated during the reporting period.

4.6 PROGRAM MODIFICATION AND REVIEW

The Authority last revised the SWMP on March 24, 2008. In June of 2010, the Environmental Affairs Department reviewed the inventory of municipal operations at SDIA and found that no changes were necessary. No other changes have been made since that time. An inventory of municipal facilities can be found in Appendix B of this report.





5 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 INTRODUCTION

The Municipal Permit requires the Authority to: a) prepare and annually update a watershed-based inventory of all industrial and commercial sites/ sources within its jurisdiction that could contribute a significant pollutant load to the MS4; b) designate, describe and implement pollution prevention methods and a minimum set of BMPs for all industrial and commercial sites/ sources; c) describe, conduct and track industrial and commercial site inspections for compliance with its ordinances, permits, and the Municipal Permit; d) develop and implement a program to reduce the discharge of pollutants from mobile businesses to the MEP, including a listing of mobile businesses known to operate within its jurisdiction; e) enforce its stormwater ordinance for all industrial and commercial sites/sources as necessary to maintain compliance with the Municipal Permit; and f) annually report a list of industrial sites (including the name, address, and SIC code) that may require coverage under the General Industrial Permit for which a NOI has not been filed. Section 7.0, Tables 4 through 8, Figure 3 and Figures 5 through 8, and Appendices B and E of the SWMP outline the elements that satisfy these requirements.

As noted in Section 7.3 of the SWMP, while there are several industrial/commercial entities at SDIA that operate at multiple locations throughout the airport, the Authority does not consider any of these entities to be mobile

sources in terms of the Municipal Permit. Since there are no mobile industrial/commercial sources, all the industrial/commercial entities at SDIA are included in the discussion of stationary industrial/commercial sites/sources in both the SWMP and below.

This chapter of the Annual Report discusses compliance activities relative to industrial and commercial activities at SDIA during FY09-10.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

The Municipal Permit requires the Authority to maintain an inventory of industrial and commercial sites/sources and to annually update the inventory and prioritization of these sites/sources. The inventory was last presented in Table 5 of the March 2008 SWMP. Table 5 of the SWMP includes the inventory and prioritization for industrial and commercial activities/ operations at SDIA. As of June 30, 2010, there are 28 tenants conducting industrial or commercial activities, plus the ARFF Facility and the Authority itself as operator of the airport, for a total of 30 entities conducting industrial or commercial activities that could contribute a significant pollutant load to the storm drain system. All 30 of these entities are considered stationary sources. Information regarding these 30 entities and the type of industrial/ commercial activity into which they have been categorized, as well as their locations on the airport, is presented in Appendix B. The format in which the inventory is presented was revised by the copermittees in 2009.

5.2.2 SOURCE CHARACTERIZATION

The SWMP identifies commercial passenger air carriers, cargo air carriers, the Fixed Base Operator, fuel vendors, aircraft refuelers, aircraft and airport service and maintenance providers, and all airfield/airport related activities (including aircraft rescue and fire fighting) as industrial operations in terms of the General Industrial Permit. There are 27 stationary industrial sites/ operations at SDIA and the Authority has determined that all 27 are high priority threats to water quality. There are 3 commercial operations (namely,



the airport public/employee parking lot operator, the master-lease concessionaire/food service provider, and the airport janitorial services provider) that the Authority has determined to be high priority threats to water quality. In short, all 30 entities conducting industrial or commercial activities that could contribute a significant pollutant load to the storm drain system have been determined to be high priority threats to water quality.

Section 7.2.2 of the SWMP outlines the significant materials and potential pollutant sources associated with industrial and commercial operations at SDIA. The variety of materials associated with the industrial activities at the airport consists primarily of petroleum products, solvents, soap/cleaning fluids, trash, and metals. Other potential pollutants also present at the airport in smaller amounts include lavatory chemicals and waste, paints, used batteries and battery acid, anti-freeze, deicing chemicals, herbicides and pesticides, adhesives, sealants, rust preventers, and various fire suppression chemicals. The materials associated with the commercial activities at the airport consist primarily of vehicle maintenance fluids, food preparation oils, and various maintenance and cleaning chemicals. The potential pollutant generating industrial activities/operations consist primarily of specific airport-industry processes, material handling and storage, and spills and leaks. To a lesser extent, pollutants may also potentially result from dust and particulate generating activities, soil erosion, non-stormwater discharges, as well as the commercial activities of parking lot management and vehicle storage, food service, and janitorial service.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Industrial and commercial operations at SDIA are required to implement those BMPs in Chapter 7 and Appendices B and E of the SWMP relevant to their operations, including the generally applicable site-wide BMPs and pollution prevention measures. The BMPs and pollution prevention measures were broadcast through e-mail, the Authority's webpage, meetings, and also discussed with tenants and staff, as necessary, during the site inspections described below under Program Implementation

5.2.4 PROGRAM IMPLEMENTATION

In FY09-10, the Environmental Affairs Department inspected all industrial and high priority commercial operations at SDIA on a quarter-annual basis. All areas of industrial and commercial activity and associated sources of stormwater pollution were visually inspected and any unauthorized discharges were duly noted and addressed. The fourth quarter inspection was expanded to become part of the Annual Comprehensive Site Compliance Evaluation (ACSCE), required by the Industrial permit. This inspection and evaluation included: 1) a review of records; 2) a review and evaluation of all BMPs; 3) a visual inspection of all the equipment needed to implement the BMPs and; 4) a visual inspection of BMP implementation. This year the ACSCE also included interviews with tenants to assess existing and needed stormwater education opportunities.

In addition to the inspections conducted by the Environmental Affairs Department, the Airside Operations Department also conducted quarterly inspections of the aircraft fueler and fuel vendor operations in accordance with Federal Aviation Administration (FAA) regulations. These inspections are designed to identify safety concerns, but also identify poorly maintained or leaking equipment. The Environmental Affairs Department is advised of any environmental issues discovered during these inspections. Table 5-1 presents the dates and types of industrial and commercial activity inspections conducted by the Authority during FY09-10.

TABLE 5-1 INDUSTRIAL/COMMERCIAL ACTIVITY SITE INSPECTIONS CONDUCTED DURING FY09-10

Date*	Inspection Element
07/29/09	Quarterly FAA 139.321 (b) Fuel/Fueler Inspection
09/29 - 30/09	Quarterly Site Inspection
10/12/09	Quarterly FAA 139.321 (b) Fuel/Fueler Inspection
12/15 - 16/09	Quarterly Site Inspection
01/24 - 25/10	Quarterly FAA 139.321 (b) Fuel/Fueler Inspection
03/26/10 and 3/29/10	Quarterly Site Inspection
04/29/10	Quarterly FAA 139.321 (b) Fuel/Fueler Inspection
04/16/10 through 06/21/10	Quarterly Site / Annual Comprehensive Site Inspection

^{*.} Quarterly Site Inspections and the Annual Comprehensive Site Inspection were performed for commercial and industrial tenants.



Inspections conducted in FY09-10 generally found industrial activities to be in compliance with the requirements of the SWMP and the Municipal Permit Industrial and Commercial Component. The majority of the required BMPs are being implemented properly. Table 5-2, however, identifies the types of industrial/commercial activity and the associated BMPs which were most frequently found to be improperly implemented at the time of inspection.

TABLE 5-2 TYPES OF INDUSTRIAL/COMMERCIAL ACTIVITIES AND ASSOCIATED BMPS FOUND TO BE IMPROPERLY IMPLEMENTED AS DETERMINED DURING FY09-10 SITE INSPECTIONS

Industrial/Commercial Activity	BMPs Required by SAN SWMP
Improper storage of materials.	SC-07 - Outdoor Storage of Significant Material
Leaking vehicles or equipment. Oily stains or other chemical stains on the ground surface. Used absorbent left on ground surface.	SC-02 - Aircraft, Ground Vehicle and Equipment Maintenance SC-02A - Outdoor Equipment Operations and Maintenance Areas SC-08 - Waste Handling and Disposal
Improper storage of waste.	SC-08 – Waste Handling and Disposal
Trash/debris accumulation	SC-12 - Outdoor Washdown/Sweeping

In those instances where BMPs were found to be implemented improperly, the Environmental Affairs Department directed the tenant/operation to correct the situation and to implement the BMP in the manner described in the SAN SWMP. In general, issues and concerns identified during inspections were corrected as soon as they were brought to the attention of the tenant. There were 26 industrial and commercial operations/tenants with compliance concerns during FY09-10. The concerns identified during the inspections are listed in Table 5-3 below. These operations were issued a notice (in writing or by phone) in response to issues identified during the site inspections. Each notice detailed the concerns regarding BMP implementation identified by the Environmental Affairs Department during the inspection, requested corrective action and a written response within a specific time-frame, and provided information on the proper implementation the particular BMPs required for their activities. Each item was addressed satisfactorily within the time-frame allowed and no further enforcement actions were initiated.

Table 5-3 Industrial/Commercial Operation Compliance Concerns Identified during Site Inspections and Dates of Resolution - FY09-10

Operation	Compliance Issue(s)	Type & Date of Notice	Date of Resolution
Air Tran Airways	Trash receptacle at the gate without a lid	5/11/2010 - Written	05/28/10
Alaska Air	Trash storage bin left open while not in use	12/15/2009 - Written	12/16/2009
Allegiant	Trash receptacle at the gate without a lid	6/11/2010 - Written	6/23/2010
Allied Aviation	Drums stored outside without overhead cover	6/4/2010 - Written	6/29/2010
American Airlines	Broken absorbent bags at gate	3/30/2010 - Written	4/14/2010
	Trash receptacle at the gate without a lid	5/4/2010 - Written	5/11/2010
American Eagle	Trash can on the ramp without a lid	4/27/2010 - Written	6/15/2010
ASIG	Stains and used absorbent were observed in the fuel truck parking area	10/1/2009 - Written	10/20/2009
	Oily equipment stored by doorway without secondary containment	4/22/2010 - Written	4/23/2010
ATI	Drums in the operational area were stored outside without proper secondary containment	3/29/2010 - Written	4/2/2010
Delta	Used absorbent observed in several locations	10/1/2009 - Written	10/16/2009
Delta	Uncovered trash bin was observed by gate Motor oil bottle in trash container Trash containers at gates observed without lids	3/30/2010 - Written	4/15/2010
Elite Line Services	Spill pallets fillede with rainwater stored outdoors without overhead cover	4/16/2010 - Written	4/22/2010
	Drum stored outside without over head cover.	10/5/2009 - Written	10/8/2009
FedEx	"Quickcrete" concrete bags stored outdoors	3/29/2010 - Written	3/31/2010
	Outdoor trash can without a lid	5/11/2010 - Written	5/14/2010
Flagship	Outdoor trash cans without lids	4/19/2010 - Written	4/19/2010
Frontier Airlines	Trash receptacle at the gate without a lid	5/21/2010 - Written	5/24/2010



Table 5-3 Industrial/Commercial Operation Compliance Concerns Identified during Site Inspections and Dates of Resolution - FY09-10 (Continued)

Operation	Compliance Issue(s)	Type & Date of Notice	Date of Resolution
Hawaiian	Leaking piece of equipment on the ramp area	3/30/2010 - Written/Phone	3/30/2010
	Trash receptacle at the gate without a lid	6/3/2010 - Written	6/23/2010
HMS Host	Spills and used absorbent present at grease trap area between gates	3/30/2010 - Written	4/9/2010
	Trash accumulating at the Terminal 2 connector dumpster area		
	Grease being stored/transported in open containers outside	5/7/2010 - Written	5/10/2010
	Trash receptacles with lids open or missing	10/2/2009 - Written	10/5/2009
	Trash observed on the ground	12/16/2009 - Written	12/16/2009
Landmark	Drum and open box of motor oil cans observed without proper secondary containment	12/15/2009 - Written	12/16/09
	Staining by the shop building	3/29/2010 - Written	4/14/2010
Landmark	Outdoor trash receptacle without lids Used drip pans stored outdoors	5/4/2010 - Written	5/26/2010
	Leaky equipment without drip pans		
	Hazardous materials storage area without over head cover		
LPI	Outdoor trash can without lid	4/28/2010 - Written	4/28/2010
	Soaps stored outdoors without secondary containment		

Table 5-3 Industrial/Commercial Operation Compliance Concerns Identified during Site Inspections and Dates of Resolution - FY09-10 (Continued)

Operation	Compliance Issue(s)	Type & Date of Notice	Date of Resolution
SDCRAA	Trash accumulated behind blast fence	9/29/2009 - Written	9/30/2009
	Trash and debris accumulation around dumpster	10/5/2009 – Writen	10/10/2009
	Glass beads on ground from paint equipment testing		
	Trash accumulated behind blast fence	9/29/2009 - Written	9/30/2009
	Trash and debris accumulation around dumpster	10/5/2009 – Written	10/10/2009
	Glass beads on ground from paint equipment testing		
	Sediment observed on the ramp from a construction project	12/21/2009 – Phone	12/21/2009
	Boxes and cans of chemicals stored without proper secondary containment	12/22/2009 – Written	1/8/2010
	Trash accumulating along the fence line behind the trash compactors	3/30/2010 – Written	4/13/2010
	Construction and other materials need secondary containment	3/30/2010 – Written	4/1/2010
	Broken sand bags observed by maintenance shops	6/23/2010 - Written	6/29/2010
	Debris on ground by runway lighting vaults		
	Debris on ground in storage yard		
Sky West	Outdoor trash cans without lids	4/26/2010 – Written	6/29/2010
Southwest	Trash cans without lids	10/2/2009 – Written	10/16/2009
	Broken pallets left by gate	3/29/2010 –	4/12/2010
	Boxes of motor oil without proper secondary containment	Written	
	Trash containers without lids.		
	Outdoor trash receptacles without lids Spill pallet in an area without overhead cover filled with water	5/5/2010 – Written	5/7/2010



Table 5-3 Industrial/Commercial Operation Compliance Concerns Identified during Site Inspections and Dates of Resolution - FY09-10 (Continued)

Operation	Compliance Issue(s)	Type & Date of Notice	Date of Resolution
Timco	Oil and equipment stored outside without cover and secondary containment	10/2/2009 – Written	10/16/2009
United	Evidence of outdoor hand washing	10/2/2009 –	10/16/2009
	Trash can without a lid	Written	
	Evidence of outdoor hand washing	12/15/2009 – Written	1/16/2010
	Leaking equipment observed on the ramp	3/29/2010 – Written/Phone	3/29/2010
	Outdoor trash receptacles observed without lids	3/30/2010 – Written	4/23/2010
	Various containers of cleaning solutions left outside without secondary containment and cover		
	Box of oil cans saturated with oil left outside without proper secondary containment		
	Radiator fluid stored outdoors without proper secondary containment	5/7/2010 – Written	6/29/2010
	Outdoor trash receptacles without lids		
UPS	Hazardous materials stored without secondary containment	5/6/2010 – Written	6/15/2010
US Air	Used absorbent observed at gate Significant amount of trash/debris accumulated at gate	10/5/2009 - Written	10/30/2009
	Trash can without a lid		
	Chemicals and equipment improperly stored without secondary containment and cover		
	Trash bin observed tipped over with trash coming out onto the ramp	3/30/2010 – Written	4/14/2010
	Oil cans stored outdoors without secondary containment	4/29/2010 – Written	6/2/2010
	Grease buckets outdoors without overhead cover and secondary containment		
	Outdoor trash receptacles without lids		

TABLE 5-3 INDUSTRIAL/COMMERCIAL OPERATION COMPLIANCE CONCERNS IDENTIFIED DURING SITE INSPECTIONS AND DATES OF RESOLUTION - FY09-10 (CONTINUED)

Operation	Compliance Issue(s)	Type & Date of Notice	Date of Resolution
West Jet	Trash receptacle without a lid	4/28/2010 – Written	6/23/2010

5.3 MOBILE SOURCES ELEMENT

As noted above, while there are several industrial/commercial entities at SDIA that operate at locations throughout the airport, the Authority does not consider any of these entities to be mobile sources in terms of the Municipal Permit. Any and all industrial/commercial entities at SDIA are included in the discussion of stationary industrial/commercial sites/sources in both the SWMP and above.

5.4 PROGRAM REVIEW AND MODIFICATION

In response to the re-issued Municipal Permit, the Authority submitted a completely revised SWMP to the RWQCB on March 24, 2008. Since that time, the only revisions to the Industrial and Commercial Component of the SWMP has been an update of the inventory of industrial and commercial operations. Since March 24, 2008, one new commercial passenger airline tenant (namely, Virgin America) began operations as SDIA, and has therefore been added to the inventory. Another commercial passenger airline tenant (namely, Aloha Airlines) has completely ceased operations, including those operations at SDIA, and has therefore been removed from the inventory. These revisions are shown in the updates to Table 5 of the SWMP. Any and all revisions to the SWMP are discussed and summarized in Chapter 14 of this Annual Report





6 Residential Component

As stated in the Executive Summary, as well as the Introduction to this Annual Report, and more specifically in Section 8.0 of the SWMP, there are no residential land uses or activity areas within the Authority's jurisdiction. For this reason and consistent with previous Annual Reports, the FY09-10 Annual Report contains no discussion of activities conducted by the Authority relative to the Residential Component of the Municipal Permit.

Please note, however, that both the SWMP and our Annual Reports discuss issues relative to the general public under the Education and Public Participation components (Chapters 8 and 9 of this report). It should also be noted that the Authority participates in and serves as the secretary on the Education and Residential Sources Copermittee workgroup, in which regional residential education efforts are developed.

Storm Water Management Plan - Municipal Stormwater Permit





7 Illicit Discharge Detection and Elimination Component

Section D.4 of the Municipal Permit requires that the Authority establish an Illicit Discharge Detection and Elimination (IDDE) program to actively seek and eliminate illegal discharges and connections to the storm drain system. This program provides the framework for the detection, investigation and follow-up, and elimination of reported violations. Section J.3.a of the Permit outlines the annual reporting requirements and schedule for the entire jurisdictional urban runoff management program, including the IDDE component.

In 2008, addendum No. 2 to the Permit extended the due date for the annual reporting requirements of Section D.4, the IDDE component, to December 15th of each year. Extending the due date to December 15th allows the Copermittees to compile the information for an entire Dry Weather Monitoring season (May 1 to September 30) in one single report, rather than reporting information on portions of the Dry Weather Monitoring Program in two separate JURMP fiscal year Annual Reports. Therefore, information on the IDDE component of the Authority's Storm Water Management Program including: public reporting of illicit discharges and connections, spill prevention and response, sanitary sewer spill prevention and response, toxic

Storm Water Management Plan - Municipal Stormwater Permit

material disposal, wet and dry weather monitoring, follow up and enforcement, and all other supporting documents that might otherwise be provided here in Chapter 7 of the Annual Report, will be submitted to the RWQCB in a separate report on December 15th, 2010.





8 EDUCATION COMPONENT

8.1 INTRODUCTION

The Authority's stormwater education and outreach program is designed to measurably increase the awareness of target populations with respect to the storm drain system, the impacts of urban runoff on receiving waters, and the variety of BMPs required for use at the airport that are intended to help prevent and/or eliminate stormwater quality problems. The education efforts outlined in the SWMP are intended to increase understanding of stormwater management issues and to help promote behavioral changes that will reduce stormwater pollution, and thereby lead to a reduction in pollution draining to the storm drain system and San Diego Bay.

The education and outreach program is targeted towards Authority staff and airport tenants, as well as the general public. The programs focus on elements of the SWMP, including development planning, construction activities, municipal activities, and industrial/commercial activities. Section 10 of the SWMP provides a general description of the content, form, and frequency of training developed for Authority staff, airport tenants, school children and the general public, as applicable. While the Authority has no residential land use within our jurisdiction, we support and participate in the Copermittee's regional outreach efforts to the residential communities. The following sections describe the education and outreach activities conducted by the Authority during FY09-10.

8.2 STAFF TRAINING ELEMENT

The stormwater training programs developed by the Authority are designed to provide information appropriate to the duties and activities of the particular audience. In brief, the training typically addresses: 1) laws, regulations, and permit requirements; 2) urban runoff concepts; 3) BMPs and requirements for use; 4) illicit discharges, inspections, and reporting; and 5) other water conservation and pollution prevention concepts. Table 8-1 presents the education and outreach activities directed at Authority staff during FY09-10.

TABLE 8-1 EDUCATION ACTIVITIES FOR AUTHORITY EMPLOYEES DURING FY09-10

Program Element	Description of Activities	Estimated Audience Size*
Authority Webpage	Environmental Affairs' webpage includes information on the Authority's stormwater program and the SWMP (www.san.org/environmental).	Up to 350
	Airport Recycling Guide, pollution prevention information, and Energy Savings Checklist remain posted on the intranet and internet.	
	October 2, 2007 – February 4, 2008. A draft Environmental Impact Report for the Airport Master Plan was available on Authority's webpage.	
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	Up to 350
Authority Social Media Web Pages	April 16, 2010 Posted "Making every day Earth Day at SDIA."	Up to 350
Posters/ Banners/ Signage in Terminals and Parking Lots	Dec 8, 2009 through March 8, 2010. WiLDCOAST sponsored a conservation art project that was displayed at the "Youth Art Wall" in Terminal Two. Students from the Boys and Girls Club of Imperial Beach created three scenes from the Otay River Valley using recycled materials.	Up to 350
Brochures/Calendars	Recycling Guide provided in terminals and at various outreach events.	Up to 350
	December 4, 2009. Environmental Affairs Department provided "Be the Solution to Stormwater Pollution" 2010 Regional Storm Water Calendars at the Monthly Authority Staff Meeting.	Up to 200
	January 29 and April 23, 2010. Environmental Affairs Department provided "Be the Solution to Stormwater Pollution" 2010 Regional Storm Water Calendars at the Electronic Waste Collection events held these dates.	Up to 50



Table 8-1 Education Activities for Authority Employees during FY09-10 (Continued)

Program Element	Description of Activities	Estimated Audience Size*
Brochures/Calendars	April 14, 2010. "Be the Solution to Stormwater Pollution" 2010 Regional Storm Water Calendars were provided at the Airport Authority's Electric Car Show event held at Terminal 1 curbside.	Up to 20
	April 30, 2010. "Be the Solution to Stormwater Pollution" 2010 Regional Storm Water Calendars were provided at the Grand Opening of the "Solid Waste Management Facility Ribbon Cutting Ceremony."	
Media News Releases	July 6, 2009. News release announces, "Airport Authority hosts media briefing and groundbreaking ceremony to kick off "The Green Build."	Up to 350
	July 9, 2009. News release announces, "Airport Authority Board authorizes design, construction, and funding for The Green Build."	
	July 30, 2009. News release announces, "Now on Facebook & Twitter: San Diego International Airport uses power of social media to reach residents and travelers."	
	November 14, 2009. News release announces, "San Diego International Airport teams up with Surfrider Foundation to fight cigarette litter."	
	March 29, 2009. News release announces, "Airport Authority begins environmental work on consolidated rental car facility," which began the CEQA review process.	
	April 14, 2009. News release announces, "In honor of Earth Day, San Diego International Airport to show it's electric vehicle fleet April 14."	
	April 22, 2010. News release announces, "San Diego County Regional Airport Authority recieves sixth Recycler of the Year Award from the City of San Diego."	
E-mail	July 30, 2009. E-Newsletter announcing New Rule for Battery Recycling.	Up to 350
Announcements/ Tenant Advisories	August 6, 2009. Tenant Advisory announcing the Week-long Clean up and Quarterly E-waste Collection Event.	
	August 14, 2009. E-Newsletter announcing the Two-Day E-waste Collection Event.	
	August 28, 2009. Tenant Advisory reminder on Smart Carte dispensers and use, and proper cigarette disposal.	

TABLE 8-1 EDUCATION ACTIVITIES FOR AUTHORITY EMPLOYEES DURING FY09-10 (CONTINUED)

Program Element	Description of Activities	Estimated Audience Size*
E-mail Announcements/ Tenant Advisories	September 8, 2009. Intranet post announcing total weight amounts from the Two-day E-waste Collection Event.	Up to 350
	September 9, 2009. E-Newsletter promoting the "25 th California Coastal Clean-up Day" event.	
	September 10, 2009. E-Newsletter announcing "New Look for Battery Recycling Collection Points."	
	September 14, 2009. Intranet post promoting the "25 th California Coastal Clean-up Day" event.	
	September 15, 2009. Tenant Advisory announcing "Good Bye for Now Least Terns, Hello Rainy Season."	
	October 1, 2009. E-Newsletter announcing "Energy Awareness Month and Energy Saving Tips for Home and Office."	
	October 1, 2009. Intranet post announcing "Energy Awareness Month and Energy Saving Tips for Home and Office."	
	October 14, 2009. E-Newsletter announcing "United Way – Cash for Cans recycling results by departments."	
	November 13, 2009. E-Newsletter announcing "America Recycles Day."	
	November 23, 2009. E-Newsletter announcing "10-Tips for an eco-friendly Thanksgiving."	
	December 14, 2009. E-Newsletter announcing "Holiday Pollution Prevention Tips."	
	January 8, 2010. E-Newsletter announcing the "One Day only E-Waste Collection Event."	
	January 15, 2010. Tenant Advisory announcing the "One Day Only E-waste Collection Event."	
	January 29, 2010. E-Newsletter announcing "Open for Business One Day Only E-waste Collection happening NOW."	
	April 1, 2010. E-Newsletter announcing "Earth Month Events."	
	April 8, 2010. E-Newsletter announcing "5 great reasons why going green on Earth Day, and every day, will make you feel good!"	
	April 9, 2010. Tenant Advisory announcing "In honor of Earth Day, San Diego International Airport to show its electric vehicle fleet April 14."	



TABLE 8-1 EDUCATION ACTIVITIES FOR AUTHORITY EMPLOYEES DURING FY09-10 (CONTINUED)

Program Element	Description of Act	vities		Estimated Audience Size*	
E-mail Announcements/ Tenant Advisories	April 16, 2010. E-Newsletter announcing "County-wide Prescription Drug Take Back Program and Earth Fair at Balboa Park." April 20, 2010. E-Newsletter announcing "Earth Day."		Up to 350		
				April 23, 2010. E-Newsletter announcing upcoming "Bike to Work Day" event.	
	April 26, 2010. E-Newsletter announcing National Geographic's "The Human Footprint" lunch time movie event. April 29, 2010. Tenant Advisory announcing "Solid Waste Management Facility Ribbon Cutting Ceremony."				
				May 21, 2010. E-News	eletter announcing "Bike
	1 -	etter from President/CEo		O "Saving Authority	
	Department Meetings	Environmental Affairs staff attendance at Facilities Maintenance Department – Monthly Status Meetings:		Up to 120	
		July 28, 2009	November 24, 2009	April 27, 2010	
August 25, 2009		January 26, 2010	May 25, 2010		
	September 29, 2009	February 23, 2010	June 29, 2010		
	October 27, 2009	March 30, 2010			
	Facilities Maintenance Department attendance at Environmental Affairs Department – Monthly Status Meetings			Up to 15	
	January 19, 2010	April 20, 2010	June 18, 2010		
Targeted Training for Specific Employees		staff gave a presentation ogram at the annual mane	on the Authority's Storm datory training:	Up to 350	
	September 30, 2009	February 16, 2010	May 3, 2010		
	November 18, 2009	February 24, 2010 (F	FMD 1 st & 2 nd Shift)		
	December 1, 2009	March 3, 2010 (FMD			
	August 19-20, 2009. P audit and pilot project	resentation given at Storn	nCon on the Authority's	100s	
		Environmental Affairs D Vaste Collection Event.	Department hosted the	100s	
		vironmental Affairs Depa ff Meeting and handed or	•	100s	

TABLE 8-1 EDUCATION ACTIVITIES FOR AUTHORITY EMPLOYEES DURING FY09-10 (CONTINUED)

Program Element	Description of Activities	Estimated Audience Size*
Special Presentations	January 29, 2010. Environmental Affairs Department hosted the One-Day Electronic Waste Collection Event.	100s
	April 14, 2010. Environmental Affairs Department hosted the Airport Authority's Electric Vehicle Show event held at Terminal 1 curbside.	100s
	April 28 & 29, 2010. Environmental Affairs Department presented the National Geographic's – "Human Footprint" movie lunchtime event.	Up to 15
	April 30, 2010. Grand Opening of the "Solid Waste Management Facility Ribbon Cutting Ceremony."	100s
Attendance at external professional training/ workshops	July 1, 2009. HAZWOPER 8 hour refresher training.	4
	July 16, 2009. Filtrexx Land Improvement Systems Presentation.	1
	August 5, 2009. Webinar on California's Draft General Construction Permit. Session one Overcoming Implementation issues.	3
	August 19-20 2009. StormCon- The North American Surface Water Quality Exposition Conference and gave presentation on audits and pilot projects.	1
	September 17, 2009. Bacteria TMDL workshop hosted by Weston.	1
	October 1, 2009. Webinar – California's General Construction Permit: Session II- Navigating the Newly Adopted Regulations.	1
	October 8 & 9, 2009. Industrial Environmental Association: Balancing Environmental Needs & Economic Realities Annual Conference.	3
	November 2-4, 2009. California Stormwater Quality Association Conference.	4
	November 18, 2009. San Diego Regional Sustainability Partnership 2 nd Annual Sustainable Partnership Breakfast.	2
	November 18, 2009. Webinar – California's General Construction Permit: Session III — Navigating the Newly Adopted Regulations	1
	February 24, 2010. Environmental Affairs Department staff attended to the Zero Waste Conference.	1
	March 11, 2010. City of San Diego – Waste Reduction and Disposal Division hosted a tour of the Miramar Landfill for staff of the Environmental Affairs and Landside Operations Departments.	10
	March 23, 2010. California Environmental Protection Agency Basic Inspector training.	1



TABLE 8-1 EDUCATION ACTIVITIES FOR AUTHORITY EMPLOYEES DURING FY09-10 (CONTINUED)

Program Element	Description of Activities	Estimated Audience Size*
Attendance at external professional training/ workshops	May 21-29, 2010. HAZWOPER 40 hour training. May 27, 2010. City of San Diego – Waste Reduction and Disposal Division hosted a Food Waste Recycling Program Presentation for staff of the Environmental Affairs and Landside Operations Departments.	2
	June 3, 2010. "Risky Business: The New Storm Water Construction General Permit" Training Seminar.	2

^{*.} There are approximately 350 Authority Employees at any time during the reporting period.

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to Authority staff, the stormwater education program is also designed to reach the other target audiences required by the Municipal Permit. However, other than our support and participation in the Copermittees' regional outreach efforts to the residential communities, the Authority has no specific efforts directed at the "residential community." As such, the remaining audiences addressed by the education component of the SWMP include: the general public and school children; the airport industrial and commercial tenants; quasi-governmental agencies, such as the FAA; and construction site project managers/developers/contractors.

The education program emphasizes the consistent presentation of readily understandable information about the causes and effects of stormwater pollution, as well as the proper use of BMPs. Each element of the education program is designed to present the appropriate Municipal Permit "agenda" message to a particular audience. The education program seeks to partner with other Copermittees, airport tenants, non-profit organizations, and other interested stakeholders to ensure cost-effective use of resources.

Again, Section 10 of the SWMP provides details on the education mechanisms and proposed training frequencies. The following tables summarize the education efforts conducted by the Authority during the reporting period. There are several instances where one education mechanism has been applied to several target audiences. For example, the Authority

Storm Water Management Plan - Municipal Stormwater Permit

webpage, airport storm drain stenciling, and airport recycling brochure were each developed to address all the target audiences. Tables 8-2 through 8-4 present information relative to the education efforts directed at the following composite audiences during FY09-10: a) the general public and school children; b) airport industrial, commercial, and quasi-governmental agency tenants; and c) construction project managers, developers, and contractors.

8.4 PROGRAM REVIEW AND MODIFICATION

The Authority last revised the SWMP on March 24, 2008. There have been no revisions to the Education Component of the SWMP since that time.



TABLE 8-2 EDUCATION ACTIVITIES FOR THE PUBLIC AND SCHOOL CHILDREN DURING FY09-10

Program Element	Description of Activities	Estimated Audience Size
Authority Webpage	Webpage Environmental Affairs webpage (<u>www.san.org/environmental</u>) includes information on the Authority's stormwater program and the SWMP.	
	Airport Recycling Guide and Pollution Prevention information remain posted on the internet.	
	Sustainability (featuring a "Green Tip" to be more sustainable, and things SDIA is doing to be a more sustainable airport) posted on the internet.	-
Authority Social Media Web Pages	April 16, 2010. Posted "Making every day Earth Day at SDIA."	Up to 350
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	100s of thousands
Posters/ Banners/ Signage in Terminals and Parking Lots	Dec 8, 2009 through March 8, 2010. WiLDCOAST sponsored a conservation art project that was displayed at the "Youth Art Wall" in Terminal Two. Students from the Boys and Girls Club of Imperial Beach created three scenes from the Otay River Valley using recycled materials.	100s of thousands
Brochures/Calendars	Recycling Guide in airport terminals and at various outreach events.	Up to 2,500
Media News Releases	July 6, 2009. News Release announces, "Airport Authority hosts media briefing and groundbreaking ceremony to kick off" The Green Build."	100's of thousands
	July 9, 2009. News Release announces, "Airport Authority Board uthorizes design, construction, and funding for The Green Build."	
	July 30, 2009. News Release announces, "Now on Facebook & Twitter: San Diego International Airport uses power of social media to reach residents & travelers."	
	July 6, 2009. News Release announces, "Airport Authority hosts media briefing and groundbreaking ceremony to kick off "The Green Build.	
	November 14, 2009. News Release announces, "San Diego International Airport teams up with Surfrider Foundation to fight cigarette litter."	
	March 29, 2010. News Release announces, "Airport Authority begins environmental work on consolidated rental car facility," which began the CEQA review process.	
	April 14, 2010. News Release announces, "In honor of Earth Day, San Diego International Airport to show its electric vehicle fleet April 14."	
	April 22, 2010. News Release announces, "San Diego County Regional Airport Authority Receives Sixth Recycler of the Year Award from the City of San Diego."	

Table 8-2 Education Activities for the Public and School Children during FY09-10 (Continued)

Program Element	Description of Activities	Estimated Audience Size
Collaborative Efforts	July 9, 2009. Meeting to discuss water conservation and pollution issues with Elementary Institute of Science.	24
	Continued collaboration with WiLDCOAST to support the "Wildlife Outreach Program" to encourage conservation of local wildlife and habitats.	Not Applicable
	Continued collaboration with San Diego CoastKeeper to support "Project Swell" and provide children with a water quality-based educational curricula and to support the "Common Grounds" water quality monitoring database.	
	Continued collaboration with Surfrider Foundation to support "Hold On To Your Butt" public education campaign about cigarette butts as a stormwater pollutant.	
	Collaboration with San Diego CoastKeeper and others to participate in the 23 rd Annual California Coastal Cleanup Day Event held September 19, 2009.	
	Continued collaboration with local government agencies, universities, and businesses on the "San Diego Regional Sustainability Partnership" with one focus being natural resource conservation and protection.	
	Continued collaboration with San Diego CoastKeeper, I Love a Clean San Diego and others on the 25 th Anniversary Annual California Coastal Cleanup Day event, held September 19, 2009.	
	Collaboration with I Love A Clean San Diego to sponsor the 8 th Annual Creek to Bay Cleanup Event held April 24, 2010.	
Special Presentations	July 16, 2009. Environmental Affairs Department presented to children in the YMCA Summer Explorers Program and provided information on the California Least Tern and pollution prevention.	Up to 23
	May 11, 2010. San Diego Coastkeeper and the City of San Diego launched Project SWELL Kindergarten curriculum in San Diego Unified School District at Ocean Beach Elementary School.	Not Applicable
	August 5, 2009. Environmental Affairs Department hosted a tour to the summer interns. The tour included education on storm water management on the airfield.	Up to 15



TABLE 8-3 EDUCATION ACTIVITIES FOR AIRPORT INDUSTRIAL, COMMERCIAL, AND QUASI-GOVERNMENTAL AGENCY TENANTS DURING FY09-10

Program Element	Description of Activities	Estimated Audience Size
Authority Webpage	Environmental Affairs web page (<u>www.san.org/environmental</u>) includes information on the Authority's stormwater program and the SWMP.	1,000s
	Airport Recycling Guide and pollution prevention information remain posted on the internet.	
	Sustainability (featuring a "Green Tip" to be more sustainable, and things SDIA is doing to be a more sustainable airport) posted on the internet.	
Authority Social Media Web Pages	April 16, 2010. Posted "Making every day Earth Day at SDIA."	1,000s
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	1,000s
Posters/ Banners/ Signage in Terminals and Parking Lots	Dec 8, 2009 through March 8, 2010. WiLDCOAST sponsored a conservation art project that was displayed at the "Youth Art Wall" in Terminal Two. Students from the Boys and Girls Club of Imperial Beach created three scenes from the Otay River Valley using recycled materials.	1,000s
Brochures	Recycling Guide in airport terminals and at various outreach events.	Up to 2,500
Media News Releases	July 6, 2009. News Release announces, "Airport Authority hosts media briefing and groundbreaking ceremony to kick off The Green Build."	1,000s
	July 9, 2009. News Release announces, "Airport Authority Board authorizes design, construction, and funding for The Green Build."	
	July 30, 2009. News Release announces, "Now on Facebook & Twitter: San Diego International Airport uses power of social media to reach residents & travelers."	
	November 14, 2009. News Release announces, "San Diego International Airport teams up with Surfrider Foundation to fight cigarette litter."	
	March 29, 2010. News Release announces, "Airport Authority begins environmental work on consolidated rental car facility," which began the CEQA review process.	
	April 14, 2010. News Release announces, "In honor of Earth Day, San Diego International Airport to show its electric vehicle fleet April 14."	
	April 22, 2010. News Release announces, "San Diego County Regional Airport Authority Receives Sixth Recycler of the Year Award from the City of San Diego."	

TABLE 8-3 EDUCATION ACTIVITIES FOR AIRPORT INDUSTRIAL, COMMERCIAL, AND QUASI-GOVERNMENTAL AGENCY TENANTS DURING FY09-10 (CONTINUED)

Program Element	Description of Acti	vities		Estimated Audience Size
Tenant Safety Committee Meetings	Environmental Affairs Department presented stormwater management program updates at Tenant Safety & Security Committee meetings:		320	
	July 15, 2009	November 18, 2009	March 17, 2010	
	August 19, 2009	December 16, 2009	April 21, 2010	
	September 16, 2009	January 20, 2010	May 19, 2010	
	October 21, 2009	February 17, 2010	June 16, 2010	
Lindbergh Airport Managers	Environmental Affairs Department presented stormwater management program updates to airline station managers at monthly LAMC meetings:		up to 50	
Committee (LAMC)	July 15, 2009	November 18, 2009	March 17, 2010	
Meetings	August 19, 2009	December 16, 2009	April 21, 2010	
	September 16, 2009	January 20, 2010	May 19, 2010	
	October 21, 2009	February 17, 2010	June 16, 2010	
Special Presentations	resentations August 20 - 21, 2009. Environmental Affairs Department hosted Two-Day Electronic Waste Collection Event.		100s	
	January 29, 2010. Environmental Affairs Department hosted the One-Day Electronic Waste Collection Event.			100s
Targeted Training/ Presentations for Specific Tenant Groups	July 20, 2009. Environmental Affairs Department met with Southwest Airlines to discuss provisioning truck washing options.			



TABLE 8-3 EDUCATION ACTIVITIES FOR AIRPORT INDUSTRIAL, COMMERCIAL, AND QUASI-GOVERNMENTAL AGENCY TENANTS DURING FY09-10 (CONTINUED)

Program Element	Description of Activities	Estimated Audience Size
E-mail Announcements/ Tenant Advisories	January 8, 2010. E-Newsletter announcing the "One Day only E-Waste Collection Event."	1000s
	January 15, 2010. Tenant Advisory announcing the "One Day Only E-waste Collection Event."	
	January 29, 2010. E-Newsletter announcing "Open for Business One Day Only E-waste Collection happening NOW."	
	April 1, 2010. E-Newsletter announcing April "Earth Month Events."	
	April 8, 2010. E-Newsletter announcing "5 great reasons why going green on Earth Day, and every day, will make you feel good!"	
	April 9, 2010. Tenant Advisory announcing "In honor of Earth Day, San Diego International Airport to show its electric vehicle fleet April 14."	
	April 16, 2010. E-Newsletter announcing "County-wide Prescription Drug Take Back Program and Earth Fair at Balboa Park."	
	April 20, 2010. E-Newsletter announcing "Earth Day."	
	April 23, 2010. E-Newsletter announcing upcoming "Bike to Work Day" event.	
	April 29, 2010. Tenant Advisory announcing "Solid Waste Management Facility Ribbon Cutting Ceremony."	
	May 21, 2010. E-Newsletter announcing "Bike to Work Day."	
	June 3, 2010. E-Newsletter from President/CEO "Saving Authority Resources and Protecting the Environment."	

Table 8-4 Education Activities for Airport Construction Project Managers, Developers, and Contractors during FY09-10

Program Element	Description of Activities	Estimated Audience Size
Authority Webpage	Environmental Affairs webpage (<u>www.san.org/environmental</u>) includes information on the Authority's stormwater program and the SWMP.	1,000s
	Airport Recycling Guide and Pollution Prevention information remain posted on the internet.	
	Sustainability (featuring a "Green Tip" to be more sustainable, and things SDIA is doing to be a more sustainable airport) posted on the internet.	
Authority Social Media Web Pages	April 16, 2010. Posted "Making every day Earth Day at SDIA."	1,000s
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	100s
Posters/ Banners/ Signage in Terminals and Parking Lots	Dec 8, 2009 through March 8, 2010. WiLDCOAST sponsored a conservation art project that was displayed at the "Youth Art Wall" in Terminal Two. Students from the Boys and Girls Club of Imperial Beach created three scenes from the Otay River Valley using recycled materials.	100s
Brochures	Airport Recycling Guide in airport terminals and at various outreach events.	Up to 100
Direct Contact through Project	Environmental Affairs Department staff attendance at Pre-Construction meetings: 11 meetings	265
Meetings and Inspections	Environmental Affairs Department staff attendance at regularly scheduled Project Progress meetings: 165 meetings	1764
	Environmental Affairs Department follow-up meetings to site inspections and tailgate meetings. Typically, one-on-one with construction contract site supervisor: 185 meetings	185





9 Public Participation Component

9.1 INTRODUCTION

The Authority has established two main goals for the public participation element of the SWMP. The first goal is to develop mechanisms to facilitate public participation in the implementation of the SWMP. The second is to then gain the participation of the community in helping to sustain and improve the Authority's stormwater management efforts. An educated public generally makes for a more effective partner in preventing stormwater pollution. As such, there is some overlap between the Authority's public education efforts described in Chapter 8 of this Annual Report and the public participation efforts described here. Public participation is garnered in two primary ways: participation in implementation of SWMP programs and public feedback on SMWP programs. Feedback is used to improve the SWMP itself and to improve the implementation of the SWMP.

The Authority's public participation program is directed primarily at airport tenants and Authority staff, while also addressing the general public to the extent possible. The mechanisms used to facilitate public participation on the part of these groups during FY09-10 are described here.

9.2 PUBLIC PARTICIPATION ELEMENT FOR AUTHORITY STAFF AND AIRPORT TENANTS

In addition to daily interactions between the Authority staff and the airport tenants, several mechanisms were used during the reporting period to provide staff and airport tenants the opportunity to participate in the implementation and ongoing development of the Authority's SWMP. These mechanisms included:

a) regular meetings of the San Diego County Regional Airport Authority Board;

b) monthly meetings of the Lindbergh Airport Managers Committee; c) monthly meetings of the Tenant Safety Committee; d) the 24-hour telephone line;

e) the Authority's webpages; and f) outreach events. The use of these six public participation mechanisms for tenants and Authority staff during the reporting period are summarized here.

9.2.1 AIRPORT AUTHORITY BOARD MEETINGS

The Airport Authority Board is committed to ensuring that SDIA operates in a manner that complies with all federal, state and local environmental laws. Tenants and Authority staff are encouraged to become involved and help to continually improve both the SWMP and its implementation. Tenants and staff are encouraged to speak directly to the Board during public meetings. During FY09-10, the Board held a combined total of 27 general and subcommittee meetings.

9.2.2 LINDBERGH AIRPORT MANAGERS COMMITTEE

Tenants and Authority staff meet monthly to discuss and improve the operational aspects of SDIA. During these meetings, tenants and staff are encouraged to become involved in the SWMP, take ownership of the SWMP, and help ensure SWMP implementation. The meetings allow for frank exchange of information and opinions regarding stormwater management concerns at SDIA. There were 12 meetings of the Lindbergh Airport Managers during the reporting period.

9.2.3 TENANT SAFETY COMMITTEE

The Tenant Safety Committee is another opportunity to encourage tenants and Authority staff to take ownership of the SWMP and to help ensure effective implementation of the plan. During these monthly committee meetings



stormwater management concerns are presented by the Environmental Affairs Department and discussed with tenants and staff. At the same time, tenants and staff are welcome to submit comments on the SWMP and its implementation during the meetings. The Committee held 12 meetings during FY09-10.

9.2.4 AUTHORITY 24-HOUR TELEPHONE LINE/PUBLIC HOTLINE

The daily activities of airport tenants and Authority staff have a substantial impact on the successful implementation of the SWMP. The SWMP provides guidance about reducing pollutants discharging to the MS4 and the proper implementation of appropriate BMPs. Taking ownership of the MS4 and making appropriate use of BMPs are some of the best ways for tenants and staff to participate in the implementation of the SWMP. The Airside Operations Department 24-hour telephone line/public hotline facilitates timely communication between the Environmental Affairs Department and concerned tenants and staff. Tenants and staff are also reminded to report unauthorized non-stormwater discharges to the 24-hour telephone line.

9.2.5 AUTHORITY WEBSITE

The Authority website features several pages dedicated to the environmental issues at SDIA (www.san.org/environmental), including stormwater management. The website, accessible by airport tenants and Authority staff, presents the SWMP in its entirety, along with contact information for the Environmental Affairs Department. The website provides another opportunity for tenants and staff to review and comment on the SWMP and the manner in which the SWMP and the BMPs described therein are implemented at SDIA. The environmental page of the Authority website had approximately 3,200 hits during FY09-10.

9.2.6 OUTREACH EVENTS FOR AIRPORT TENANTS AND AUTHORITY STAFF

Outreach events allow the Environmental Affairs Department and airport tenants and Authority staff to exchange information, ideas, and opinions about general stormwater management issues and issues specific to the airport. Outreach events have both an education component and a public participation component. Such events promote public participation and further environmental stewardship by tenants and staff. Outreach events are an important element of public participation

and help keep communication open between the Authority, its tenants and its staff. From April through June of 2010, the Authority conducted outreach to 30 individual airport tenants. The Environmental Affairs Department met with each of these 30 tenants and provided education regarding stormwater runoff, potential pollutant sources within each tenant's operational area and activities, and BMPs applicable to their individual areas and operations. The Authority also promoted two local watershed cleanup events during the reporting period. These two events drew participation by Authority staff and their families, namely: a) the 25th Annual California Coastal Cleanup Day on September 19, 2009; and b) the 8th Annual Creek to Bay Cleanup Event held April 24, 2010.

9.3 PUBLIC PARTICIPATION ELEMENT FOR THE GENERAL PUBLIC

The Authority uses a variety of mechanisms to provide the general public with opportunities to participate in the ongoing development and implementation of the Authority's SWMP. Some of the mechanisms used to encourage participation by the general public are similar to those used with tenants and staff. These mechanisms include a) regular meetings of the San Diego County Regional Airport Authority Board; b) regular meetings of the San Diego Municipal Permit Copermittees; c) the Authority's website; d) the Project Clean Water website; e) the Authority's 24-hour telephone line; f) the Copermittees' regional hotline telephone numbers; and g) outreach events for the General Public.

9.3.1 AIRPORT AUTHORITY BOARD MEETINGS

As stated above, the Airport Authority Board is committed to ensuring that SDIA operates in a manner that complies with all environmental laws. The public is encouraged to review and comment on the SWMP and to thereby help to continually improve both the plan and its implementation. The general public is encouraged to speak directly to the Board during public meetings. During FY09-10, the Board held a combined total of 27 general and subcommittee meetings.



9.3.2 SAN DIEGO MUNICIPAL PERMIT COPERMITTEE MEETINGS

The San Diego Municipal Permit Copermittees meet regularly to discuss various aspects of the stormwater management programs being implemented throughout the county in accordance with the Municipal Permit. In addition to the regular meetings of the Copermittee Management Committee, the Copermittees have established a number of subcommittees and workgroups. Ordinarily, meetings of the Committee, the subcommittees, and the workgroups are open to the general public. These meetings provide numerous opportunities for public participation in stormwater management activities both throughout the region and at SDIA. Attendees include a wide variety of experts, including representatives of federal, state and local agencies, industry representatives, environmental groups, consulting firms, product vendors, and academic and research institutions, as well as the general public. Combined, the Copermittees held more than 46 general, subcommittee, and workgroup meetings during FY09-10.

9.3.3 AUTHORITY WEBSITE

As stated above, the Authority website features several sections regarding the environmental issues at SDIA (www.san.org/environmental), including stormwater management. The website is accessible by the general public and presents the SWMP in its entirety. The website provides contact information for the Environmental Affairs Department, allowing the general public another opportunity to review and comment on the SWMP and the BMPs described therein. Again, the environmental page of the Authority website had approximately 3,200 hits during FY09-10.

9.3.4 PROJECT CLEAN WATER WEBSITE

Partly in response to its duties as the Principal Copermittee to the Municipal Permit, the County of San Diego established the Project Clean Water website (www.projectcleanwater.org) that features both general and specific information on regional water issues and the local stormwater management programs. The website features contact information and direct web-links to the Authority. The website is a major portal for public participation in stormwater management regionally and at the individual jurisdictional level.

9.3.5 AUTHORITY 24-HOUR TELEPHONE LINE/PUBLIC HOTLINE

The Municipal Permit Copermittees developed the Think Blue San Diego Regional website (www.thinkbluesdregion.org) launched on December 1, 2009. The website allows the general public to search by zip code, to determine which Copermittees' jurisdiction the user resides. The website also offers stormwater management news and information, regional spill reporting hotlines, links to the Project Clean Water website and the BMPs toolbox web page, and a calendar of regional outreach events. The Think Blue San Diego Region Website had 2,535 hits during FY09-10.

9.3.6 AUTHORITY 24-HOUR TELEPHONE LINE/PUBLIC HOTLINE

The general public can always address immediate stormwater concerns directly to the Authority using the Airside Operations Department 24-hour telephone line/public hotline. In addition to providing the general public with another link to the Environmental Affairs Department, the telephone line enables the general public to report unauthorized non-stormwater discharges and other stormwater concerns.

9.3.7 COPERMITTEES' PUBLIC HOTLINE

The Municipal Permit Copermittees have established two regional hotlines, the Project Clean Water Hotline and the THINKBLUE Hotline. Both are 1-800 numbers that allow the general public to obtain contact information for any of the individual jurisdiction stormwater management programs, including the Authority's. The hotlines also provide another mechanism for the general public to report unauthorized non-stormwater discharges and/or other stormwater concerns, which are then referred to the appropriate jurisdiction. The hotlines provide services in English and Spanish and are available 24-hours a day.

9.3.8 OUTREACH EVENTS FOR THE GENERAL PUBLIC

Similar to the previous discussion of outreach events for staff and tenants, outreach events for the general public allow the Authority and the general public to exchange information, ideas, and opinions about stormwater management issues in general and those specific to the airport. Such events promote public participation and further environmental stewardship by the general public.



During FY09-10, the Authority continued to collaborate with five local environmental groups that share concern for proper stormwater management at SDIA and protection of San Diego Bay - the receiving water for runoff from the airport. Three of these efforts began during FY04-05 and continued through FY05-06, FY06-07, FY07-08, FY08-09, and FY09-10. The Authority collaborated with San Diego Coastkeeper to help support the "Project Swell" campaign aimed at engendering environmental stewardship in local schoolchildren through education using water-quality-specific curricula. The Authority also collaborated with Coastkeeper on the "Common Grounds" water quality-monitoring database, as well as the volunteer citizens water quality monitoring program. In addition, the Authority has collaborated with WiLDCOAST to support its "Wildlife Outreach Program" - a bilingual campaign aimed at educating the public and schoolchildren about watershed and natural resource management. The Authority continues to support the Surfrider Foundation's "Hold On To Your Butt" campaign aimed at educating the public and children about cigarette butts as a stormwater pollutant through educational brochures, t-shirts, bumper stickers, and public service announcements. The Authority teamed up with the Surfrider Foundation to participate in "Hold On To Your Butt Day" Saturday November 14, 2009. The event helped to raise awareness of, and reduce litter from, discarded cigarette butts. Authority staff spent four hours in and in front of the airport terminals handing out "personal cigarette ashtrays," bumper stickers and information cards to airport visitors in order to educate smokers at the airport that their improperly disposed of cigarette butts can end up as pollution in San Diego Bay.

Continuing an outreach effort that began in FY08-09, the Environmental Affairs Department met one last time in July of 2009 with high school students from the Elementary Institute of Science to discuss environmental issues related to water conservation, water quality, and water pollution prevention.

Throughout FY09-10, the Authority continued to collaborate with local government agencies, universities, and businesses in the "San Diego Regional Sustainability Partnership," with one focus of the partnership being natural resource conservation and environmental protection. The Authority participated in one outreach event in collaboration with the Partnership. On November 18, 2009, the Authority participated at the "2nd Annual Sustainable Partnership Breakfast." The Authority provided information about storm water pollution prevention and plastic debris in our oceans.

Finally, the Authority hosted two community outreach events during FY09-10 that were part of the month-long Earth Month celebration at the airport. On April 14, 2010, Authority staff displayed its Electric Vehicle Fleet on the curb at Terminal 1. Information and educational materials included 2010 regional storm water calendars, San Diego Bay Watershed note pads, pencils listing the regional hotline, and recycling brochures. Authority staff discussed the benefits of the electric vehicle fleet and additional ways the airport is celebrating Earth Day. On April 30, 2010, the Authority collaborated with Waste Management and the City of San Diego - Waste Reduction and Disposal Division in the grand opening and ribbon cutting ceremony of the improved airport solid waste management facility. The grand opening launched the implementation of new, automated features of the airport's solid waste management facility. Educational materials included 2010 regional storm water calendars, San Diego Bay Watershed note pads, pencils listing the regional hotline, reusable grocery bags, and recycling brochures.

9.4 PROGRAM REVIEW AND MODIFICATION

The Authority last revised the SWMP on March 24, 2008. There have been no revisions to the Public Participation Component of the SWMP since that time.





10 Fiscal Analysis Component

10.1 INTRODUCTION

The fiscal analysis presented in this Chapter identifies the various categories of expenditures attributable to the urban runoff management program for FY09-10 and includes a description of the source(s) of the funds that are used to support the program and any legal restrictions on the use of the funds. In late 2008, the Copermittees collaboratively developed and adopted a standardized method of fiscal analysis in accordance with Permit Sections G, J.1.a(3)(k), and J.1.c(1)(d). This Standardized Fiscal Analysis Method and Format (Fiscal Analysis Method) was submitted to the RWQCB in January of 2009 as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for FY08-09. The Fiscal Analysis Method was prescribed for use by the Copermittees no later than January 31, 2010 and, therefore, frames the information presented below.

10.2 GENERAL BUDGET INFORMATION

The San Diego County Regional Airport Authority Act, the Authority's enabling legislation, frames the financial parameters of the Authority. As a financially self-sufficient agency, the Airport Authority does not rely on taxpayer dollars or any city or county funds to operate. The Authority

operates on a fiscal year that runs from July 1 through June 30. The expense budget is comprised of costs for salaries, wages, benefits, operating equipment and systems, safety and security, maintenance, utilities, contractual services, business development costs (including advertising and promotional activities), various property lease payments, debt service, and capital improvements.

The bulk of expenditures related to the implementation of the SWMP pass through the Environmental Affairs Department and the Facilities Management Department. The Environmental Affairs Department is responsible for administrative functions within the Stormwater Management Program, including fiscal analysis. The Environmental Affairs Department staff carries out the administrative activities for the program, including: 1) general program budget analysis and planning; 2) inspections and enforcement; 3) monitoring and reporting; 4) coordination and involvement with the Municipal Permit Copermittees and agencies; 5) assistance to other groups outside the department; 6) internal and external training, workshops, and public events; and 7) helping to secure the materials and equipment necessary to perform required tasks. The Facilities Management Department is generally responsible for the operation and maintenance (O&M) aspects of the program, including: 1) inspection and maintenance of the storm drain system; 2) maintenance of facilities and grounds; 3) securing the materials, equipment and vehicles necessary to perform required tasks; and 4) supporting the management of the Authority's wastes.

The remaining expenditures flow through the Authority's Capital Improvement Program (CIP). The Capital Improvement Program is a rolling 3 to 5 year program that provides for critical improvements and asset preservation, including environmental pollution prevention needs.

10.3 FISCAL ANALYSIS METHODS

The FY09-10 Annual Report represents the first time that the Authority has used the Copermittee Fiscal Analysis Method to conduct and present such a reveiw. As such, there have been changes to the methodology originally established by the Copermittees.



10.4 FISCAL YEAR 2009-2010 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

Financial resources expended by the Authority to implement the SWMP are presented in the three categories outlined in the Fiscal Analysis Method, namely, Jurisdictional, Watershed, and Region. The total expenditures for FY09-10 are presented in Table 10-1 and equal \$2,637,910.

A) Jurisdictional Expenditures

The annual costs to implement the Jurisdictional elements of the SWMP include the overal program administration and the costs incurred for staff, contract services, and materials and equipment for each of the program components listed in Table 10-1. The bulk of the Jurisdictional costs are associated with staff and contract services associated with the Municipal Component and represent the efforts expended by the Environmental Affairs and Facilities Management Departments. In addition to the expenditures required to ensure compliance with the Municipal Permit, the Industrial Component listed in Table 10-1 also includes contract services costs for sampling and monitoring required to ensure compliance with the General Industrial Permit. The IDDE Component costs presented in Table 10-1 also include contract services costs for the sampling and monitoring that is part of the dry weather monitoring program. All Capital Improvement Program costs associated with the Authority's stormwater management program are included in the Special Investigations Component presented in Table 10-1.

B) Watershed Expenditures

The annual costs to implement the Watershed elements of the San Diego Bay Watershed Urban Runoff Management Plan generally only fall into the categories of administration and watershed activities. Administration costs include Authority staff time at meetings, communication and coordination with the Watershed Copermittees, and data compilation and reporting. The costs incurred for watershed activities include staff, contract services, and materials and equipment for those watershed activities implemented by the Authority (see San Diego Bay Watershed Urban Runoff Management Program 2008-2009 Annual Report, Appendix D, available at www.projectcleanwater.org/pdf/wurmp/sdbay_annual_report_08_09.pdf).

TABLE 10-1 STORM WATER MANAGEMENT PROGRAM EXPENDITURE SUMMARY FOR FY09-10

Description	Costs
A. Jurisdictional Components	
1. Administration	\$38,000
2. Development Planning	\$19,000
3. Construction	\$43,600
4. Municipal	\$1,888,600
5. Industrial	\$148,000
6. Residential	\$0
7. IDDE	\$106,000
8. Education	\$61,150
9. Public Participation	\$42,150
10. Special Investigations	\$95,500
11. Non-emergency Firefighting	\$9,500
Jurisdictional Total	\$2,451,500
B. Watershed - San Diego Bay Watershed	
1. Administration	\$1,800
2. Watershed Activities	\$154,000
WatershedTotal	\$155,800
C. Regional	
1. Administration	\$7,650
2. Copermittee Cost Share	\$22,960
Regional Total	\$30,610
TOTAL COSTS	\$2,637,910



C) Regional Expenditures

The annual costs to implement the Regional elements of the San Diego County Regional Urban Runoff Management Plan generally only fall into the categories of administration and the Authority's share of the cost for regional activities. Administration costs include Authority staff time at meetings, communication and coordination with the Copermittees, and data compilation and reporting. The shared costs represent the Authority's obligations to support Copermittee staff, contract services, and materials and equipment for regional activities such as regional workgroups, wet weather monitoring, and public education and outreach.

10.4.2 FUNDING SOURCES

The Authority has four sources of revenue: 1) airline revenue; 2) non-airline revenue; 3) non-operating revenues; and 4) investment earnings. Airline revenue is primarily from landing fees, terminal rents, and security related fees. Non-airline revenue is comprised of public parking fees, terminal and other concessions, rental car fees, and ground rents. Non-operating revenue is primarily passenger facility charges (PFCs) and federal grant receipts collected to fund capital improvement projects. To ensure that the budget is adequately funded, the Finance Division prepares a revenue budget that incorporates budget expenditure requests into a rate-setting formula to determine projected rates, fees and charges to the airlines and other tenants.

Funding sources for the Capital Improvement Program projects include Federal Aviation Administration (FAA) Airport Improvement Program (AIP) grants, PFCs, airport operating revenues, airport revenue bonds, and short-term borrowing using commercial paper.

10.5 PROGRAM REVIEW AND MODIFICATION

The Authority last revised the SWMP on March 24, 2008. Given the adaption of the Fiscal Analysis Method by the Copermittees in January of 2009, the fiscal analysis methodology presented in Chapter 12 (Fiscal Analysis Component) of the SWMP is being updated to incorporate the standardized method.

Storm Water Management Plan - Municipal Stormwater Permit





11 EFFECTIVENESS ASSESSMENT COMPONENT

11.1 INTRODUCTION

The Authority continues to evaluate the effectiveness of the stormwater management program in both the short- and long-term. The San Diego Municipal Copermittees developed, and continue to develop, criteria that allow for an assessment of the effectiveness of stormwater management efforts implemented in accordance with the Municipal Permit. In 2003, the Copermittees produced "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" (Framework) as a guidance document. The concepts developed in the Framework have since been incorporated into the Municipal Permit. The Framework allows the Authority to conduct an assessment of: a) SWMP implementation; b) program effectiveness at improving stormwater discharge and receiving water quality; c) identification of management measures proven to be ineffective in reducing urban runoff pollutants and flow; and d) identification of any changes necessary to ensure the effectiveness of the program. The following presents both a narrative assessment of each component of the Authority's stormwater management program during FY09-10 and an assessment of the program in terms of the Framework. As a logical extension of the assessment, this chapter also identifies any improvement or degradation observed in water quality.

11.2 EFFECTIVENESS ASSESSMENT RESULTS

11.2.1 NARRATIVE ASSESSMENT OF PROGRAM COMPONENTS

Chapters 2 through 10, and 13 of this report outline the Authority's implementation of program components during FY09-10. A narrative assessment of each program component and identification of the strengths and weaknesses of the components are presented here. Taken as a whole, the SWMP is generally effective and in compliance with the Municipal Permit.

The Municipal, Industrial, and Commercial Components of the SWMP are the backbone of the stormwater management program at the airport. The Municipal, Industrial, and Commercial Components of the SWMP are designed to comply with both the Municipal Permit and the General Industrial Storm Water Permit. These components are considered to be well-defined and properly implemented. Although the programs have been expanded to include implementation of stormwater management practices related to roads, parking lots and recycling, most of the program elements of the Municipal Component have been in place since the 1990s when airport operations were first required to comply with the General Industrial Storm Water Permit.

The Land Use Planning Component of the SWMP focuses on the Airport Master Plan and the implementation of the Authority's SUSMP process. As noted in Chapter 2 of this Annual Report, the Airport Master Plan was adopted in May of 2008, and the Authority SUSMP was revised in March of 2010. Three (3) of the development projects initiated at the airport in FY09-10 were subject to the SUSMP process. The Land Use Planning Component of the SWMP remains effective.

The Environmental Affairs Department continues to take an active role in pre-construction project meetings and regular project progress meetings with construction contractors and relevant Authority staff. The Environmental Affairs Department also continues to inspect construction activities at a frequency in excess of the Municipal Permit requirements. The Construction Component of the SWMP is considered to be effective.



Information related to the IDDE component of the SWMP is not required for submission to the RWQCB until December of each year. Nonetheless, based on preliminary review of the data currently being compiled, the IDDE Component of the SWMP is considered effective.

The Education Component of the SWMP has been designed to increase public knowledge about stormwater issues and concerns both at the airport and throughout the San Diego Bay watershed. The tables included in Chapter 8 of this Annual Report outline the training and outreach conducted during FY09-10. The education and outreach efforts continue to be evaluated and improved in an attempt to strengthen the effectiveness of this component of the program.

Chapter 9 of this Annual Report notes that numerous meetings either held by or attended by the Authority Board or staff which represent significant opportunities for public participation. In short, the Public Participation Component remains an effective element of the SWMP.

Finally, Chapter 10 of this Annual Report demonstrates that the Authority has sufficient financial resources to implement the SWMP. The analysis presents the expenditures for FY09-10, the budget for FY10-11, the source of the funds, and a description of the use of these funds.

11.2.2 PROGRAM ASSESSMENT USING THE ASSESSMENT FRAMEWORK

The Authority recognizes the importance of evaluating the effectiveness of program components and the program as a whole. The following assessment of the Authority's stormwater management program is based on the Framework noted above. The Framework builds upon a foundation of basic program activity assessments (Program Assessment element) and moves towards a water-quality based assessment (Water Quality Assessment element) to evaluate the overall effectiveness of the program (Integrated Assessment element). The Framework uses direct and indirect measurements of program effectiveness, employs methods to estimate pollutant loads, and incorporates discharge and receiving water quality monitoring. The Framework presents a six-tier hierarchy of program outcomes that can be used independently or in combination to evaluate effectiveness. The six levels of assessment outcomes are listed below:

Level 1 - Compliance with Activity-based Permit Requirements

Level 2 - Changes in Knowledge/Awareness

Level 3 - Behavioral Changes and BMP Implementation

Level 4 - Load Reductions

Level 5 - Changes in Discharge Quality

Level 6 - Changes in Receiving Water Quality

The Authority has adopted the Framework planning and implementation processes to conduct pollutant source characterization, select appropriate BMPs, target the outcomes of BMP implementation, and identify adequate measures of program effectiveness. The application of the Framework to the Authority's stormwater management program follows.

Level 1 - Compliance with Activity-based Permit Requirements

The Municipal Permit requires the establishment of specific urban runoff management program components, activities, and frequencies, with the assumption that these particulars will reduce urban runoff pollution and improve receiving water quality. The degree to which the activities required by the Permit are implemented constitutes the first level and foundation of the Framework program assessment hierarchy. Tracking this information over time allows the Authority to assess consistent and incremental program improvements. Table 11-1 presents the activity-based requirements of the Permit and the Authority's implementation of these requirements during FY09-10.

Level 2 - Changes in Knowledge/Awareness

One of the desired outcomes of the Authority's stormwater management program is a change for the better in the knowledge, awareness, or attitudes of staff, tenants, and the general public. A major goal of the Authority's SWMP education and public participation efforts is to instill knowledge and awareness about stormwater management issues in these target audiences.



TABLE 11-1 ASSESSMENT OF ACTIVITY-BASED PERMIT REQUIREMENTS

Permit Section	Activity	Identified	Completed
F.1 Land Use	Number of projects subject to SUSMP requirements	3	3
F.2 Construction	Number of high priority construction sites subject to inspection	5	5
	Number of medium/low priority construction sites subject to inspection	11	11
	Number of enforcement actions taken	0	0
	Number of construction projects referred to RWQCB for enforcement of State General Construction Storm Water Permit	0	0
F.3.a Municipal	Number of high priority municipal operations subject to inspection	23	23
	Quantity of debris and material removed from the MS4 (in tons)	Not Applicable	7
	Quantity of debris and material captured by street sweeping (in cubic yards)	Not Applicable	119
	Quantity of debris and material captured by parking lot sweeping (in cubic yards)	Not Applicable	4,274
	Quantity of debris and material captured by airside sweeping (in tons)	Not Applicable	76
F.3.b. Industrial and	Number of high, medium, or low priority industrial/commercial operations subject to inspection	30	30
Commercial	Number of enforcement actions taken	50	50
	Number of operations referred to RWQCB for enforcement of State General Industrial Storm Water Permit	0	0
F.4 Education	Number of stormwater educational materials/brochures	Not Applicable	300
	Number of stormwater education mechanisms for the general public	Not Applicable	8
	Number of stormwater training mechanisms for staff	Not Applicable	14
	Number of stormwater training mechanisms for tenants	Not Applicable	11
	Number of stormwater training mechanisms for construction project managers, developers and contractors	Not Applicable	7
F.5 IDDE	The IDDE Component will be reported in the IDDE Annual Report in December 2010.		
F.6 Public Participation	Number of types of participation mechanisms for staff and tenants	Not Applicable	6
	Number of types of participation mechanisms for the general public	Not Applicable	7

The Authority made revisions to its education program and assessment approach during FY09-10. The number of hits to the Authority's environmental web page was still monitored, but pre- and post-training tests to assess knowledge and awareness changes associated with educational presentations were discontinued.

The Authority's web site, particularly the environmental web page, provides staff, tenants, and the general public access to information regarding stormwater management efforts at SDIA, including the SWMP itself. Making basic stormwater management information available should increase public awareness of stormwater management concerns. The environmental web page had a total of 3,200 hits during the reporting period. This represents an average of approximately 62 hits per week. There were16,500 hits reported in FY08-09, 50,000 hits reported in FY07-08, 278 hits reported in FY06-07, 88 hits reported in FY05-06, 370 hits reported in FY04-05, and 120 hits reported in the FY03-04 Annual Report. These seven years of data are not yet indicative of a trend. As such, the Authority will continue to track the number of hits to the environmental web page in future annual reports in an effort to assess the utility of this information in drawing conclusions about the effectiveness of the Authority's stormwater management program.

All Authority staff are required to attend mandatory annual stormwater pollution prevention awareness training. FY09-10 was the second year the Authority attempted to use the pre- and post-training tests as an assessment mechanism. In FY08-09, quantifiable results were obtained from the particular pre- and post-test mechanism in use, but in FY09-10, the test mechanism was easily subverted and the testing produced poor and inconclusive results. During FY09-10, the Authority began a process to convert the annual stormwater training into an online computer course. Once this conversion is complete, employees will still be required to take a pre and post test, but they will also be required to obtain a score of 100% correct on the post test in order to pass the training and fulfill their annual training requirement. Using this method, scores from the pre-tests can be compared from year to year to see if individual employees are retaining the knowledge presented to them in the annual stormwater trainings.

During FY08-09, the Environmental Affairs Department implemented a new, more focused training and education program for the employees of the Facilities Management Department. Like all Authority departments, the Facilities Management Department already receives annual mandatory



stormwater pollution prevention awareness training. However, a more robust training program was designed for this department since many of their required work activities and the materials they use have a significant potential to impact storm water runoff. For FY09-10, this training was revised and improved, and the pre- and post-tests were eliminated. The training included a one hour presentation focusing primarily on stormwater issues including pollutants of concern at the airport, proper BMP implementation, spill response procedures, and a demonstration of storm drain protection procedures and appropriate drain protection equipment options.

Table 11-2 presents an overview of the training sessions held to improve knowledge and awareness of Authority employees about stormwater concerns during FY09-10.

TABLE 11-2 STORMWATER TRAINING FOR AUTHORITY EMPLOYEES DURING FY09-10

Name of Training	Date	Number of Attendees
Annual Mandatory Stormwater Pollution Prevention Awareness Training	9/30/09	44
Annual Mandatory Stormwater Pollution Prevention Awareness Training	11/18/09	68
Annual Mandatory Stormwater Pollution Prevention Awareness Training	12/1/09	87
Annual Mandatory Stormwater Pollution Prevention Awareness Training	2/16/10	37
FMD Annual Environmental Training – 1st Shift	2/24/10	21
FMD Annual Environmental Training – 2nd Shift	2/24/10	12
FMD Annual Environmental Training – 3rd Shift	3/3/10	13
Annual Mandatory Stormwater Pollution Prevention Awareness Training	5/3/10	25
350 total Airport Authority employees were targeted for annual stormwa	ter training	Total Trained

The Authority continues its dedication to the improvement of knowledge and awareness of stormwater issues through education and outreach efforts. Due to economic constraints in FY09-10, the Authority has focused on improvement of existing education methods known to produce successful outcomes, rather than expansion of the program. As seen in Chapter 8 of

this report, these efforts included terminal displays and signage, Tenant Advisories, school presentations and partnerships, and training and outreach events. The impact of these efforts continues to increase Authority staff, airport tenant, and the general public's knowledge and awareness of stormwater pollution prevention.

Level 3 - Behavioral Changes and BMP Implementation

One primary objective of the Authority's stormwater management program is to produce significant and lasting changes in the behavior of target audiences. Ideally, behavioral changes are expressed in terms of consistent BMP implementation. The Framework indicates that estimating or quantifying BMP implementation is one component of a successful effectiveness assessment strategy.

Previous Annual Reports noted that the Authority had conducted site-wide audits of BMP implementation by the Authority staff and airport tenants in 2005, 2007, and 2009. A detailed discussion of the site audit program was presented in the effectiveness assessment section of the FY05-06 Annual Report. The same methodology was again used to conduct the audits in 2007 and 2009.

The 2009 site audit was organized around the BMP categories contained in the SWMP. During the audit, staff and tenants were questioned about the level of implementation of required BMPs, including treatment or structural BMPs, for each potential pollutant source. BMP implementation rates were then calculated for the Authority as a whole, individual tenants, and four general land use categories. Implementation rates alone did not fully describe how well BMPs were implemented by any particular operation. Other factors needed to be considered, such as the complexity of the operations and the operational complexity of BMPs required for implementation. The BMP implementation rates and total complexity scores for operations conducted by either Authority staff or tenants are presented in the August 2009 Draft Site Audit Report.

The results of the 2009 audit found that: a) no tenants scored a BMP implementation rate less than 80 percent; b) nineteen scored between 80 to 90 percent; and c) 13 scored 90 percent or higher. These results indicate an overall improvement in BMP implementation at SDIA over the 5 year time period that the three audits were conducted.



The site audits conducted in 2005, 2007 and 2009 also identified deficiencies in BMP implementation and provided a list of recommended changes for the Authority's stormwater management program. The findings of these site audits are to be used to direct program improvements, as well as increase awareness, and help to produce changes in behavior and BMP implementation rates. Although BMP implementation rates as reported by the audits are relatively high, inspection results still continue to show imperfect application of BMPs in the field. During the FY09-10 Annual Inspection (also called the ACSCE, see Chapter 5), 26 out of 30 tenants (including the Authority) were found to have deficiencies in their BMP implementation but the majority of those occurrences were minor implementation issues, such as lids not being closed on outdoor trash receptacles. In response to this observation, the Authority began the process of developing a tenant BMP education program in FY09-10. The first step of this process, which was completed as a part of the Annual Inspection (or ACSCE), was the development of a survey to assess the perceived need and interest of tenants in further stormwater education provided by the Authority. Results of the survey showed that while only approximately 41% currently have existing stormwater training as a part of their company's education program, 89% of tenants were interested in additional stormwater education being provided by the Authority. The next steps will be to 1) look at the latest audit results and the inspection program data to determine the BMPs most commonly improperly implemented and 2) develop training materials focused specifically on those BMPs.

Level 4 - Load Reductions

The primary goal of BMP implementation is to reduce the pollutant loadings to stormwater discharges and, in turn, effect improvements to receiving water quality. Evaluating load reductions related to BMP implementation is one part of the Authority's program assessment process. By working to establish Framework Level 4 outcomes, the Authority hopes to understand the relationship of BMP implementation to water quality improvement. The site audit, discussed in the Level 3 program assessment above, began the identification and characterization of the pollutants of concern that impact stormwater quality at the airport. The results of the 2005 site audit also influence the current dry weather and wet weather monitoring programs. The continued development of both the site audit process and the implementation of the SWMP sampling plans (appendix D of the SWMP) are designed to provide the Authority with mechanisms for estimating load reductions related

to the improved implementation of existing BMPs and/or the implementation of new BMPs as part of the Authority's stormwater management program.

The Authority is continually evaluating the contribution of specific sources to stormwater runoff at the airport. Based on the site audits, the activities and sources most closely associated with the airport operations, industrial, and ground transportation land use categories are assumed to be the primary contributors of potential pollutants. The three probable contributors of the copper and zinc associated with both the airport operations and ground transportation land use categories are: 1) vehicle and aircraft use and emissions; 2) galvanized metal structures; and 3) atmospheric deposition. The probable contributors of copper, zinc and other metals associated with industrial land uses are: 1) vehicle, equipment, and aircraft maintenance and emissions; 2) outdoor storage and use of paints, motor oils, inoperable vehicles, etc.; 3) industrial spills and releases; and 4) other industrial activities.

The site audits identified copper and zinc as the primary pollutants of concern and so the source identification element of the wet weather monitoring program focuses on these pollutants. The "source identification sampling element" of the Authority wet weather monitoring program is designed to evaluate sources of the airport's pollutants of concern in terms of annual mass loading in stormwater runoff. Once the sources are well established, the Authority will evaluate the potential for reduction through BMP implementation and the best combination of BMPs to achieve pollutant load reductions. Fourteen sampling locations are being used to characterize the quality of non-industrial stormwater runoff associated with vehicle and aircraft use and emissions, atmospheric deposition, and galvanized metal structures, particularly metal roofs. Sampling results are reported in the IDDE Annual report in December of each year. Sampling data from the 2009 IDDE Annual Report continues to show results consistent with historical data for pollutants of concern at the Airport.

The comparison of relationships between pollutant source areas and the sampling sites suggests that roofs are a larger source of zinc than other source areas and that the runway/ramp area is a larger source of copper. The total copper loads for the parking lots and airport operations are similar and there is no statistical difference between them. Ranking the pollutant sources from highest to lowest pollutant load, the list appears as follows:

1) for total copper - runway/ramp, roofs, airport operations, parking lots;



2) for total zinc - roofs, runway/ramp, parking lots, airport operations. In FY08-09 the Authority implemented a downspout filter pilot study to address these pollutants but the study was discontinued at the beginning of FY09-10 due to inconsistent water quality benefits and prohibitive cost and maintenance factors.

Load reductions can also be generally characterized by the amount of potential stormwater pollutant materials that were removed during the fiscal year. The following totals reflect wastes and potential pollutants that were removed in FY09-10.

- Street sweeping debris (landside) 119 cy
- Parking lot sweeping debris 8,344 cy
- Airfield cleaning debris (sweeping, scrubbing, rubber removal) 76 tons
- MS4 cleaning debris 7 tons
- Pet waste bags 733 bags

The outcomes from completed and future site audits, as well as the results from the Authority's dry and wet season monitoring programs will be used to prioritize stormwater management activities and identify potential program improvements. By working to establish Framework Level 4 outcomes, the Authority hopes to gain an understanding of the relationship of required BMPs to water quality improvement. To avoid specious conclusions, these load reduction estimation exercises often require large datasets collected over time. The Level 4 assessment provided here outlines a process for estimating future load reductions and provides baseline information from which to draw future comparisons.

Level 5 - Discharge Quality

Changes in discharge quality should be the direct result of successful stormwater management program implementation. However, establishing relationships between discharge quality and specific program components can be difficult. The two NPDES permits applicable to SDIA require that the quality of stormwater runoff from SDIA not cause or contribute to the violation of applicable water quality standards. Although neither of these two NPDES permits contains effluent limitations, they both require monitoring programs. The Municipal Permit requires a jurisdictional dry weather monitoring program. The results of the Authority's dry weather monitoring program will be presented in the FY09-10 Annual IDDE Report in December. The General Industrial Stormwater Permit requires a facility to

conduct wet weather stormwater sampling. The results of the Authority's wet weather monitoring program will also be presented in the Annual IDDE Report.

Preliminary analysis of the 2010 dry weather sampling data and FY09-10 wet weather sampling data continues to match the historical trend of exceeding benchmarks for copper and zinc. FY09-10 wet weather sampling results median concentrations were calculated for the compliance sampling pollutants of concern and they were compared to the benchmarks, to determine the number of benchmark exceedances that occurred. Specific conductivity, oil and grease, total suspended solids, total zinc and ethylene glycol did not exceed the benchmarks. Total copper and total iron both had exceedance frequencies of 95%. Biologic oxygen demand (BOD), dissolved copper, and dissolved zinc each exceeded the benchmarks in over 50% of the samples. The remaining pollutants of concern exceeded the benchmarks in 45% or less of the samples.

As previously stated, the Authority's wet weather monitoring program (Appendix D-2 of the SWMP) addresses the runoff sampling requirements of the General Industrial Storm Water Permit and provides an indication of discharge quality. In developing the wet weather monitoring program, the Authority evaluated the quality of the existing historic stormwater sampling data set and identified representative sample locations and the amount of data sufficient to provide adequate statistical power in evaluating long-term program effectiveness. Development of the wet weather monitoring program also considered the variability in annual precipitation patterns at the airport and the impact of such variability on program implementation and on the assessment of long-term program effectiveness. The FY09-10 wet weather season is only the fourth season in which the wet weather monitoring program was conducted in accordance with the SWMP. Over time, a larger dataset will allow the Authority to evaluate changes in discharge water quality, and perhaps, relate improved discharge water quality to improvements in the Authority's stormwater management program.

Level 6 - Changes in Receiving Water Quality

The ultimate objective of the Authority's stormwater management program is to protect the water quality of San Diego Bay, the water body receiving discharges from the Authority's MS4. Level 6 measures can be addressed through outcomes such as compliance with regulatory benchmarks,



protection of biological integrity, and beneficial use attainment. The Authority has not conducted any receiving water quality monitoring independent of the Copermittee Receiving Water Monitoring Program, since neither of the two NPDES permits currently applicable to activities at SDIA requires that the Authority monitor receiving waters and/or benthic communities to detect the potential impacts of stormwater runoff. The Authority must rely on studies conducted by others to evaluate Framework Level 6 outcomes and attempt to establish relationships, if possible, between receiving water quality and specific program components of the Authority's stormwater management efforts.

The receiving water quality issues in the vicinity of the airport that have been studied or noted by others have generally resulted from the activity related to federal Clean Water Act (CWA) Section 303(d) requirements. The waters of San Diego Bay in the vicinity of the airport were listed on the 2002 CWA Section 303(d) list of water quality segments for 1) benthic community effects, 2) sediment toxicity, and 3) bacteria indicators. A 2006 CWA Section 303(d) list of water quality limited segments which was adopted by the State Water Resources Control Board in October of 2006, and approved by the Environmental Protection Agency in June of 2007, includes copper as a pollutant in the marinas along Harbor Island in the vicinity of the airport. No additional listings occurred during FY09-10.

The RWQCB has been in the process of investigating the establishment of Total Maximum Daily Loads (TMDLs) for 19 of the 38 bacteria-impaired water bodies in the San Diego region in a two part study (Project I and Project II). Project I looked at indicator bacteria in beaches and creeks in the San Diego region. Project II looked at bacteria-impaired shorelines in San Diego Bay and Dana Point Harbor. At the end of FY07-08 the RWQCB adopted a Basin Plan amendment to incorporate the TMDLs developed for Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay. On June 16, 2009 the state board approved the Basin Plan amendment. In FY09-10 the Authority attended the first of several Copermittee workshops focused on the development of a Work Plan to address reference conditions at the beach and upstream for bacteria, in response to the TMDL for Indicator Bacteria for Twenty Beaches and Creeks in the San Diego Region. The Authority will continue to support Copermittee efforts to address Bacteria TMDLs and will modify future monitoring programs as necessary.

In regards to the TMDL process for benthic community effects and sediment toxicity in the vicinity of the airport, the RWQCB did not release any new information during the FY09-10 reporting period. The most recent activity remains the release of the Final Report, in June of 2005, entitled "TMDL Sediment Quality Assessment Study at the B Street/Broadway Piers, Downtown Anchorage, and Switzer Creek, San Diego, Phase II, Temporal Variability, Causes of Impacts, and Likely Sources of Contaminants of Concern." Without additional information or data, the Authority cannot draw any new inferences from this TMDL process to help measure the effectiveness of the Authority's stormwater management program in accordance with Level 6 of the Framework.

11.2.3 INTEGRATED EFFECTIVENESS ASSESSMENT

An integrated assessment of the Authority's stormwater management program uses the results of the Framework's Program Implementation Assessment and Water Quality Assessment to draw general conclusions about overall effectiveness. Based on the information discussed for Framework Level 1 through 6 outcomes above, the management measures currently being implemented by the Authority are generally effective. The Authority has demonstrated compliance with the Level 1 activity-based permit requirements. The Authority continues to improve and evaluate education and outreach efforts. The number of hits on the environmental page of the Authority web site and the continued Authority employee training program, discussed in the Level 2 assessment above, suggest that the awareness of tenants and staff appears to be on the rise. The Level 3, Level 4, and Level 5 outcome assessments above made extensive use of site audit data, including the 2009 Audit, and the results of the 2009 Dry weather and FY09-10 wet season stormwater monitoring information. The site audit information has used the baseline BMP implementation rates established by the first audit to draw some initial comparisons with the second and third audits performed in 2007 and 2009. All three audits and the stormwater sampling program have provided some insight into the pollutants of concern and their apparent loads in stormwater runoff at the airport. The audit and sampling programs will allow the Authority to more accurately assess Level 3 and Level 4 outcomes in future years. The discharge water quality information collected in FY09-10 and discussed in the Level 5 assessment above noted that discharge water quality continues to match the historical trend of exceeding benchmarks for copper and zinc. The assessment at Framework Level 6 (changes to receiving



water quality) remains a difficult and complex task, involving numerous assumptions about the relationship of runoff water quality from the airport on receiving water quality in San Diego Bay. Efforts by the Authority to refine the Level 6 assessment continue to rely on collaboration with regional monitoring due in part to the extensive resources and longer time frames generally needed to collect sufficient monitoring data from which to draw conclusions. On the whole, the Authority's stormwater management program continues to be effective at preventing, minimizing, and/or eliminating impacts to the water quality of San Diego Bay.

The Authority continues to assemble information on those factors which appear to be key for assessing the stormwater management program and for recommending improvement to the program. The Authority has developed methods to assess program effectiveness in terms of Levels 1 through 5 of the Framework. As information is collected, the Authority will continue attempts to link implementation of the program directly to discharge water quality. The Authority has also developed procedures to identify pollutants, required BMPs, and the implementation rates for the required BMPs. Over time, the Authority intends to estimate the load reductions from BMP implementation and attempt to connect those estimates to the results of runoff monitoring. As BMP implementation rates increase, it is expected that the pollutant loadings will decrease.

11.2.4 MANAGEMENT MEASURES PROVEN TO BE INEFFECTIVE

Taken as a whole, the information presented throughout this report indicates that the majority of the management measures currently being implemented by the Authority have proven to be effective. The Municipal Permit emphasizes an iterative process to improve both BMPs and stormwater management measures as a whole. As such, the Authority will continue to refine and employ the Framework and site audit methodologies discussed in this chapter to identify and enhance effective stormwater management measures and to discontinue those that prove ineffective.

11.2.5 WATER QUALITY IMPROVEMENT OR DEGRADATION

The limited water quality information discussed above notes that discharge water quality continues to match historical trends and to exceed benchmarks for copper and zinc. The results of the dry weather monitoring conducted in FY09-10 also appear to confirm copper and zinc as pollutants of concern and suggest that bacteria be closely evaluated at discreet airport locations. Continued implementation of the dry weather and wet weather stormwater monitoring programs will lead to future evaluation and validation of discharge water quality at SDIA using trend analysis and other statistical methods. The FY09-10 Annual IDDE Report will also discuss changes in discharge water quality.

11.3 PROGRAM REVIEW AND MODIFICATION

The Authority last revised the SWMP on March 24, 2008. There have been no revisions to the Effectiveness Assessment Component of the SWMP since that time.





12 Special Investigations

12.1 INTRODUCTION

Two special investigation projects addressing urban runoff at SDIA took place during FY09-10; the Downspout BMP Pilot Project initiated in 2007, and the Oval 8 Feasibility Study initiated in FY08-09. Both projects aimed to find new ways to address known pollutants of concern at SDIA. Each of these projects is discussed below.

12.2 THE DOWNSPOUT BMP PILOT PROJECT

BMP effectiveness evaluations and source sampling conducted by the Authority determined that the rooftops and runways were the largest sources of the primary pollutants of concern at SDIA (namely, copper and zinc). Begun in 2007, the Downspout Pilot Study was designed to test BMP products for treating storm water from the Terminal 1 rooftops prior to the runoff entering the storm drain system. The Authority began with an evaluation of the BMPs currently available that are designed to remove heavy metals from downspout drainage. The study looked at both the pollutant removal efficiencies and the maintenance requirements of both filters. Two technologies, the Downspout Filter and FloGard, were selected based on their footprint and cost for installation.

One of the two BMPs selected for the study, the Downspout Filter, is manufactured by Bio Clean Environmental Services, Incorporated, and is designed for commercial and industrial buildings. The Downspout Filter includes a fabric filter designed to capture debris, sediments, hydrocarbons, and heavy metals. The other BMP selected for use was the FloGard manufactured by KriStar Enterprises, Incorporated. The device includes a fossil rock filter medium specialized to filter out heavy metals, particulates, debris, and petroleum hydrocarbons. A total of four installation locations were chosen at Terminal 1; two locations for each of the two selected BMPs.

The study Sampling and Analysis Plan (SAP), prescribed that a total of six storm events be sampled over two years, starting in fall 2008. Both first-flush and grab samples were collected from the influent and effluent locations of the BMPs. The first-flush sample quantifies the constituent concentrations of the initial runoff from the Terminal 1 roof and shows the BMP filter removal efficiency for the first flush. The grab sample was collected to quantify the constituent concentrations and BMP filter removal efficiency after the initial flush. The collected samples were then analyzed for both total and dissolved copper and zinc concentrations.

In addition to collecting water quality samples, the filter units were inspected on a monthly basis to document the condition of each BMP filter and the overall condition of the entire unit. The filter media for both filters appeared unchanged over the course of the first six months of monitoring, although the ease of maintenance was quite different between the two technologies, with the Downspout Filter being significantly harder to maintain. As such, total lifetime costs (operation and maintenance) for the Bio Clean filter could be several times higher than the KriStar filter.

The analytical results for the sample collected suggested that the filters did not remove heavy metals as efficiently as expected. Stormwater samples collected during four storm events in FY08-09 showed results for both filters that had total copper and total zinc concentrations in the effluent that were higher than for the influent concentrations. Additionally, the heavy metals concentrations being reported were relatively higher than expected. Sampling conducted during FY09-10 had similar results, and the water quality benefits provided by both technologies appeared to be minimal. In light of these results, the Authority determined that these downspout filters were not an effective BMP for reducing heavy metal concentrations in roof runoff. No further testing is proposed, and no downspout filters will be installed.



12.3 THE OVAL EIGHT FEASIBILITY STUDY

In FY08-09 the Airport Authority began a feasibility study to investigate BMP technologies to treat runway runoff, with the intent that the study would lead to a pilot program to manage and treat stormwater runoff that flows from the runway and discharges into Ovals 4 and/or 8 (located between the runway approaches).

During FY08-09, the study began with a literature search to screen potential BMPs available to remove heavy metals from storm water runoff. Technologies reviewed included underground detention, sand filtration, porous pavement, biofiltration, synthetic turf, and a proprietary underground wetland treatment system. The technologies were evaluated based on their applicability considering constraints posed by both the airport operational and the natural environments. Site constraints included: 1) the space available to accommodate the BMPs; 2) height limits on any proposed BMPs; and 3) the amount of hydraulic head available.

The three candidate structural BMPs that were selected based on the initial phase of evaluation were porous pavement, synthetic turf in combination with sand filtration and a porous pavement bed, and a proprietary underground treatment system. A preliminary, feasibility level design was drawn up for each of the three selected BMPs. Using these preliminary designs, constructions costs were calculated, along with maintenance and operation costs, and monitoring costs.

In FY09-10 it was determined that the pilot project should proceed solely in Oval 8 because the capital and maintenance costs would be lower and there would be less need for fill material. After analysis to determine which of the three BMP candidates would best remove heavy metals (copper and zinc) to below USEPA benchmark levels, and have the longest operating life, it was determined that porous concrete and synthetic turf be the focus of the pilot study. The next steps in the pilot study are to conduct a geotechnical investigation of the proposed project site, proceed with the design of the candidate BMPs, and identify a funding source for full project implementation.

12.4 CLOSING

Due to lack of significant evidence of water quality benefit, the downspout filter study was discontinued in FY09-10. The Oval 8 pilot study remains in the FY10-11 budget, but is currently on hold as a cost control measure that is subject to monthly review and evaluation.

There were no other special investigations underway at SDIA during the FY09-10 reporting period that resulted in any additional data or information relevant to urban runoff that has not already been presented elsewhere in this Annual Report.





13 Non-Emergency Fire Fighting

13.1 INTRODUCTION

Non-emergency fire fighting is discussed in Section 3 of the SWMP. Non-emergency fire fighting flows at SAN generally fall into two categories: a) discharges from building fire suppression systems during installation, maintenance, or testing; and b) discharges of potable water and/or potable water mixed with fire fighting foaming agents from the ARFF rigs during fire fighting practice drills and other exercises. This chapter of the Annual Report provides a brief description of significant non-emergency fire fighting activities that occurred during FY09-10.

13.2 SOURCE CHARACTERIZATION

Potable water that has been left to stand in a building fire suppression system has a significant potential to carry pollutants, especially when left to stand over time, as the water tends to stagnate and undergo various physical and chemical changes. Potable water and/or potable water mixed with fire fighting foaming agents discharged to the ground during fire fighting training can become a contaminated source of water and/or a transport mechanism for pollutants. Discharges of potable water from the ARFF rigs during fire fighting practice drills and other exercises has the potential to transport

pollutants to receiving waters if the discharge is allowed to flow through areas where significant materials, oil, sediment, trash, and construction debris may potentially be carried into the storm drain system.

13.3 BEST MANAGEMENT PRACTICES

Control measures to address the potential for non-emergency fire fighting flows to transport pollutants to receiving waters are described in Section 3.4 of the SWMP. For fire suppression system flushing, the Authority requires the use of one of the following procedures: 1) capture and/or direct discharge to the sanitary sewer system on or off site; or 2) submission and approval of a workplan signed by a registered civil engineer, detailing how the water will be capture, stored, and tested for water quality, and recommending the treatment necessary prior to discharging to the airport storm drain system.

Fire fighting training by the fire fighters stationed at the ARFF typically involves the discharge of potable water from the ARFF fire fighting vehicles. The Authority requires the use of the applicable non-stormwater management BMPs found in Appendix B of the SWMP to control these discharges. The Authority also lists several additional control measures in Section 3.4.3 of the SWMP to control these discharges, the focus of which generally require the discharge of water in a manner and direction that maximizes either or both the time and/or distance required for the discharge to reach the storm drain system, such that the potential for evaporation is maximized, and also prevents the discharge from contacting surface pollutants in the path of the discharge.

The ARFF fire fighting vehicles are flushed for one to two minutes every day using only potable water as part of the maintenance routine and testing. ARFF fire fighting vehicles are also used to perform fire fighting foam testing twice a year and dry chemical suppressant (Purple K) testing once a year. The foam tests use approximately 1,000 gallons of water and 50 gallons of foaming agent in each vehicle. The chemical suppressant tests only use a few pounds of the material.



All three types of testing are performed on a large concrete pad called the north ramp area, just to the east of ARFF facility. The entire north ramp area drains through two oil water separators, although these systems are only used as a back-up fail-safe. The slit trench storm drain inlet to which the north ramp drains is blocked off from the stormwater conveyance system using sandbags prior to and during the tests. This allows the foam or chemical suppressant to be captured on the north ramp and/or in the slit trench, but prevents the foam or chemical suppressant from entering the stormwater conveyance system. All of the foam or chemical suppressant is flushed into the slit trench and then vacuumed into a tanker truck for proper disposal in the sanitary sewer under proper permits.

13.4 PROGRAM IMPLEMENTATION

Fire fighting chemical suppressant testing was not performed during FY09-10. Fire fighting foam testing was performed on July 15, 2009 and May 13, 2010.

13.5 PROGRAM REVIEW AND MODIFICATION

The Authority last revised the SWMP on March 24, 2008. There have been no revisions to the Non-Emergency Fire Fighting Component of the SWMP since that time.

Storm Water Management Plan - Municipal Stormwater Permit





14 JURMP REVISIONS

As noted in Chapter 1 of this report, the Authority uses the term Storm Water Management Plan (SWMP) when referring to the document prepared in response to the Municipal Permit requirements for a Jurisdictional Urban Runoff Management Plan (JURMP). The latest version of the SWMP was submitted to the RWQCB on March 24, 2008. Based on the program review conducted in preparing this annual report, the following revisions are proposed for the SWMP. The revisions are presented in two categories: 1) those revisions discussed in this report; and 2) additional revisions identified during compilation of this report, but not discussed herein.

14.1 REVISIONS DISCUSSED IN THE ANNUAL REPORT

- 1. Chapter 2 Development Planning Component Updated SUSMP, March 24, 2010.
- **2.** Chapter 3 Construction Component Updates to the Monthly Inventory of Active Construction Sites and related tables.
- **3.** Chapter 5 Industrial and Commercial Component Updates to Inventory of Industrial/Commercial Sites/Sources and related tables.
- **4.** Chapter 10 Fiscal Analysis Component Updated fiscal analysis methodology to incorporate the Standardized Fiscal Analysis Method and Format (Fiscal Analysis Method) adopted by the Copermittees in January of 2009.

14.2 ADDITIONAL REVISIONS PROPOSED FOR THE SWMP

1. Updates to Table 2 – Key (Authority) Personnel (responsible for SWMP implementation).





15 CONCLUSIONS AND RECOMMENDATIONS

15.1 INTRODUCTION

The FY09-10 Annual Report summarizes the Authority's efforts to manage stormwater at SDIA in compliance with the San Diego Municipal Permit. Based upon this Annual Report and the Annual Reports for FY03-04, FY04-05, FY05-06, FY06-07, FY07-08, and FY08-09, the Authority believes the stormwater management program at SDIA is adequately planned, executed, reviewed, and funded. This chapter summarizes information to support a determination that the Authority stormwater management program fulfills the requirements of the Municipal Permit. Also highlighted herein are any recommendations for program improvements that may further enhance stormwater pollution prevention and control measures at SDIA.

15.2 CONCLUSIONS

Conclusions about the Authority's stormwater management program are presented in four basic categories: 1) overall program compliance status; 2) effective stormwater management program components; 3) program elements identified for improvement; and 4) revisions to the SWMP.

15.2.1 OVERALL PROGRAM COMPLIANCE STATUS

Information presented throughout this report, particularly Chapter 11 (Effectiveness Assessment Component), supports a determination that the Authority's stormwater management efforts are in general compliance with the Municipal Permit.

15.2.2 EFFECTIVE STORMWATER MANAGEMENT PROGRAM COMPONENTS

Based on the results of current program implementation and the findings of the FY09-10 effectiveness assessment in Chapter 11, the management measures currently being implemented have proven to be effective.

15.2.3 PROGRAM ELEMENTS IDENTIFIED FOR IMPROVEMENT

Again, the majority of the management measures currently being implemented by the Authority have proven to be effective. The assessment of program effectiveness in Chapter 11 did not identify any particular stormwater management program elements in need of improvement.

15.2.4 REVISIONS TO THE SAN SWMP

Proposed revisions to the SWMP, identified during this reporting period, include updates to the industrial/commercial inventory, updates to the inventory of active construction sites, updates to the table of key personnel responsible for SWMP implementation, an update to the Development Planning Component in light of the revisions to the Authority's SUSMP process (SWMP, Appendix C) made on March 24, 2010, and updates to the fiscal analysis methodology (SWMP, Chapter 12) to incorporate the Standardized Fiscal Analysis Method and Format (Fiscal Analysis Method) adopted by the Copermittees in January of 2009. A summary of these proposed revisions is presented in Chapter 14.



15.3 15.3 RECOMMENDATIONS

Following the recommendations of previous Annual Reports, the Authority continues to review and expand upon effective education and outreach efforts for staff and tenants as a means for raising general awareness of stormwater concerns and for achieving improved BMP implementation rates. The Authority strives to continue to improve this program while balancing the concerns and restrictions of the current national economic climate. Information provided in this report indicates that current education and outreach efforts are effective. Successful education efforts should lead to improved BMP implementation. The Authority will also continue to pursue funding sources for technologies and pilot projects to help address known pollutants of concern. Aside from the general recommendation to continue effective and cost-efficient implementation of existing stormwater mangement efforts, there are no further specific recommendations at this time.

15.4 CLOSING

The FY09-10 Annual Report clearly demonstrates that the stormwater management program at SDIA is adequately planned, executed, reviewed, and funded. The program generally fulfills the requirements of the Municipal Permit. The Authority strives to enhance existing stormwater pollution prevention and control measures at SDIA, to eliminate ineffective measures, and to identify, develop, and incorporate more effective measures whenever possible. Stormwater pollution prevention is just one piece of the greater environmental protection program that the Airport is dedicated to implementing.

Storm Water Management Plan - Municipal Stormwater Permit





Appendix A

SUSMP Example -Landmark Aviation Parking Lot/Gate Project

Storm Water Management Plan - Municipal Stormwater Permit	



Urban Storm Water Mitigation Plan (USWMP)

for:

LANDMARK AVIATION VIP PARKING LOT SAN DIEGO AIRPORT

2900-2904 Pacific Highway San Diego, CA

Parcel ID 2350292

Prepared for:

Landmark Aviation 2904 Pacific Highway San Diego, CA 92101 619.298.7704

Prepared by:

PBS&J

Rosanna M. Lacarra 1555 Faraday Avenue Carlsbad, CA 92008 760.603.6082 RMLacarra@pbsj.com

October 14, 2009

Urban Storm Water Mitigation Plan (USWMP)

Project Name:	Landmarl	k Aviation VIP Parking Lot	
Tract/Parcel Map		Parcel ID No. 2350292	

This Urban Storm Water Mitigation Plan (USWMP) has been prepared for Landmark Aviation. The USWMP is intended to comply with the requirements of the San Diego County Regional Airport Authority (Airport Authority) Jurisdictional Urban Runoff Management Plan (JURMP), Standard Urban Stormwater Mitigation Plan (SUSMP), and San Diego Regional Water Quality Control Board Order 2007-0001 (Permit).

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Date:

October 14, 2009

Signature:

Printed Name:

Carmen C. Kasner, P.E.

Title:

AVP, Senior Group Manager

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this USWMP. The undersigned will ensure that this plan is carried out and any amendments are submitted to the Airport Authority for approval, as appropriate, to reflect up-to-date conditions on the site consistent with the current Airport Authority JURMP, SUSMP, and Permit. Once the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement the USWMP and receive approval by the Airport Authority for any amendments. An appropriate number of approved and signed copies of this document shall be available on the subject site in perpetuity.

Date:

October 14 2000

Signature:

Printed Name:

Charlie Ferraro

Title:

General Manager

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Section 1 Project Description

PROJECT DESCRIPTION SUMMARY

1. Detailed development description:

This project involves modifying the existing building foundation to convert it to a parking lot to serve the existing Landmark Aviation facility located in the adjacent and existing building. The existing surface is concrete with some existing utilities that will be abandoned and will require filling of existing gaps in the foundation in order to have a contiguous surface that serves to accommodate 16 parking spaces (including one designated for handicap parking), the entry from Pacific Coast Highway, and the driveway.

The development will include the addition of minor landscaping features in container planters.

2. Project location and site address:

The project is located at 2900 Pacific Highway at the foot of West Palm Street in San Diego, CA. The project is under the jurisdiction of the San Diego County Regional Airport Authority. Landmark Aviation is a tenant of the San Diego County Regional Airport Authority which oversees San Diego International Airport operations.

3. Property size:

The project footprint is approximately 14,111 square feet or 0.3 acres

4. Existing use:

The existing use is not defined, other than it is an abandoned project originally slated as a building structure.

5. Type of development:

This is a commercial development defined as parking lot for USWMP purposes. It triggers priority project designation due to the size being over 5,000 square feet and greater than 15 parking spaces.

6. Impervious/pervious surface areas:

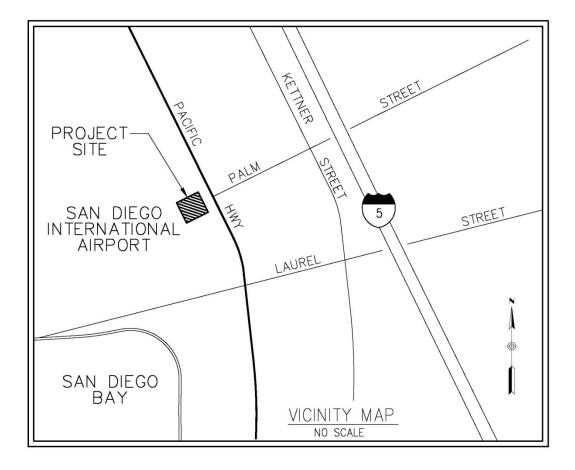
The existing percent impervious is 91 percent due to unfinished work on the project site and the final development will be 97 percent imperviousness. The change in imperviousness is an increase of approximately 6 percent.

Section 2 Project Location Map

The location of the project site is at 2900 Pacific Highway at the foot of West Palm Street as illustrated in Figures 2.1.

The site drainage is sheet flow from northeast to southwest on a flat surface. At the southwest end of the property the drainage continues onto the airplane parking area beyond the property fence. The receiving water for the airport drainage system is to San Diego Bay.

Figure 2.1 – Vicinity Map



Section 3 Project Site Assessment

This project site assessment section provides important information that is used when considering the potential water quality and hydrologic impacts that could be caused by the proposed project. This information is important when considering the appropriate BMPs to reduce identified potential impacts as well as when developing measures (low impact development, source control and treatment) to reduce those impacts.

PROJECT SITE SUMMARY

1. Zoning and land use designation:

Existing uses are associated with airport services including commercial air transportation and adjacent vehicle parking.

2. Existing and proposed drainage:

Existing and proposed drainage will remain unchanged since there is no planned grading or infrastructure modification to the already impervious surface.

3. Will the drainage system be modified by the development?

No

4. Will drainage coincide with Airport's system or flow to a lagoon, creek or ocean?

Drainage will be unchanged. The flow of runoff will be as it is at the existing facility.

5. Watershed and receiving waters:

The receiving water body is San Diego Bay and ultimately the Pacific Ocean. The watershed basin designation is 908 for Pueblo San Diego in the San Diego Regional Boards' Basin Plan.

6. 303(d) listed receiving waters:

San Diego Bay is listed for PCBs bay-wide, and the Harbor Island East Basin (in the downstream vicinity of the airport and the project site) is listed for copper.

7. Total Maximum Daily Loads (TMDLs):

No TMDLs are specifically in place for this portion of San Diego Bay.

8. Environmentally Sensitive Areas (ESA):

San Diego Bay is considered an Environmentally Sensitive Area. The project site discharges to San Diego Bay.

9. Soil type(s) and condition:

Soil type is generally not relevant to this project since no grading or new construction is planned.

Section 4 Pollutants of Concern

This section of the storm water mitigation plan identifies primary and secondary pollutants of concern. Pollutants of concern are those that are anticipated to be generated by the proposed project. Pollutants of concern are differentiated between primary and secondary priorities depending on the condition of downstream receiving waters. If the project will drain to a receiving water body that is impaired for a pollutant anticipated from that project, that pollutant is a primary pollutant of concern. Pollutants frequently identified on the 303(d) list of California impaired water bodies include sediment, bacteria, metals, nitrogen, nutrients, and pesticides (for the 303(d) list go to www.swrcb.ca.gov/tmdl/303d_lists.html). In some cases, there may be specific conditions (i.e. other known water quality problems) that warrant identifying an anticipated pollutant as a primary pollutant of concern. If there is no corresponding impairment or other water quality problem in the receiving waters for an anticipated pollutant, the pollutant is a secondary pollutant of concern.

POLLUTANTS OF CONCERN SUMMARY

1. Project categories and features:

The project category is a Parking Lot according to Table 3-1 in the San Diego International Airport USWMP.

2. Primary pollutants of concern:

According to the process outlined in Section 3.1.2 of the Authority SUSMP document, the primary pollutants of concern for this particular project are heavy metals.

3. Secondary pollutants of concern:

According to the process outlined in Section 3.1.2 of the Authority SUSMP document, the secondary pollutants of concern for this particular project are trash and debris, and oil and grease.

4. Project water quality analyses:

The existing drainage volume and flow is unchanged. The pollutants of concern will be metals and oil and grease from vehicle parking which will be treated using an infiltration trench BMP to provide high level removal. Trash and debris will be managed primarily through source control and housekeeping. No trash is anticipated to leave the property due to the existence of a chain link fence that will allow trash to trapped and removed by hand. No inlets are found on the property site that would allow trash and debris to be conveyed to the receiving water.

5. Project watershed information:

Not applicable for this small scale, minor redevelopment project.

Section 5 Hydrologic and Geotechnical Conditions of Concern/ Drainage Report

This section of the Urban Storm Water Mitigation Plan identifies hydrologic and geotechnical conditions of concern related to the proposed project. Common impacts to the hydrologic regime resulting from development typically include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. A change to a priority project site's hydrologic regime would be considered a condition of concern if the change would impact downstream channels and habitat integrity. Conditions of concern can include problems such as flooding, erosion, scour, and other impacts that can adversely and permanently affect channel and habitat integrity.

Hydrologic or geotechnical conditions of concern are identified through a review of on-site and downstream drainage paths. If the proposed project would cause or contribute flows to problems along on-site or downstream drainage paths, these problems or future problems are considered conditions of concern.

In order to identify conditions of concern, a comprehensive understanding of flow volume, rate, duration, energy, and peak flow is necessary. Often, a formal drainage study is necessary which considers the project area's location in the larger watershed, topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, and any other relevant hydrologic and environmental factors. As part of the study, the drainage report shall include:

- Field reconnaissance to observe downstream conditions
- Computed rainfall and runoff characteristics including a minimum of peak flow rate, flow velocity, runoff volume, time of concentration and retention volume; these characteristics shall be developed for the 2-year and 10-year frequency, Type I storm of 6 or 24-hour duration (whichever is the closer approximation of the site's time of concentration)

No erosion or drainage changes, including hydromodification are anticipated in this project that is only changing the use of an existing impervious site.

A drainage report was not prepared for the proposed project; however, a State of California registered civil engineer (Carmen Kasner PE, PBS&J) reviewed the project for potential conditions of concern. The following is a summary of that review.

HYDROLOGIC AND GEOTECHNICAL CONDITIONS SUMMARY

1. Project location:

Drainage from the project will remain unchanged and is part of the existing San Diego International Airport drainage system currently in place.

2. Topography, soil and vegetation:

Not applicable to this existing impervious site that will remain unchanged in regard to these conditions.

3. Impervious area:

The impervious area is changing from 12,915 to 13,673 square feet and the change is due to the filling of existing and abandoned trenches and utilities that will be abandoned with the new use.

4. Drainage features:

Drainage from the project will remain unchanged and is part of the existing San Diego International Airport drainage system currently in place.

5. Relevant hydrologic and environmental factors:

None for this project, as noted above.

6. Proposed hydrologic conditions:

None for this project, as noted above.

7. Significant impact on downstream channels and habitat integrity:

None for this project, as noted above.

8. Project hydrology analyses:

None for this project, as noted above.

9. Project watershed information:

None for this project, as not above.

Section 6 Best Management Practices (BMPs)

Minimizing a development's effects on water quality and the environment can be most effectively achieved by using a combination of BMPs which include LID Site Design, Source Control, and for priority projects shall include Treatment Control measures. These design and control measures employ a multi-level strategy. The strategy consists of: 1) reducing or eliminating post-project runoff; 2) controlling sources of pollutants; and 3) treating storm water runoff before discharging it to the storm drain system or to receiving waters.

This USWMP and the proposed BMPs for the proposed project have been developed to minimize drainage impacts identified in Section 5 and the introduction of pollutants identified in Section 4 into the municipal storm drain system and/or ultimate drainage receiving water body.

For more detailed information on the use and design of BMPs, please see the California Stormwater Quality Association New development and Redevelopment handbook. The handbook is available at www.cabmphandbooks.com. Additional information is also available in the Airport Authority's SUSMP and the County of San Diego Low Impact Development Handbook at www.sdcounty.ca.gov/dplu/LID PR.html

6.1 LID Site Design BMPs

The most effective means of avoiding or reducing water quality and hydrologic impacts is through incorporation of measures into the project design; also know as low impact development. These measures should be taken into consideration early in the planning of a project as they can affect the overall design of a project.

The design of the proposed project has considered and incorporated site design concepts as described below.

The project has an existing impervious area that is not being modified, simply re-designating the use and as a result the pollutants of concern for the new use are addressed through treatment BMPs are noted in Sections 6.2 and 6.3 below.

LID SITE DESIGN CONCEPT 1: MINIMIZE STORMWATER RUNOFF, MINIMIZE PROJECT'S IMPERVIOUS FOOTPRINT AND CONSERVE NATURAL AREAS

1. Minimizing impervious footprint:

Not applicable to an already existing impervious footprint.

2. Conservation of natural areas:

Not applicable.

3. Use of permeable paving or other surfaces:

Not applicable to an already existing impervious footprint.

4. Designing to minimum widths necessary:

Not applicable.

5. Incorporation of landscaped buffers:

Not applicable.

6. Reduced street widths:

Not applicable.

7. Maximize canopy interception:

Not applicable.

8. Use of native or drought tolerant trees/shrubs:

Will be included in the minor landscaping footprint.

9. Minimizing impervious surfaces in landscaping:

Not applicable. Landscaping will be only in planters or containers.

10. Use of natural drainage systems:

Not applicable.

11. Low flow infiltration:

An Infiltration trench will be located at the project site as described and shown in Section 6.3.

12. Onsite ponding areas or retention facilities:

Not applicable.

13. Minimize soil compaction: Not applicable.

14. Other site design features: Not applicable.

LID SITE DESIGN CONCEPT 2: MINIMIZE DIRECTLY CONNECTED IMPERVIOUS AREAS (DCIAs)

1. Draining rooftops into adjacent landscaping:

No rooftops or adjacent landscaping included as part of this project footprint.

2. Draining to adjacent landscaping:

No landscaping considered or feasible; other than container plants.

3. Vegetated drainage swales:

Not applicable to this project.

4. Site drainage system:

Not applicable. No re-design of the drainage is considered in this project.

5. Non-residential parking areas:

Parking area will drain to treatment BMP (infiltration trench) as described and shown in Section 6.3.

6. Protect slopes and Channels:

Not applicable.

6.2 Source Control BMPs

Source Control BMPs are measures focusing on reducing or eliminating post-project runoff and controlling sources of pollutants. Source Control BMPs must be included in all projects and can be represented in structural measures such as landscape, irrigation, signage considerations, materials, and design of areas; and non-structure measures such as requirements, cleaning, education, and maintenance.

According to the Airport Authority SWMP and the Tenant Summary Sheet applicable to Landmark Aviation (formerly Jimsair), source control BMPs applicable to the VIP Parking Lot are identified in the following table. Complete BMP descriptions are provided in Appendix A.

Number	BMP and Objective	Included			
	Routine Non-Structural BMPs				
SC01	Non-Storm Water Management: Non-Storm Water runoff shall be managed and prevented as described in the BMP.	Yes			
	Explanation/Description: Tenant will have on-hand the appropriate materials, equipment and employee training to prevent non-storm water discharges.				

Number	BMP and Objective	Included
SR01	Spill Prevention, Control, and Clean-up: A Spill Plan is implemented to ensure that spills are managed properly by requiring stockpiling of cleanup materials, notification of responsible agencies, disposal of cleanup materials, documentation, etc.	Yes
	Explanation/Description: Tenant will have on-hand the appropriate materials and spill control/clean-up materials for minor events from parking lot and/or vehicles.	
SC09	Building and Grounds Maintenance: Building and grounds maintenance procedures are specified; including responsible parties, and implemented to reduce pollution of drainage water.	Yes
	Explanation/Description: Includes for this project site, that trash and debris will be managed by the tenant to prevent discharge to the adjacent drainage system and the receiving waters.	
SC10	Employee Training: Practical informational materials and/or training are provided to employees to increase their understanding of stormwater quality, sources of pollutants, and their responsibility for reducing pollutants in stormwater - actual content shall be included in the O&M Plan. Employee training shall be conducted annually, at a minimum, and within one month of hire for new employees.	Yes
	Explanation/Description: Employees will be trained on the main BMP and pollutant concerns for this project site using the materials included in Appendix A or others as appropriate.	
SC18	Housekeeping: Cleaning and clean up procedures are specified and implemented to keep the parking lot free for pollutants and reduce associated pollutant discharges.	Yes
	Explanation/Description: No loading docks.	
SC16	Parking Lots: All private streets and parking lots shall include regular street sweeping practices. Details of street sweeping frequency, responsible parties, and regular sweeping scheduling.	Yes
	Explanation/Description: Period sweeping of the parking lot, driveway and entrance should be performed as recommended in this BMP found in Appendix A.	
	Source Control Structural BMPs	
TC01	Treatment BMP Maintenance: All BMP inspection and maintenance activities shall be conducted annually by October 1 st , at a minimum. Details of responsible parties, maintenance activities, and schedules can be deferred to the O&M Plan to follow approval of this document.	Yes
	Explanation/Description: Tenant is responsible for oversight of the BMPs included in the following sections and to abide by the operation and maintenance recommendations provided in this USWMP.	
SC17	Storm Drain Maintenance. Storm Drain Maintenance includes Storm Drain System Signs: Stencils or affixed signs a placed adjacent to storm drain inlets to prevent waste dumping at storm drain inlets.	Yes
	Explanation/Description: Placement of a placard or sign denoting a treatment BMP for the infiltration trench will be considered.	
SC18	Housekeeping. Housekeeping includes trash management includes placement of appropriate patron trash receptacles, trash removal and trash/litter pick-up.	Yes
	Explanation/Description: Parking lot trash receptacles near the entry will be provided.	

6.3 Treatment Control BMPs (for PRIORITY projects only)

Treatment control BMPs utilize treatment mechanisms to remove pollutants that have entered stormwater runoff and consist of public domain BMPs (identified in the following table with numbers such as TC-10). BMP numbers correspond to the California BMP Handbook.

The following table identifies the treatment control BMPs included in the proposed project.

Number	BMP and Objective	Included
	Infiltration	
TC-10	Infiltration Trench: A long narrow rock filled trench with no outlet receives water and stores it until it infiltrates into the underlying soil. It's effective for removing most pollutants but can get clogged with sediment.	Yes
	Explanation/Description: Storm water runoff from the proposed parking lot will sheet flow from northeast to southwest to an infiltration trench located along the southwest end of the project site. The infiltration trench has been designed to treat the 85 th percentile rainfall event.	
TC-11	Infiltration Basin: A shallow impoundment designed to capture and hold stormwater until it infiltrates into underlying soil. Effective at removing most pollutants but requires large areas and may be constrained by soil types.	No
	Explanation/Description: Not appropriate for this project type or footprint.	
TC-12	Retention/Irrigation: Stormwater is captured in cistern, basin, trench, or other storage area and is subsequently used for irrigation of site landscaping.	No
	Explanation/Description: Not appropriate for this project type or footprint.	
	Detention and Settling	
TC-20	Wet Pond: A constructed basin with a permanent pool of water throughout the year. Differ from wetlands because it is of greater depth. Treats stormwater runoff by settling and biological uptake.	No
	Explanation/Description: Not appropriate for this project type or footprint.	
TC-21	Constructed Wetland: A constructed basin with permanent pool of shallow water throughout most of year with substantial vegetative coverage.	No
	Explanation/Description: Not appropriate for this project type or footprint.	
TC-22	Extended Detention Basin: A constructed basin with an outlet designed to detain storm water for at least 48 hours to allow particles and pollutants to settle.	No
	Explanation/Description: Not appropriate for this project type or footprint.	
MP-20	Wetland: Similar to a constructed wetland but a self contained, manufactured module with vegetation that mimics natural wetland processes.	No
	Explanation/Description: Not appropriate for this project type or footprint.	

Number	BMP and Objective	Included				
	Biofiltration					
TC-30	Vegetated Swale: Open, shallow, vegetated channels that collect and slowly convey runoff through the property. Filters runoff through vegetation, subsoil matrix, and/or underlying soils; traps pollutants, promotes infiltration and reduce flow velocity.	No				
	Explanation/Description: An infiltration trench is proposed.					
TC-31	Vegetated Buffer Strip: Vegetated surfaces that are designed to treat sheet flow from adjacent surfaces. Removes pollutants by deceleration, settling, and infiltration.	No				
	Explanation/Description: An infiltration trench is proposed.					
TC-32	Bioretention: A soil and plant based filtration strategy that involved capturing stormwater in depressed landscaped areas. Bioretention practices are flexible strategies for using landscaping as treatment.	No				
	Explanation/Description: Not appropriate for this project type or footprint.					
	Filtration					
TC-40	Media Filter: Usually two-chambered with a pretreatment settling basin and a filter bed filled with sand or other absorptive filter media.	No				
	Explanation/Description: Not appropriate for this project type or footprint.					
MP-40	Media Filter: Similar to constructed media filter but manufactured as self-contained filtering vaults, units, or cartridges.	No				
	Explanation/Description: Not appropriate for this project type or footprint.					
	Flow Through Separation					
TC-50	Water Quality Inlet: Vaults with chambers including screens, settling areas, and/or filter media to promote settling and/or separation of pollutants from stormwater.	No				
	Explanation/Description: No inlets on this project site.					
MP-50	Wet Vault: A vault with a permanent water pool and internal features to promote settling and/or separation of pollutants from stormwater.	No				
	Explanation/Description: Not appropriate for this project type or footprint.					
MP-51	Vortex Separator: Similar to wet vaults but round and use centrifugal action as primary separation mechanism.	No				
	Explanation/Description: Not appropriate for this project type or footprint.					
MP-52	Drain Inserts: Boxes, trays, or socks with screens or filter fabric and may also include filter media. They are installed in inlets or catch basins and removal effectiveness for pollutants is generally low except for large sediment.	No				
	Explanation/Description: Not appropriate for this project type or footprint.					
	Other					
TC-60	Multiple Systems: A system that uses two or more BMPs in series to increase treatment (treatment train). Required when one BMP does not provide sufficient treatment alone.	No				
	Explanation/Description: Not appropriate for this project type or footprint.					

6.3.1 SELECTION

An infiltration trench is designed for this project to treat the stormwater runoff. An infiltration trench is a long, narrow, rock-filled trench with no outlet that receives stormwater runoff. Runoff is stored in the void space between the stones and infiltrates through the bottom and into the soil matrix. Infiltration trenches perform well for removal of fine sediment and associated pollutants such as metals and oil and grease as noted for this project in Section.

6.3.2 SIZING

Sizing is required for all treatment control BMPs to demonstrate that the BMPs will provide adequate treatment for the flows or volumes of stormwater that will be generated by the site. Separate sizing calculations and design specifications have been provided for each individual treatment control BMP and each treatment control BMP location identified for use in a project. The following information should be included in this section of the USWMP:

- Infiltration trench is designed using the Stormwater Quality Design Volume (SQDV)
- Calculations are attached in Appendix B.
- After trench preparation but prior to placement of the trench rock materials, the existing soils infiltration rate shall be verified by filling the trench with 1.0 inch of water and recording the time required for the water to infiltrate into the soil. If the rate of infiltration is less than the assumed rate of 0.5 in/hr, contact the engineer for additional requirements.

6.3.3 LOCATION

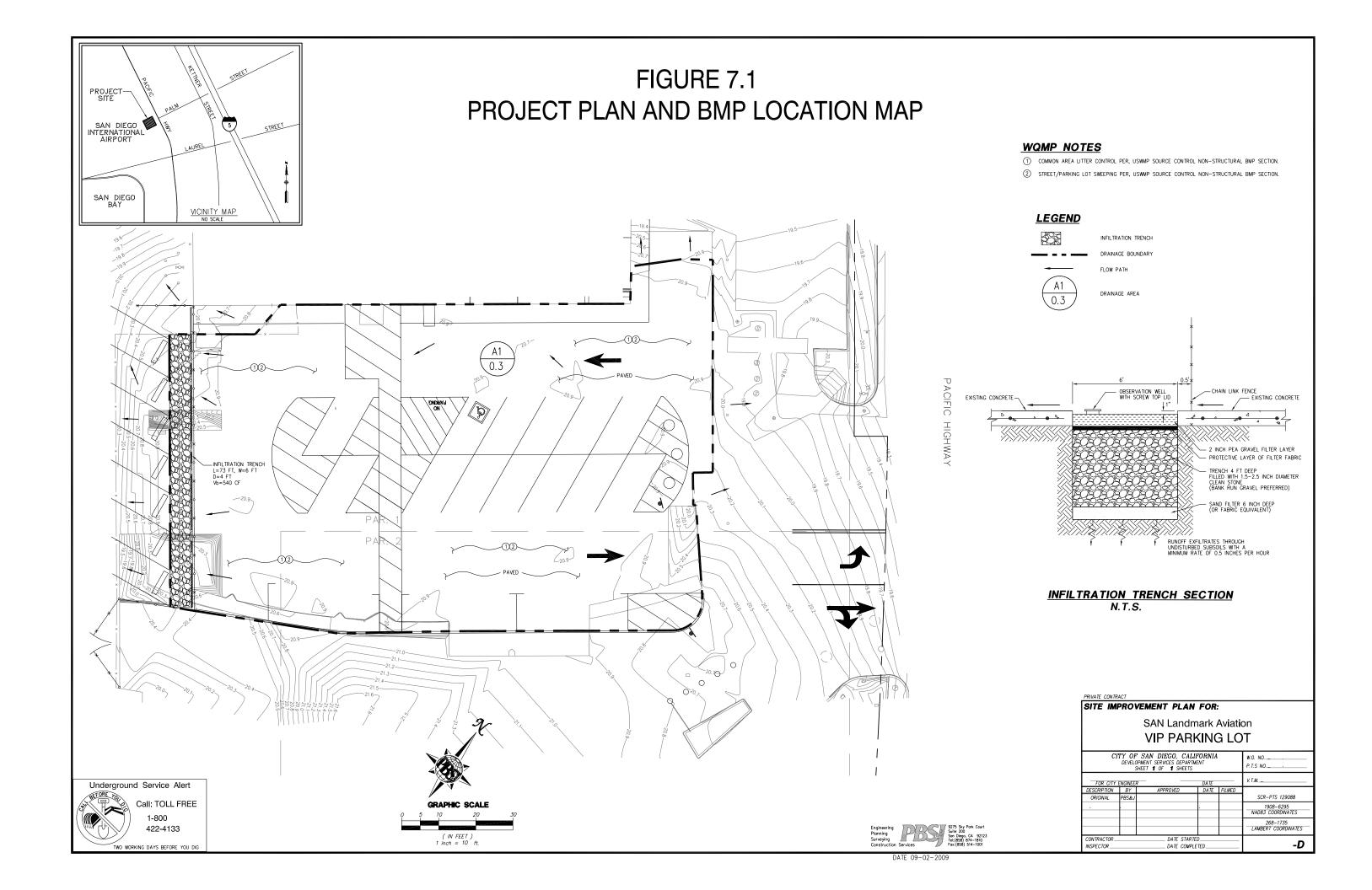
Project-based structural Treatment Control BMPs should be implemented as close to pollutant sources as possible to minimize costs and maximize pollutant removal prior to runoff entering receiving waters.

The treatment BMP or infiltration trench as been located to take into consideration the following:

- The infiltration trench is located at the furthest downstream location of the parking lot (southwest corner) to maximize capture of the "first flush" storm event and capitalize on treatment effectiveness.
- The location of the infiltration trench is shown in Figure 7.1 in the next section.

Section 7 Project Plan and BMP Location Map

Figure 7.1 illustrates the proposed project and the infiltration trench or treatment BMP that will be implemented pursuant to this USWMP.



Section 8 Stormwater BMP Maintenance

The Airport Authority does not accept stormwater structural BMPs as meeting the USWMP requirements unless an Operations and Maintenance (O&M) Plan is prepared and a mechanism is in place that will ensure ongoing long-term maintenance of all structural and non-structural BMPs.

8.1 Operation and Maintenance (O&M) Plan

An O&M Plan has been prepared for the proposed project and must be approved by the Airport Authority as part of the USWMP submittal. The O&M Plan describes the designated responsible party to manage the stormwater BMP(s), employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities, copies of resource agency permits, and any other necessary activities. At a minimum, outside maintenance agreements shall require the inspection and servicing of all structural BMPs per manufacturer or engineering specifications. Parties responsible for the O&M Plan shall retain records for at least 5 years. These documents shall be made available to the Airport Authority for inspection upon request at any time.

An O&M Plan has been included with this USWMP and is found in Appendix C.

8.2 Priority Project BMP Verification

The tenant's/applicant's Engineer of Record and/or the party designated by the Airport Authority must verify through inspection of the site that the BMPs have been constructed and implemented as proposed in the approved USWMP. The inspection must be conducted and final verification completed by the Airport Authority representative.

8.3 Annual BMP Operation and Maintenance Verification

The BMP owner must verify annually that the O&M Plan is being implemented as noted and described in the Airport Authority's TC01 BMP (See Appendix A). The verification must include a record of inspection of the BMPs prior to the rainy season (October 1st of each year).



Appendix B

Municipal Inventory

Storm Water Management Plan - Municipal Stormwater Permit	



FY09-10 Municipal Facilities Inventory

Type of Activity	Water Quality Threat Priority	Item or Description
Roads (1)	High	4 miles
Parking Lots (12)	High	12 lots (7,725 total parking spaces, 74 acres)
MS4 (1)	High	210 inlets
		86,000 feet of storm drain pipe
Closed landfill (1)	High	39 acres
Maintenance and Storage Areas (3)	High	Corporate yard (the "bone yard")
		Runway Generator Shop
		Terminal 2 West Equipment Storage area
Solid Waste Operations (4)	High	Trash and Recycling Compactor Area
		Terminal 2 East Trash Compactor
		Terminal 2 West Trash and Recycling
		Compactor Area
		Landscape Waste Dumpster
Airside Operations Area (1)	High	Ramp Scrubbing/ Runway Rubber Removal
Grounds (Landscaped) (1)	Low	12.5 Acres
Buildings (13)	Low	Commuter Terminal
		Terminal 1
		Terminal 2
		Cargo Terminal
		West Wing (Offices)
		Quieter Home Program -Truxton Rd (Offices)
		Building A (Offices)
		Central Plant (HVAC and Power Plant)
		LPI Building (Offices)
		FMD (Offices)
		FMD Shop (Maintenance Shops)
		Procurement (Office and Storage Building)
		Terminal Development Project (Offices)



Appendix C

Industrial Commercial Inventory

Storm Water Management Plan - Municipal Stormwater Permit	



FY09-10 Inventory for Stationary Industrial and Commercial Facilities

Field Name	Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC / NAICS Code		Principal Products / Services	Potential Pollutants							Tributary to 303(d) Listed	Threat to water quality	GIS Mapping Options					
ription	Jurisdiction responsible for inspection of facility (Co-permittee)		Street number of facility, this is the numeric street address	y, Suite or unit number or letter, if needed. This field could also be used to indicate ar intersection if no street number exists. This field is optional.	facility is located	1 '		efault Zip code where facility is located	This field requires both the Hydrological unit and Hydrologic area where facility is located. This field must be populated to one decimal place. Copermittees may elect to populate to two decimal places.	code. NAICS codes must be transferred to an appropriate SIC code if possible. If there is no SIC code, use the appropriate NAICS. Either the SIC or		A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.						nent to	303(d) listed receiving water and generating pollutants for which the water body is impaired? Each Copermittee shall use best professional	Does the facility pose a high threat to water quality? Each Copermittee shall use best professional judgement to determine if a facility poses a high	The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping. Assessors Parcel Number Latitude / Longitude (Decimal Degrees) X-Y Coordinates If entering coordinates					
Field Desc										NAICS must be filled in. SIC NAICS (www.census.gov)	IC code (www.OSHA.gov)		Bacteria	Gross Pollutants Metals	Nutrients	Oil & Grease	Organics	Organics Pesticides Sediment Trash			threat to water quality.	Assessors Parcel Numb (APN)	er Latitude / Longitude	(Decimal Degrees)	X-Y Coo	X-Y Coordinates If entering coordinates either by Lat/Long Northing/Easting identification of the coordinate system us required.	
Required Field Type	Text	Text	Number	General	Text	Text	Text	Numeric	Numeric (To a minimum of 1 decimal, 2 decimals are optional)	Numeric	NAICS Code Numeric (six Digits)	Text	Text 1	「ext Text	Text	Text	Text T	ext Text	Text	Text	Text	Numeric	Latitude Numeric	Longitude Numeric	Easting Numeric	Northings Numeric	Coordinate System (Text)
	AA	Air Canada	3707		North Harbor Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	e Voc	No	Voc	Ves No.	No	Voc	Yes	Yes						
		Air Tran		11445	North Harbor		CA CA				,			103	110	103	ics ino	No	103								
	AA	Airways	3707	#117	Drive North Harbor	San Diego	CA	92101	908.0-908.21		481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes		+				
	AA	Alaska Airlines	3665	#228	Drive North Harbor	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes		+				
	AA	Allegiant	3707	T2E	Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	no Yes	s Yes	No	Yes	Yes No		Yes	Yes	Yes						
	AA	Allied Aviation	3698-C		Pacific Highway	San Diego	CA	92101	908.0-908.21	4581	424710	Fuel Storage	No Yes	s Yes	Yes	Yes	Yes Yes	No No	Yes	Yes	Yes						
	AA	American Airlines	3707	#103	North Harbor Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes	s its	No	Yes	Yes	110	Yes	Yes	Yes						
	AA	American Eagle	3225	#109	North Harbor Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes	No	Yes	Yes	Yes						
	AA	ARFF	3698		Pacific Highway	San Diego	CA	92101	908.0-908.21	4581	922160	Airport rescue and fire fighting	No Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes						
	AA	ASIG	2340		Stillwater Road		CA		908.0-908.21		488190	Fueling services	No Yes	s Yes	No	Yes	Yes No	Yes	Yes	Yes	Yes						
	AA	ATI Continental	2412		Winship Lane North Harbor	San Diego	CA	92101	908.0-908.21	4581	488119		No Yes	s Yes	No	Yes	Yes No	NO	Yes	Yes	Yes						
	AA	Airlines	3835	#115	Drive North Harbor	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes						
		Delta Air Lines	3835	#107	Drive	San Diego	CA		908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes						
		Elite Line Services	3707	#121	North Harbor Drive	San Diego	CA	92101				Maintenance (Passenger boarding															
	AA								908.0-908.21	4581	488190	bridges&baggage conveyor)	No Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes						
					West Washington					4	492110																
	AA	FedEx	2221		Street	San Diego	CA	92110	908.0-908.21	4513		Cargo Handling	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes						
	AA	Flagship	3835	#1	North Harbor Drive				908.0-908.21	4581	561720	Janitorial	Yes Yes	s No	Yes	Yes	Yes No	yes	Yes	Yes	Yes						
	AA	Frontier Airlines	3707	#107	North Harbor Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes						
	AA	Hawaiian Airlines	3707	#111.3	North Harbor Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes						
		HMS Host	3665		North Harbor Drive	San Diego	CA		908.0-908.21		722310	Food & beverage	Yes Yes	s No	Yes	Yes	Yes Yes	, No	Yes	Yes	Yes						
		JetBlue Airways	3835	#108	North Harbor	San Diego	CA		908.0-908.21		481111, 487990	Passenger Carrier			No		Vac Nt.	Me	Vas	Yes	Yes						
		Landmark		π100		<u> </u>	C/1				•	Corporate General	<u> </u>	s Yes	110	Yes	NO INO	No	7/				1				
	AA	Aviation	2904		Pacific Highway North Harbor		CA		908.0-908.21		481111, 487990	Aviation	Yes Yes	s Yes	INO	res	res No		res	Yes	Yes		1				
	AA	LPI	3705		Drive North Harbor	San Diego	CA	92101	908.0-908.21	7521 {	812930	Parking lot managemen	t Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes		+				
		SDCRAA SkyWest	3835	-	Drive North Harbor	San Diego	CA	92101	908.0-908.21	4581	488119	Facility maintenance	Yes Yes	s Yes	Yes	Yes	Yes Yes	Yes	Yes	Yes	Yes		+				
	AA	Airlines	3225	#104	Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes						
	AA	Southwest Airlines	3665	Terminal 1		San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	s Yes	Yes	Yes	Yes No		Yes	Yes	Yes						
		Sun Country Airlines	3835	#107	North Harbor Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes						
	AA	United Airlines	3665	# 223	North Harbor Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger carrier	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes						
		UPS	2221		Washington Street		CA	92101	908.0-908.21		492110	Cargo Handling	No Yes	s Yes	Yes	Yes	Yes No	No	Yes	Yes	Yes						
		US Airways	3701		North Harbor		CA		908.0-908.21		481111. 487990				No			No	Yes	Yes	Yes						
		,			North Harbor	<u> </u>	CA				,			s Yes	110	Yes											
		Virgin America	3707	T2E	Drive North Harbor	San Diego	CA	92101	908.0-908.21		481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes		+				
	AA	WestJet	3707	T2E		San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes No	No	Yes	Yes	Yes						