

# San Diego County Regional Airport Authority

Fiscal Year 2011-2012

Municipal Stormwater Permit Annual Report

September 2012



# Statement of Certification for the 2011-2012 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:

Title:

September 19, 2012

Signature:

Paul Manasjan

Printed Name:

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





30 MAN 03
Date

# Municipal Stormwater Permit

## Annual Report Fiscal-Year 2011-2012

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# Acknowledgements

The San Diego County Regional Airport Authority Fiscal Year 2011-2012 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 2011-2012 (FY11-12) 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 FY11-12 Annual Report describes all the stormwater management activities conducted by the Authority between July 1, 2011 and June 30, 2012 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 FY11-12, 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 airport-wide 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.

Thirty two (32) airport tenants (including the Authority itself) conduct activities that are subject to the Industrial/Commercial Component of the Municipal Permit. These 32 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 ad hoc inspections, quarterly inspections, and an annual inspection for all industrial and commercial activities at SDIA. These inspections resulted in 118 recorded enforcement actions. All issues of concern were resolved.

During the reporting period, there were 15 active construction projects at SDIA and the Environmental Affairs Department conducted regular site inspections of each project. Except for notices given for corrective action on site inspection forms, no written enforcement actions were issued to any construction projects during FY11-12.

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 FY11-12 will be described in the Annual IDDE Report to be submitted to the RWQCB on December 15th, 2012. 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 FY11-12 IDDE Annual Report in December 2012.

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 webpage, airport storm drain stenciling, posters, signage, brochures, public service announcements, news releases, meetings, and focused training sessions. The FY11-12 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 24-hour telephone hotline; the Authority webpage; and 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 FY11-12. 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 an accounting of the Authority's stormwater management program expenditures for FY11-12. Costs are categorized by Jurisdictional, Watershed, and Regional components.

The FY11-12 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

### Storm Water Management Plan - Municipal Stormwater Permit

the requirements of the Municipal Permit. The FY11-12 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, 2011 to June 30, 2012 - the fiscal year 2011-2012 (FY11-12). The Authority submits this FY11-12 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 Aviation and Commercial Business Department (formerly 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 FY11-12 Annual Report presents a compilation of the Authority's stormwater management efforts in the following order:

Statement of Certification

Acknowledgements

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### 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 \$150 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 roadway 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 and the Authority has prepared a single document, the Storm Water Management Plan (SWMP, March 2008), to fulfill the requirements of both. As noted above, the Authority has been subject to the Municipal Permit since August of 2003. 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 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's 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

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 FY11-12 Annual Report contain items of note. The discussion of Development and Planning activities in Chapter 2 outlines the development improvement projects reviewed during the reporting period. The 15 construction projects underway at SDIA during FY11-12 are discussed in Chapter 3. Chapter 4 - Municipal Component - highlights the continuation of our electronic waste recycling events, pet waste bag dispensers, enhanced street sweeping program, and the installation of our curb inlet screen covers. Chapter 8 – Education Component – discusses the continued educational efforts of the Environmental Affairs Department throughout the year. The Effectiveness Assessment Component in Chapter 11 continues to evolve as more data and information are gathered over 7 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. The Special Investigations chapter describes the creation of the Ramp Walk Group and development of the SANTrack database management program, two enhancements to our inspection program in FY11-12.





# 2 DEVELOPMENT PLANNING COMPONENT

### 2.1 INTRODUCTION

TABLE 2-1 PERMIT COMPLIANCE REPORTING REQUIREMENTS

No.	Compliance Item	Outcome
1	A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	Section 2.3.1
2	Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	Section 2.3.1
3	A listing of the development projects to which SUSMP requirements were applied.	Table 2-2
4	Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	Section 2.3.1
5	At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	Table 2-3

TABLE 2-1 PERMIT COMPLIANCE REPORTING REQUIREMENTS (CONTINUED)

No.	Compliance Item	Outcome
6	A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	Table 2-2
7	An updated treatment control BMP inventory.	Table 2-3
8	The number of treatment control BMPs inspected, including a summary of inspection results and findings.	Table 2-3
9	A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	Section 2.3.2 and Table 2-3
10	Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	Section 2.3.1
11	A listing of any projects which received a SUSMP waiver.	Table 2-2
12	A description of implementation of any SUSMP waiver mitigation program.	Section 2.2.1
13	A description of Hydromodification Management Plan (HMP) development collaboration and participation.	Section 2.3.1
14	A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	Table 2-2
15	A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	Table 2-2
16	A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	Table 2-2
17	The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Section 2.3.3



This chapter of the Annual Report discusses compliance activities relative to development project review and approval activities at SDIA during FY11-12. Table 2-1 above outlines the requirements of the Municipal Permit, our compliance, and/or where to find a description of our compliance within this report. Section 4 (Development Planning Component) of the SWMP has been prepared, in part to outline the means and methods used to ensure that these requirements are satisfied.

### 2.2 PROCESS

### 2.2.1 OVERVIEW AND PROGRAM REQUIREMENTS

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 Authority's environmental review processes for both land use development and specific improvements is described in Section 4.3 of the SWMP. Planning and development review staff in the Airport Planning Department use the California Environmental Quality Act (CEQA) (and the National Environmental Policy Act (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" to evaluate the potential stormwater impacts of any particular proposed land use or development project.

The Airport Planning Department is also responsible for development and implementation of the Airport Master Plan. The Authority Board adopted the Airport Master Plan on May 1, 2008. 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.

In making land use and development project approval 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; Low Impact Development (LID) BMPs can be incorporated, where feasible; buffer zones can be established between development and natural water bodies (where feasible); and that Standard Urban Runoff Mitigation Plan (SUSMP) requirements are properly established.

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.

The Authority has not developed a SUSMP waiver process and no SUSMP waivers have ever been granted by the Authority. Given the location of the airport, the urban environment surrounding the airport and that San Diego Bay is the receiving water for stormwater runoff from the airport, the Authority SUSMP states that all proposed development projects within the Authority's jurisdiction are initially deemed exempt from hydromodification requirements. The Authority can, however, still require a project to implement applicable hydromodification requirements if further review finds such measures necessary. Projects determined to be exempt from hydromodification flow control requirements are still required to implement the low impact development and water quality treatment control requirements of the Authority SUSMP and the Municipal Permit.

The intake process for land use and development project review generally begins with submittal of a Project Evaluation Form to the Airport Planning Department and a project description to the Facilities Development



Department. Meetings are arranged with various stakeholder departments, and each department subsequently begins their own project tracking procedures. Both the Airport Planning Department and the Environmental Affairs Department maintain departmental project-specific electronic and paper files to evaluate, condition, and document project approvals. Project information is used to by the Facilities Development Department to populate a database used to track the project from design review through construction close-out. The Facilities Development Department database information is made available to every Authority Department through the Authority's intranet.

### 2.2.2 SOURCE CHARACTERIZATION

Every land use and development at SDIA has the potential to generate stormwater pollutants. Section 4.0 (specifically, Section 4.2.2 – Development Planning, Source Characterization), 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 describe the pollutant sources associated with urban land use and development. The associated stormwater pollutants 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.

### 2.2.3 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 (PDP). The SUSMP describes procedures to identify

pollutants and conditions of concern for proposed Priority Development Projects. The Authority SUSMP is included in Appendix C of the SWMP. The SUSMP is available on the Authority's website both separately, as a standalone weblink, and as Appendix C from the weblink to the SWMP. The SUSMP is also been made available to staff in the Facilities Development Department and to all project proponents, as necessary.

### 2.2.4 INSPECTIONS

The Environmental Affairs Department inspects all development projects to ensure that post-construction BMPs required by the project approval process are indeed in place prior to occupancy. The Environmental Affairs Department also maintains an inventory of treatment control BMPs in place at SDIA. The Environmental Affairs Department, with the assistance of the Faciliteis Management Department and Facilities Development Department, as necessary, annually inspect the condition of treatment control BMPs installed at SDIA and verifies that the BMPs are operating properly and being adequately maintained.

### 2.3 PROGRAM IMPLEMENTATION

### 2.3.1 CONFIRMATIONS AND LISTINGS

The Municipal Permit requires that updates to the SDIA Master Plan and/or modification of the environmental review process and/or the development project approval process be reported annually. For the FY11-12 reporting period, neither the SDIA Master Plan nor the environmental review/ development project approval process was modified.

All development projects proposed at SDIA during FY11-12 were required to go through the Authority's development review and approval (urban runoff approval) process described in Section 2.2.1 above and to meet any applicable or imposed project requirements and conditions. The review and approval process ensured that all applicable SUSMP BMP requirements were indeed applied to all priority development projects. The Environmental Affairs Department verified that post-construction BMPs required during project



review and approval for all PDPs were in-place prior to occupancy. Information relative to these requirements was tracked in the manner described in Section 2.2.1 above.

During FY11-12, there were 15 projects in development review, with 13 projects completing the development review process and 2 still under review. Nine (9) of the 13 that completed the review also began construction during the reporting period and 8 of those have completed construction. Four (4) of the 14 projects were tenant improvement projects; the other 11 projects were Authority improvement projects.

The Authority's development project review process determined that 6 of these 15 projects were subject to the Authority's SUSMP requirements, namely: 1) the South Side Interim Parking Lot; 2) the Central Receiving and Distribution Center; 3) the North Side Interior Roadway and North Side Utilities Storm Drain Force Main; 4) the Rehabilitation of Lot 8; 5) the Relocation of Lot 6 and the Cell Phone Lot; and 6) the Washington Street Parking Lot. The project proponents for these 6 were advised that the project was subject to the Authority's SUSMP process and that no waivers from the process would be granted. None of these 6 projects were allowed to implement treatment control BMPs with low removal efficiency ratings.

Five (5) of these 6 projects completed the SUSMP process entirely, and only the Washington Street Parking Lot is still pending SUSMP document submittal and review. Only the South Side Interim Parking Lot began and completed construction during FY11-12. The Central Receiving and Distribution Center is the one project that began construction during FY11-12 that is not complete.

As noted in Section 2.2.1 above, all proposed development projects within the Authority's jurisdiction are initially deemed exempt from hydromodification requirements. And although the Authority can still require a project to implement applicable hydromodification requirements if the development review process finds such measures necessary, none of the 6 projects under SUSMP review during FY11-12 were required to meet HMP requirements.

Much of the above discussion is presented in Table 2-2 below, specifically: the number and a brief description of the development projects under review during FY11-12; which of those projects were found to be subject to SUSMP

requirements; which were allowed to implement treatment control BMPs with low removal efficiency rankings; which were granted waivers from the SUSMP Process; which were or were not required to meet HMP requirements, and the construction status of each.

TABLE 2-2 DEVELOPMENT PROJECTS REVIEWED DURING FY11-12

#	Project Name & Description	SUSMP Required  (Yes/No)	Low Efficiency SUSMP BMPs Allowed (Yes/No)	SUSMP Waiver Granted (Yes/No)	Required to Meet SUSMP HMP Req'ments	Disturbing more than 50 acres	Construction Status during FY11-12
1	Teledyne 30" Storm Drain and Sewer Lift Station 104066	No					Complete
2	ASIG – Facility Concrete Resurfac- ing 012-013-11024	No					Complete
3	South Side Interim Parking Lot 104125	Yes	No	No	No	No	Complete
4	DHL Relocation 104143	No					Complete
5	T2E Restroom Remodel FMD #601001	No					Complete
6	Allied Aviation – Remote Fuel Rack OWS TI 012-035-11033	No					Not Begun
6	Taxiway C Rehab – Warranty Repairs 104026	No					Complete
8	CRDC	Yes	No	No	No	No	Underway



TABLE 2-2 DEVELOPMENT PROJECTS REVIEWED DURING FY11-12 (CONTINUED)

#	Project Name & Description	SUSMP Required  (Yes/No)	Low Efficiency SUSMP BMPs Allowed (Yes/No)	SUSMP Waiver Granted (Yes/No)	Required to Meet SUSMP HMP Req'ments	Disturbing more than 50 acres	Construction Status during FY11-12
9	ASIG Annex Cargo Building Demoli- tion FMD #601010	No					Complete
10	Allied Aviation – Remote Fueling Station Pavement Repairs 012-035-11045	No					Complete
11	Northside Interior Roadway and NSU Storm Drain Force Main 104135 & 104118E	Yes	No	No	No	No	Not Begun
12	South Side Site Protection (TDY) 104126	No					Not Begun
13	Rehabilitate Lot 8 104127	Yes	No	No	No	No	Not Begun
14	Relocate Parking Lot 6 & Cell Phone Lot 104145	Yes	No	No	No	No	Not Begun
15	Washington Street Parking Lot 104146	Yes	No	No	No	No	Not Begun

### 2.3.2 INVENTORY AND INSPECTIONS

In addition to requiring that the Authority verify that treatment control BMPs are properly installed prior to occupancy, the Municipal Permit requires the Authority to annually: 1) update an inventory of treatment controls required by the SUSMP process; 2) inspect the treatment control BMPs; and 3) verify

that treatment control BMPs are functional and being properly maintained. Table 2-3 presents the details of the Authority's efforts to meet these requirements for FY11-12. Table 2-3 lists each development project found to be subject to SUSMP requirements, lists the BMPs proposed for each, lists the verification date for the installation of those BMPs, and lists the dates of the annual inspection, along with an indication of any functional or maintenance issues identified during inspection. The Municipal Permit requires that the Authority present at least one example of a priority development project that was conditioned to meet SUSMP requirements and include a description of the required BMPs. Table 2-3 presents that information for 5 priority development projects that were conditioned to meet SUSMP requirements and describes the BMPs that we approved and installed to date.

TABLE 2-3 WATERSHED-BASED INVENTORY OF SUSMP-REQUIRED TREATMENT CONTROL BMPs, VERIFICATION AND/OR INSPECTION DURING FY11-12\*

#	Project Name & Brief Description	SUSMP BMPs Required per Project Approval	Date Installation Verified	Date of Annual Inspection/ Issues Identified
1	NTC Parking Lot Project 201201 Construction of a Public Parking Lot	Approx 9% of pervious site surface (landscaping)  1 Trash Racks/Hydrodynamic Devices (Vortechnics Stormwater Treatment System)	July 2005	6/20/12 No issues
2	EMAS Project, 201401 Installation of an Engi- neered Materials Arrest Sys- tem at West End of the Runway	Approx 50% of pervious site surface (gravel)  2 Storm Drain Inlet Filters	Nov 2006	6/21/12 No issues
3	Landmark Aviation Parking Lot/Gate Project 104095 Convert 14,000 sq ft of building foundation to parking lot	Approx 3% of pervious site surface (landscaping)  1 Infiltration Trench	Dec 2009	6/20/12 No issues
4	Vehicle Service Road - 104111	11 High-rate media filters (Bio- Clean Grate Inlet Skimmer Box) in combination with self-retaining areas	Jan 2012	6/21/12 No issues



TABLE 2-3 WATERSHED-BASED INVENTORY OF SUSMP-REQUIRED TREATMENT CONTROL BMPs, VERIFICATION AND/OR INSPECTION DURING FY11-12\* (CONTINUED)

#	Project Name & Brief Description	SUSMP BMPs Required per Project Approval	Date Installation Verified	Date of Annual Inspection/ Issues Identified
5	South Side Interim Parking - 104125	Infiltration through 4 permeable asphalt strips that total 1,500 feet of length that is 3 ft wide, 3.5-in thick over 9-in of asphalt treated permeable base, on 36-in of granular drain material with an 8-in perforated pipe underdrain draining to the conveyance system and through 1 high-rate media filter system (Contech StormFilter).	June 2012	Installation completed in June of 2012; no Annual Inspection in FY11-12

<sup>\*</sup> All 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).

The Authority Environmental Affairs Department conducted all the treatment control BMP inspections. The treatment controls BMPs are inspected as part of the Authority's routine, annual inspection of the MS4 (as discussed in Chapter 4 of this Annual Report). Maintenance for all but one of the treatment controls listed in Table 2-3 is the joint responsibility of the Environmental Affairs Department and the Facilities Management Department. One of these projects was constructed by an airport tenant, namely, the Landmark Aviation Parking Lot/Gate Project and under the existing lease with the Authority, the tenant (Landmark Aviation) is responsible for maintenance of this treatment control BMP.

### 2.3.3 FOLLOW-UP AND ENFORCEMENT

The development project approval process, LID and BMP installation verification process, and the treatment control inspection activities conducted by the Authority during FY11-12 did not identify any violations, and therefore, no enforcement actions were initiated during the reporting period.

### 2.4 ENHANCED PROGRAM ELEMENTS

There were no enhanced Development Component Program elements during FY11-12.

### 2.5 ASPECTS OF THE PERMIT THAT ARE NOT APPLICABLE

All aspects of the Municipal Permit applicable to development are applicable to the Authority and the information presented in this chapter demonstrates the Authority's compliance with the permit.

### 2.6 PROGRAM REVIEW AND MODIFICATION

The Authority last revised the SWMP on March 24, 2008. Since that time, the only revisions to the Development Component of the SWMP has been an update of the SUSMP document and the inventory of approved and verified treatment control BMPs. The Authority last revised and updated the Authority SUSMP on January 14, 2011. The updated inventory of approved and verified treatment control BMPs is presented in Table 2-3 above. Any and all proposed revisions to the SWMP are discussed and summarized in Chapter 14 of this Annual Report.





# 3 Construction Component

### 3.1 INTRODUCTION

### TABLE 3-1 PERMIT COMPLIANCE REPORTING REQUIREMENTS

No.	Compliance Item	Outcome
1	Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	Section 3.3.1
2	Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	Section 3.3.1
3	A description of modifications made to the construction and grading ordinances and approval processes.	Section 3.3.1
4	Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	Section 3.3.1
5	Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	Section 3.3.1
6	A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	Section 3.3.1

TABLE 3-1 PERMIT COMPLIANCE REPORTING REQUIREMENTS (CONTINUED)

No.	Compliance Item	Outcome
7	For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	Section 3.3.2 and Table 3-2
8	A description of the general results of the inspections.	Section 3.3.2 and Table 3-3
9	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	Section 3.3.1
10	The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Section 3.3.3

This chapter of the Annual Report discusses compliance activities relative to construction activities at SDIA during FY11-12. Table 3-1 above outlines the requirements of the Municipal Permit, our compliance, and/or where to find a description of our compliance within this report. Section 5 (Construction Component) of the SWMP has been prepared, in part to outline the means and methods used to ensure that these requirements are satisfied.

### 3.2 PROCESS

### 3.2.1 OVERVIEW AND PROGRAM REQUIREMENTS

All construction projects proposed by the Authority itself or airport tenants are required to undergo the Authority's construction urban runoff approval process and meet the applicable construction requirements. The process is outlined in Section 5 of the SWMP. In brief, the Facilities Development Department (in their role as project review engineer) intakes the all project review applications and then provides copies to the Environmental Affairs Department and Airport Planning Department. Projects are evaluated by these two departments for environmental impacts in terms of CEQA and the



need for mitigation measures is identified. The process leads to the identification and imposition of any required construction and post-construction BMPs. In general, written notice of project approval and conditions is provided to the project proponent by the Facilities

Development Department. These conditions of approval typically require the project sponsor/manager/contractor/tenant to prepare a construction site-specific stormwater pollution prevention plan. The stormwater pollution prevention plan is reviewed and approved in writing by the Environmental Affairs Department. Smaller projects may be required to implement specific BMPs identified by the Authority, without the need for preparation or submittal of a stormwater pollution prevention plan.

The construction project review process is routinely evaluated for efficiency, cost-effectiveness, and quality of customer service. The evaluation also identifies the need to update any Authority policies or ordinances, such as construction and grading ordinances.

The intake process for project review applications also generates information that is used by the Facilities Development Department to populate a database for construction projects – including an indication of the project description, location, purpose, and actual project start and end dates. The information is incorporated into the Authority's geographic information systems (GIS) to allow for mapping and data tracking functions. The Environmental Affairs Department uses the database and GIS, along with the Department's own records to maintain a continuously updated inventory of construction projects.

### 3.2.2 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.

### 3.2.3 EFFORTS TAKEN TO NOTIFY CONSTRUCTION PROJECT PROPONENTS/ SPONSORS/MANAGERS OF BEST MANAGEMENT PRACTICE REQUIREMENTS

Construction project proponents/sponsor/managers at SDIA are required to implement those BMPs discussed in Chapter 5 of the SWMP, including generally applicable site-wide BMPs and pollution prevention measures. Construction project proponents/sponsor/managers were notified of the BMPs and pollution prevention measures via e-mail, project planning/review/approval meetings, and the Authority's webpage. BMPs are also discussed with construction project proponents/sponsor/managers and construction site personnel, as necessary, during regularly-scheduled (typically weekly) construction progress meetings attended by staff from the Environmental Affairs Department and during the site inspections described below in the Implementation section.

The BMPs required for use at construction project sites are listed in Appendix A. 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. All construction projects are required to identify BMPs that will be implemented on a site-specific basis and include them in a project-specific stormwater pollution prevention plan. Contractors are required to have a trained employee, or retain a properly trained consulting company, to ensure BMPs are properly implemented, and to perform weekly BMP inspections to ensure proper implementation and maintenance.

### 3.2.4 INSPECTIONS

The Environmental Affairs Department inspects all construction sites to monitor compliance with the Authority's ordinances, permits, approvals, the Municipal Permit, and the Construction General Permit (if applicable). It is the Authority's goal to inspect all high priority construction sites on a weekly basis for proper BMP maintenance. It is also the Authority's goal to inspect all medium and low priority construction projects on a weekly basis. While staffing and work-load issues often impact attainment of these goals, the Authority maintains a construction site inspection frequency that, at a minimum, complies with the Municipal Permit. All data is maintained electronically and in hard-copy.



Staff from the Environmental Affairs Department discuss the results of each inspection with the construction site supervisor, typically at the end of each inspection and again during regular progress meetings. In general, issues and concerns identified during inspections were corrected as soon as they were brought to the attention of the construction site supervisor. When necessary, the Authority can escalate enforcement action to ensure compliance.

In addition to inspections conducted by the Environmental Affairs Department, the Facilities Development Department (responsible for construction project management) also has dedicated inspection staff on site during every day of construction activity for each project. The Facilities Development Department construction inspectors are familiar with proper stormwater BMP implementation and are trained to raise immediate stormwater concerns with the construction site supervisor. Stormwater concerns that require additional follow-up are brought to the attention of the Environmental Affairs Department.

### 3.3 IMPLEMENTATION

### 3.3.1 CONFIRMATIONS AND INVENTORY

During FY11-12, there were no modifications made to the Authority's construction and grading ordinances and approval processes. All construction projects were required to undergo the Authority's approval process, including applicable soil disturbance maximums, if any. All construction projects were also required to implement designated BMPs. None of the construction projects reviewed and approved in FY11-12 were required to implement advanced treatment BMPs. The relevant information regarding approval and the conditions of approval were tracked by the Facilities Development Department database and the Environmental Affairs Department in project-specific electronic files. The project-specific electronic files, in conjunction with Facilities Development Department database and GIS mapping information, were used to maintain a continuously updated construction site inventory managed by the Environmental Affairs Department. Finally, all construction project

inspections were conducted in a manner that ensured all the required steps were taken to maintain full compliance with the SWMP and the Municipal Permit.

Table 3-2 presents the inventory and prioritization for construction projects underway at SDIA during the FY11-12 reporting period. There were 15 construction projects that required the implementation of storm water management controls. All other construction activities at SDIA during the reporting period were conducted either entirely indoors or without elements that required the implementation of BMPs. The Authority initiated 11 of these projects, airport tenants initiated 3 projects and the Port of San Diego initiated the remaining project. The Authority determined that 6 of these projects were high priority sites, 7 projects were medium priority sites, and the remaining 2 projects were low priority threats to water quality in accordance with the Municipal Permit. Table 3-2 presents the project name/project number, the project sponsor, a brief description of the project, the water-quality threat priority, indication of the project's status (start date, end date, as applicable, which is generally comparable to a monthly inventory), and the dates that inspections were conducted.



TABLE 3-2 CONSTRUCTION PROJECT INVENTORY AND INSPECTION HISTORY DURING FY11-12

#	Project Name & #	Sponsor	Project Description	Priority	Status During FY10-11	Inspection Dates - Dry Season	Inspection Dates - Wet Season
1	Green Build –	Authority	Terminal 2	Н	Continued	7/7/11	10/4/11
	Contract 1- (air-		West airside		from June	7/13/11	10/12/11
	side and termi- nal)		expansion and ancillary sup-		2011 and continued	7/20/11	10/19/11
	201201		port facilities		through	7/27/11	10/26/11
					June 2012	8/3/11	11/2/11
						8/10/11	11/9/11
						8/17/11	11/16/11
						8/24/11	11/23/11
						8/31/11	11/30/11
						9/7/11	12/7/11
						9/14/11	12/14/11
						9/21/11	12/21/11
						9/28/11	12/28/11
						5/10/12	1/4/12
						5/17/12	1/11/12
						5/24/12	1/18/12
						5/31/12	1/25/12
						6/8/12	2/1/12
						6/14/12	2/9/12
						6/21/12	2/17/12
						6/28/12	2/22/12
							2/29/12
							3/7/12
							3/14/12
							3/22/12
							3/30/12
							4/6/12
					4/12/12		
							4/19/12
							4/27/12

TABLE 3-2 CONSTRUCTION PROJECT INVENTORY AND INSPECTION HISTORY DURING FY11-12 (CONTINUED)

#	Project Name & #	Sponsor	Project Description	Priority	Status During FY10-11	Inspection Dates - Dry Season	Inspection Dates - Wet Season
2	Green Build –	Authority	Terminal 2 West landside expansion and ancillary sup- port facilities	H	Continued from June 2011 and continued through June 2012	7/7/11	10/4/11
	Contract 2 -					7/13/11	10/12/11
	(landside) 201401					7/20/11	10/19/11
						7/27/11	10/26/11
						8/3/11	11/2/11
						8/10/11	11/9/11
						8/17/11	11/16/11
						8/24/11	11/23/11
						8/31/11	11/30/11
						9/7/11	12/7/11
						9/14/11	12/14/11
						9/21/11	12/21/11
						9/28/11	12/28/11
						5/3/12	1/4/12
						5/10/12	1/11/12
						5/17/12	1/18/12
						5/24/12	1/25/12
						5/31/12	2/1/12
						6/8/12	2/9/12
						6/14/12	2/17/12
						6/21/12	2/22/12
						6/28/12	2/29/12
							3/7/12
							3/14/12
							3/22/12
							3/30/12
							4/6/12
							4/12/12
							4/19/12
							4/27/12



TABLE 3-2 CONSTRUCTION PROJECT INVENTORY AND INSPECTION HISTORY DURING FY11-12 (CONTINUED)

#	Project Name & #	Sponsor	Project Description	Priority	Status During FY10-11	Inspection Dates - Dry Season	Inspection Dates - Wet Season	
3	Teledyne Ryan	Port of	Demolition of	Н	Continued	7/13/11	10/4/11	
	Aeronautical	San Diego	buildings at		from June	7/20/ 11	10/12/11	
	Company		former Tele- dyne Ryan		2011 and continued	7/27/11	10/19/11	
			Facility		through	8/3/11	10/26/11	
					June 2012	8/10/11	11/2/11	
						8/17/11	11/9/11	
						8/24/11	11/16/11	
						8/31/11	11/23/11	
						9/7/11	11/30/11	
						9/14/11	12/7/11	
						9/21/11	12/14/11	
						9/28/11	12/21/11	
						5/10/12	12/28/11	
						5/17/12	1/4/12	
							5/24/12	1/11/12
						5/31/12	1/18/12	
						6/8/12	1/25/12	
						6/14/12	2/1/12	
						6/21/12	2/9/12	
						6/28/12	2/17/12	
							2/22/12	
							2/29/12	
							3/7/12	
							3/14/12	
							3/22/12	
							3/30/12	
							4/6/12	
							4/12/12	
							4/19/12	
							4/27/12	

TABLE 3-2 CONSTRUCTION PROJECT INVENTORY AND INSPECTION HISTORY DURING FY11-12 (CONTINUED)

#	Project Name & #	Sponsor	Project Description	Priority	Status During FY10-11	Inspection Dates - Dry Season	Inspection Dates - Wet Season
4	Teledyne 30" Storm Drain and Sewer Lift Station 104066	Authority	Construction of a 30" storm drain pipe, storm drain manhole structures, connection of storm drain pipe to existing structures, a sewer lift station, gravity sewer pipe, sewer force main, and connection of the force main to an existing gravity sewer	M	Started July 2011 and completed November 2011	7/7/11 7/13/11 7/20/11 7/27/11 8/3/11 8/10/11 8/17/11 9/7/11 9/14/11 9/21/11 9/28/11	10/4/11 10/12/11 10/19/11 10/26/11 11/2/11 11/9/11
5	ASIG – Facility Concrete Resurfacing 012-013-11024	Tenant	Replace asphalt with concrete where jet fuel trucks park	M	Started August 2011 and completed August 2011	8/12/11 8/19/11	None



TABLE 3-2 CONSTRUCTION PROJECT INVENTORY AND INSPECTION HISTORY DURING FY11-12 (CONTINUED)

#	Project Name & #	Sponsor	Project Description	Priority	Status During FY10-11	Inspection Dates - Dry Season	Inspection Dates - Wet Season
6	Vehicle Service	Authority	Construct	Н	Started	None	11/2/11
	Road		pavement, relocate fire		November 2011 and		12/7/11
	104111		hydrant,		completed		12/14/11
			replace drain-		March 2012		12/21/11
			age channel with an 18				12/28/11
			inch storm				1/4/12
			drain pipe/				1/11/12
			inlets, and roadway strip-				1/18/12
			ing				1/25/12
							2/1/12
							2/8/12
							2/15/12
						2/22/12	
							2/29/12
							3/7/12
							3/14/12
						3/22/12	
							3/30/12
7	Southside	Authority	Construct	Н	Started	5/3/12	2/16/12
	Interim Parking		parking lot		February 2012 and	5/10/12	2/23/12
	104125		completed	5/17/12	3/1/12		
					June 2012	5/24/12	3/8/12
						5/31/12	3/14/12
						6/8/12	3/22/12
					6/14/12	3/30/12	
						6/21/12	4/6/12
						6/28/12	4/12/12
							4/19/12
							4/27/12

TABLE 3-2 CONSTRUCTION PROJECT INVENTORY AND INSPECTION HISTORY DURING FY11-12 (CONTINUED)

#	Project Name & #	Sponsor	Project Description	Priority	Status During FY10-11	Inspection Dates - Dry Season	Inspection Dates - Wet Season
8	Expand Terminal 2 East Facility 104056	Authority	Terminal 2 East expansion (build out of AA baggage and canopy retrofit/expansion)	M	Started February 2012 and continued through June 2012	5/1/12 5/15/12 5/29/12 6/12/12 6/19/12	2/14/12 2/28/12 3/13/12 4/3/12 4/17/12
9	DHL Relocation 104143	Authority	Replace asphalt with concrete where aircraft parks	L	Started March 2012 and com- pleted April 2012	None	4/12/12
10	Expand T2E Facility 104056.2	Authority	Expand Terminal 2 East Facility Gate 24-28 and gate addition	M	Started March 2012 and contin- ued through June 2012	5/1/12 5/15/12 5/29/12 6/12/12 6/19/12 6/26/12	2/14/12 2/21/12 2/28/12 3/06/12 3/13/12 3/27/12 4/3/12 4/10/12 4/17/12 4/24/12
11	T2E Restroom Remodel FMD #601001	Authority	Remodel 1 <sup>st</sup> and 2 <sup>nd</sup> floor men's and women's rest- rooms	L	Started March 2012 and contin- ued through June 2012	5/10/12 5/24/12 6/21/12	3/30/12 4/12/12 4/27/12



TABLE 3-2 CONSTRUCTION PROJECT INVENTORY AND INSPECTION HISTORY DURING FY11-12 (CONTINUED)

#	Project Name & #	Sponsor	Project Description	Priority	Status During FY10-11	Inspection Dates - Dry Season	Inspection Dates - Wet Season
12	Central Receiving and Distribution Center (CRDC)	Tenant	Construction of the Central Receiving and Distribution Center build- ing, surface improve- ments, and utilities	Н	Started March 2012 and contin- ued through June 2012	5/3/12 5/10/12 5/17/12 5/24/12 5/31/12 6/8/12 6/14/12 6/21/12 6/28/12	3/14/12 3/22/12 3/30/12 4/6/12 4/12/12 4/19/12 4/27/12
13	ASIG Annex Cargo Building Demolition— FMD #601010	Authority	Demolition of building	M	Started April 2012 and com- pleted April 2012	None	4/2/12 4/27/12
14	Washington Street Access Improvements 104124C	Authority	Installation of water lines and electrical conduit	M	Started May 2012 and continued through June 2012	5/31/12 6/8/12 6/14/12 6/21/12 6/28/12	None
15	Allied Aviation – Remote Fueling Station Pave- ment Repairs 012-035-11045	Tenant	Replace damaged asphalt pavement at the remote fueling station	M	Started June 2012 and completed June 2012	6/7/12	None

<sup>\*</sup> H = High; M = Medium; L = Low

### 3.3.2 INSPECTIONS

Table 3-2 also lists the dates of inspection conducted by the Environmental Affairs Department during the dry season and the wet season for each of the 15 construction projects underway during the FY11-12. There were 267

construction project storm water inspections conducted during the reporting period, with 114 inspection performed during the dry season and 153 inspections performed during the wet season.

Table 3-3 identifies the construction activities for which BMPs were not being properly implemented at the time of inspection (for those issues that were identified at least 5 times across the entire inspection program during FY11-12). The most frequent issue of concern was ensuring sediment controls are maintained. Poor materials, equipment, and waste management (including hazardous materials, concrete, and other waste) was the second issue of concern most frequently identified. The third most frequent issue of concern was off-site tracking. The use of street sweepers was required at all construction projects that involved transporting soil on or off site. If soil and/or dust were identified on the street as having potentially originated from project construction activity, street sweeping was required. Spill prevention and cleanup was also identified as an issue of concern, as it has been since FY08-09. The Authority has learned that all the issues identified in Table 3-3 require constant attention from construction site supervisors and inspectors.

TABLE 3-3 TYPES OF CONSTRUCTION ACTIVITIES FOR WHICH BMPS WERE MOST FREQUENTLY IDENTIFIED AS NOT BEING PROPERLY IMPLEMENTED DURING SITE INSPECTIONS - FY11-12

Construction Activity Issue	Applicable BMPs Required for Use*	Number of Times Issue was Identified During Inspections**
Sediment controls are in deteriorated condition or are not maintained in functional order	SE-5 Fiber Rolls SE-10 Storm Drain Inlet Protection SE-13 Compost Socks and Berms	25
Materials and equipment not properly maintained or stored	NS-10 Vehicle and Equipment Maintenance NS-12 Concrete Curing NS-16 Temporary Batch Plants WM-1 Material Delivery and Storage WM-2 Material Use WM-4 Spill Prevention and Control	24



TABLE 3-3 TYPES OF CONSTRUCTION ACTIVITIES FOR WHICH BMPS WERE MOST FREQUENTLY IDENTIFIED AS NOT BEING PROPERLY IMPLEMENTED DURING SITE INSPECTIONS - FY11-12 (CONTINUED)

Construction Activity Issue	Applicable BMPs Required for Use*	Number of Times Issue was Identified During Inspections**
Hazardous materials and wastes not properly managed or stored	WM-1 Material Delivery and Storage WM-4 Spill Prevention and Control WM-6 Hazardous Waste Management WM-8 Concrete Waste Management	24
Wastes not properly managed or stored	WM-1 Material Delivery and Storage WM-5 Solid Waste Management WM-4 Spill Prevention and Control WM-8 Concrete Waste Management	20
Off-site tracking of sediment/ debris/mud observed on project access/public roads	SE-7 Street Sweeping and Vacuuming TC-1 Stabilized Construction Entrance/Exit	13
Spills not properly contained/ cleaned up	WM-4 Spill Prevention and Control WM-8 Concrete Waste Management	10

<sup>\*</sup>See Section 3.2.3 of this report. As noted in Section 3.2.3 of this report and in the SWMP, the Construction BMPs required for use are those listed in the CASQA California Stormwater Best Management Practice Handbook for Construction Activity, 2009.

In summary, the construction oversight conducted by the Environmental Affairs Department during FY11-12 found these 15 projects to be in substantial compliance with the requirements of the SWMP and the Municipal Permit Construction Component. In general, 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 within the Airport Authority boundaries during construction site inspections in FY11-12.

<sup>\*\*</sup> Table presents only those issues that were identified more than 5 times across the entire inspection program.

### 3.3.3 FOLLOW-UP AND ENFORCEMENT

The issues of concern identified during site inspections (including those noted in Table 3-2) were generally resolved through verbal communication with the construction contract site supervisor in the field at the time of inspection or at weekly progress meetings. There were no violations identified and no enforcement actions (beyond immediate verbal directives given in the field to install, modify, or repair BMPs) taken for construction sites during FY11-12. As such, no further enforcement or follow-up actions were necessary. Compliance with the SWMP and Municipal Permit was achieved through the routine construction site inspection program.

### 3.4 ENHANCED PROGRAM ELEMENTS

The Municipal Permit requires that high priority construction sites be inspected at least once every two weeks during the wet season and as needed during the dry season. The Permit also requires that medium and low priority construction sites be inspected as needed during both the wet season and the dry season. Nonetheless, it is the Authority's goal to inspect all construction sites (high, medium, and low priority) on a weekly basis. While staffing and work-load issues often impact attainment of the goal, the Authority maintains a construction site inspection program with an inspection frequency that generally exceeds the requirements of the Municipal Permit.

### 3.5 ASPECTS OF THE PERMIT THAT ARE NOT APPLICABLE

All aspects of the Municipal Permit applicable to public participation are applicable to the Authority and the information presented in this chapter demonstrates the Authority's compliance with the Permit.



### 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, 2012 (the end of the reporting period). Any and all revisions to the SWMP are discussed and summarized in Chapter 14 of this Annual Report.

Storm Water Management Plan - Municipal Stormwater Permit





# 4 MUNICIPAL COMPONENT

### 4.1 INTRODUCTION

TABLE 4-1 PERMIT COMPLIANCE REQUIREMENTS

No.	Compliance Item	Annual Report Section
1	Any updates to the municipal inventory and prioritization.	Section 4.3.1 Table 4-3
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	Section 4.3.1 and 4.2.3
3	A description of inspections and maintenance conducted for municipal treatment controls.	Section 4.2.5 Table 4-5
4	Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	Section 4.3.4 Table 4-7

TABLE 4-1 PERMIT COMPLIANCE REQUIREMENTS (CONTINUED)

No.	Compliance Item	Annual Report Section
5	Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Section 4.3.4 Table 4-7
6	Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	Section 4.3.4 Table 4-7
7	Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	Section 4.3.4 Table 4-7
8	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	Section 4.2.4
9	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	Section 4.2.1 and 4.2.3
10	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Table 4-6
11	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Table 4-6
12	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Table 4-6
13	Identification of the total distance of curb-miles swept.	Table 4-6
14	Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	Table 4-6



TABLE 4-1 PERMIT COMPLIANCE REQUIREMENTS (CONTINUED)

No.	Compliance Item	Annual Report Section
15	Amount of material (tons) collected from street and parking lot sweeping.	Table 4-6
16	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	Section 4.2.4
17	Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	Sections 4.2.4, 4.3.3 and 4.3.4 Tables 4-5 and 4-8
18	A description of the general results of the inspections.	Section 4.3.5 Table 4-8
19	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	Section 4.3.5 Table 4-8
20	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Section 4.3.5 Table 4-8

Table 4-1 above outlines the requirements of the Municipal Permit, our compliance, and/or where to find a description of our compliance within this report. Section 6 (Municipal Component) of the SWMP has been prepared, in part to outline the means and methods used to ensure that 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.

This chapter of the Annual Report discusses compliance activities relative to municipal activities at SDIA during FY11-12. Since many aspects of the Authority's Municipal Component are similar for 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 under the heading of "Process" are 1) a characterization of municipal sources and 2) 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 "Implementation."

### 4.2 PROCESS

### 4.2.1 OVERVIEW AND PROGRAM REQUIREMENTS

The Authority's pollution prevention efforts include a waste reduction and recycling program, quarterly electronic and universal waste collection events, providing two Service Animal and Pet Relief Areas for those animals that are traveling with passengers, and an integrated pest management (IPM) program designed to minimize the use of herbicides, pesticides, and fertilizers in maintaining the buildings and grounds at SDIA.

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. In addition, the Facilities Management Department staff attends an annual mandatory training session on proper pesticide and herbicide storage, application, and disposal.



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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. The Authority's Storm Water Code 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 cell phone parking area, the landside cargo area, the rental car hold lot, and SANPark on Harbor Drive.

As noted in Section 6.5 of the SWMP, the Authority does not own or manage a municipal sanitary sewer system that treats wastewater. The City of San Diego Metropolitan Wastewater Department (MWWD) provides municipal sanitary sewer and sewage treatment service to the airport. 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 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. 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.

### 4.2.2 SOURCE CHARACTERIZATION

Section 6.2.2 of the SWMP outlines the significant materials and potential pollutant sources associated with municipal operations at SDIA. Sources and potential pollutants as SDIA are presented in table 4-2.

# 4.2.3 EFFORTS TAKEN TO NOTIFY OPERATIONS OF BEST MANAGEMENT PRACTICE REQUIREMENTS

Municipal operations at SDIA are required to implement those BMPs discussed in Chapter 6 and listed in Appendices B and E of the SWMP relevant to their operations, including the generally applicable site-wide BMPs and pollution prevention measures. A list of these BMPs is provided in Appendix A of this report as well. Municipal employees were notified of the BMPs and pollution prevention measures via e-mail, the Authority's webpage, meetings, and the individualized tenant summary sheet provided in Appendix E of the SWMP. BMPs are also discussed with staff, as necessary, during the site inspections described below in the Implementation section.

TABLE 4-2 MUNICIPAL SOURCES AND POTENTIAL POLLUTANTS AT SDIA

Source	Potential Pollutants
Airport Operations	Sediment
	Trash and debris
	Oil and grease
	Hydrocarbons/fuels
	Hydraulic fluids
	Solvents, soaps, cleaning fluids
	Lavatory chemicals, waste, pet waste
	Paints
	Batteries and battery acid
	Anti-freeze
	Metals
	De-icing chemicals
	Herbicides and pesticides
	Adhesives, sealants
	Rust preventers
	Aircraft fire fighting foam
Public Spaces (littering)	Trash and debris



TABLE 4-2 MUNICIPAL SOURCES AND POTENTIAL POLLUTANTS AT SDIA (CONTINUED)

Source	Potential Pollutants
Roads and Parking Lots	Oil
	Fuel
	Antifreeze
	Atmospheric deposition
	Emissions
	Road and concrete deterioration (particulate pollutants)
Buildings and Grounds (pest and weed control)	Low impact for impaction stormwater
Sewages	Sediment
	Nutrients
	Bacteria
	Organics
	Oxygen demanding substances
Large Special Events	Trash and debris
MS4	Sediment
	Oil and grease
	Trash and debris
	Metals
	Bacteria

### 4.2.4 INSPECTIONS

The Environmental Affairs Department inspects municipal operations as described in Sections 6.0 and 7.0 of the SWMP. The inspection types include: 1) quarterly inspections of all municipal operations areas; 2) ad hoc or random 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 to confirm that site specific BMPs are properly implemented during these monthly, quarterly, and annual inspections. The program includes timely follow-up inspections whenever BMP deficiencies are found. No MS4 facilities have been found to require less than annual inspection.

The Facilities Management Department performs or contracts for regular inspection and maintenance of the MS4 and structural controls. On an asneeded-basis, the Facilities Development Department may also perform inspections of various components of the MS4. The Environmental Affairs

Department generally assists with these types 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 systems 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. There are some municipal operations/activities that are inspected on an "ad hoc" basis by either or both the Facilities Management Department and the Environmental Affairs Department. The Environmental Affairs Department conducts inspections of all special event venues prior to and after each event.

### 4.2.5 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 MS4 maintenance activities, routine maintenance activities at the airport include road, parking lot, and airfield sweeping and cleaning. Roads into and out of the airport are swept five days a week, the main terminal parking lots and seven employee and tenant lots are swept daily, and additional tenant lots are swept as needed. 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. Section7.2.2 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.



### 4.3 IMPLEMENTATION

### 4.3.1 CONFIRMATIONS AND INVENTORY

During FY11-12, designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events. Designated BMPs for pesticides, herbicides, and fertilizers were also implemented, or required to be implemented, for municipal areas and activities. Inspections conducted addressed all the required inspection steps to determine full compliance

There have been several changes in the inventory of municipal areas and activities/operations since the SWMP was prepared in March of 2008. The current municipal inventory and elements of the MS4 and structural treatment controls are listed below. A review of the changes is discussed at the end of this chapter. In FY09-10, a new storm drain outfall was constructed as a part of the Green Build Contract 1 (airside and terminal expansion project). However, since this outfall is not yet operational, it has not yet been added to the municipal inventory.

TABLE 4-3 FY11-12 UPDATED MUNICIPAL INVENTORY AND PRIORITIZATION

Type of Activity	Water Quality Threat Priority	Item or Description
Roads (1)	High	4 miles
Parking Lots (13)	High	13 lots*
MS4 (1)	High	210 inlets
		86,000 feet of storm drain pipe
Closed landfill (1)	High	39 acres
Maintenance and Storage Areas (2)	High	Corporate yard (the "bone yard")
		Runway Generator Shop
Solid Waste Operations (5)	High	Trash and Recycling Compactor Area
		Terminal 2 East Trash Compactor
		North Ramp Airside Sweeping and Scrubbing Waste Accumulation Area
		Landscape Waste Dumpsters (2)

TABLE 4-3 FY11-12 UPDATED MUNICIPAL INVENTORY AND PRIORITIZATION (CONTINUED)

Type of Activity	Water Quality Threat Priority	Item or Description
Airside Operations Area (1)	High	Ramp / Runway
Grounds (Landscaped) (1)	Low	12.5 Acres
Buildings (11)	Low	Commuter Terminal
		Terminal 1
		Terminal 2
		West Wing (Offices)
		Truxton Road Offices
		Central Plant (HVAC and Power Plant)
		ACE Building (Offices)
		FMD (Offices)
		FMD Shop (Maintenance Shops)
		Procurement (Office and Storage Building)
		Terminal Development Project (Offices)
Structural Treatment Controls (111)	High	Oil water separators (6)
		Below grade box structures (2)
		Drain inserts (38)
		Curb inlet screen covers (65)

<sup>\*</sup> Due to construction activities, the number of parking lots changed in FY11-12 and will continue to change in FY12-13.



### 4.3.2 POLLUTION PREVENTION

As in prior years, the Authority continued its pollution prevention efforts during FY11-12. The results of these pollution prevention efforts for FY11-12 are presented in Table 4-4.

TABLE 4-4 POLLUTION PREVENTION ACTIVITIES DURING FY11-12

Type of Activity	Quantity
Recyclable Waste	677.6 tons
(food waste, wood, metal, construction and demo waste, and comingled recyclables – paper, plastic, glass, metals)	
Electronic Waste	11.8 tons
Universal Waste	10,114 light bulbs and 1,328 lbs of batteries
Landscape Maintenance Green Waste	23 tons
Municipal Solid Waste Disposal (non recyclable)	3,941 tons
Pet Waste Bags Dispensed	1,000 Bags
Pesticide/Herbicide Application	68 gallons

### 4.3.3 INSPECTIONS

All regularly scheduled inspections of municipal activities conducted by the Authority in FY11-12 are presented in Table 4-5 below.

TABLE 4-5 REGULARLY SCHEDULED MUNICIPAL ACTIVITY INSPECTIONS CONDUCTED DURING FY11-12

Date	Inspection Type	# of Activities or Items Inspected/ # Requiring Inspection	Activity Types (Elements)
08/22/11 through 08/25/11	MS4 Inspection	1 element/ 1 element	MS4 (inlets and slit trenches)

TABLE 4-5 REGULARLY SCHEDULED MUNICIPAL ACTIVITY INSPECTIONS CONDUCTED DURING FY11-12 (CONTINUED)

Date	Inspection Type	# of Activities or Items Inspected/ # Requiring Inspection	Activity Types (Elements)
09/13/11 through 09/15/11	MS4 Inspection	1 element/ 1 element	MS4 (pipe)
09/21/11	Quarterly Site Inspection	36 elements/ 36 elements	Roads (1), Parking Lots (13), MS4 (various inlets) (1), Closed Landfill (1), Maintenance and Storage Areas (2), Solid Waste Operations (5), Airside Operations Area (1), Grounds (1), Buildings (11)
10/21/11 and 10/24/11	Site-specific Inspection	1 element/ 1 element	Special Event – Employee Appreciation BBQ (FMD Parking Lot)
11/28/11 through 12/1/11	MS4 Inspection	1 element/ 1 element	MS4 (slit trenches and open channel)
12/08/11 and 12/09/11	Quarterly Site Inspection	36 elements/ 36 elements	Roads (1), Parking Lots (13), MS4 (various inlets) (1), Closed Landfill (1), Maintenance and Storage Areas (2), Solid Waste Operations (5), Airside Operations Area (1), Grounds (1), Buildings (11)
2/13/12 through 2/16/12	MS4 Inspection	1 element/ 1 element	MS4 (inlets and slit trenches)
03/01/12 through 03/27/12	Annual Comprehensive Site Inspection	36 elements/ 36 elements	Roads (1), Parking Lots (13), MS4 (various inlets) (1), Closed Landfill (1), Maintenance and Storage Areas (2), Solid Waste Operations (5), Airside Operations Area (1), Grounds (1), Buildings (11)
06/4/12 through 06/7/12	MS4 Inspection	1 element/ 1 element	MS4 (inlets and slit trenches)



TABLE 4-5 REGULARLY SCHEDULED MUNICIPAL ACTIVITY INSPECTIONS CONDUCTED DURING FY11-12 (CONTINUED)

Date	Inspection Type	# of Activities or Items Inspected/ # Requiring Inspection	Activity Types (Elements)
06/04/12 and 06/ 05/12	Quarterly Site Inspection	36 elements/ 36 elements	Roads (1), Parking Lots (13), MS4 (various inlets) (1), Closed Landfill (1), Maintenance and Storage Areas (2), Solid Waste Operations (5), Airside Operations Area (1), Grounds (1), Buildings (11)
06/20/12 through 06/21/12	Annual MS4 and Structural Treatment Control Inspection	111 elements/ 111 elements	MS4 (1),Oil Water Separators (6), Vortech Unit (1), Drain Inserts (38), Curb Inlet Screen Covers (65)

### 4.3.4 CLEANING AND MAINTENANCE

The frequency and amount of material collected by the Authority's cleaning and maintenance activities during FY11-12 are presented in Table 4-6 below. A summary of inspections and cleaning of the MS4 alone is presented in Table 4-7.

TABLE 4-6 SUMMARY OF MUNICIPAL ACTIVITY CLEANING DATA

Municipal Element		# or Distance/ # or Distance Cleaned or Swept	Frequency of Cleaning	Quantity of Material Collected and Properly Disposed
Roads	High	4 miles / 4 miles	5 days per week	13.8 tons
(by average volume of debris generated)	Moderate	0	0	0
destro generated)	Low	0	0	0
Parking lots (terminal/employee)		13 lots /13 lots**	7 lots daily/1 lot twice daily/5 lots as needed	136 tons

TABLE 4-6 SUMMARY OF MUNICIPAL ACTIVITY CLEANING DATA (CONTINUED)

Municipal Element	# or Distance/ # or Distance Cleaned or Swept	Frequency of Cleaning	Quantity of Material Collected and Properly Disposed
Airfield Cleaning (sweeping, scrubbing, rubber removal and MS4 cleaning)	NA	Daily and as scheduled	78 tons

<sup>\*</sup> All metrics are approximated.

TABLE 4-7 SUMMARY OF MS4 INSPECTION AND CLEANING DATA

	Catch Basins and Inlets	Oil Water Separators and below grade box Structures	MS4	Open Channels <sup>2</sup>
Total number or distance	210	8	86,000 ft	0 ft
Number or distance inspected	184 <sup>1</sup>	7 <sup>1</sup>	3260 ft <sup>1</sup>	0 ft
Number or distance found with accumulated waste exceeding the cleaning criteria	124	7	3260 ft	0 ft
Number or distance cleaned	82	7	3260 ft	0 ft
Amount of waste removed (tons)	35.5 tons		l	

<sup>1.</sup> Portions of the facility were inaccessible because they are located within the Green Build construction area.

### 4.3.5 FOLLOW-UP AND ENFORCEMENT

The Authority conducted all municipal activities inspections in accordance with Section D.3.a.(7) of the Municipal Permit to determine if operations were in full compliance with the Permit. The annual comprehensive stormwater site inspection found that overall, the BMPs required for municipal operations as listed in the SWMP, were adequate and properly



<sup>\*\*</sup> Due to construction, the boundaries and the locations of parking lots changed in FY11-12 and will continue to change in FY12-13.

<sup>2.</sup> The open channel was converted to a pipe during the VSR relocation project.

implemented. Inspections conducted during FY11-12 found municipal operations, areas, and activities to be in compliance with the SWMP and the Municipal Permit. Concerns associated with municipal operations, areas, or activities that were identified during routine inspections and any necessary enforcement actions initiated during the reporting period are presented in Table 4-8 below.

TABLE 4-8 MUNICIPAL AREAS / ACTIVITIES VIOLATIONS, ENFORCEMENT ACTIONS, AND COMPLIANCE DATES

Date of Inspection	ID Source	Compliance Issue Description	Type of Enforcement and Resolution Method	Date Compliance Confirmed
09/13/2011	Ad Hoc Inspection	Outdoor trash cans without lids and loose debris observed in construction area under gate 3.	Email was sent to project manager. Area was cleaned and lids were provided.	09/19/2011
09/21/2011	Quarterly Inspection	Herbicide bottles left out- doors without overhead cover.	Work order submitted. Bottles were relocated.	09/28/2011
09/21/2011	Quarterly Inspection	Drums stored outdoors without secondary containment.	Spoke with tenant in person. Drums were empty, and tenant had them labeled as such.	10/03/2011
09/21/2011	Quarterly Inspection	Outdoor dumpster with lid left off.	Spoke with tenant in person. Tenant closed lid and reminded staff of proper procedures.	10/03/2011
09/21/2011	Quarterly Inspection	Outdoor trash container without lid.	Work order submitted. Trash container removed from area.	09/28/2011
09/21/2011	Quarterly Inspection	Staining observed around triturator.	Ocean Blue contacted to clean area.	09/26/2011
11/08/2011	Ad Hoc Inspection	Absorbent material spill near storm drain.	Work order submitted. Area was swept.	11/11/2011
12/08/2011	Quarterly Inspection	Trays of absorbent material left outdoors at runway lighting vault area.	Work order submitted. Material was properly disposed of.	12/14/2011
12/08/2011	Quarterly Inspection	Low boy street sweeping dumpster is without cover.	Spoke with FMD. Cover was provided.	12/08/2011
12/08/2011	Quarterly Inspection	Drums stored outdoors without cover in boneyard.	Spoke with Ocean Blue. Drums were removed from site.	12/12/2011

Table 4-8 Municipal Areas / Activities Violations, Enforcement Actions, and Compliance Dates (Continued)

Date of Inspection	ID Source	Compliance Issue Description	Type of Enforcement and Resolution Method	Date Compliance Confirmed
03/08/2012	Annual Inspection	Bags of recyclables stored outdoors without containment.	Email was sent to tenant. Tenant removed recyclables from site.	04/08/2012
03/08/2012	Annual Inspection	Fuel containers stored without secondary containment.	Email was sent to tenant. Secondary containment pallet provided.	06/06/2012
03/08/2012	Annual Inspection	Damage to storm drain BMP observed.	Email sent to tenant. Ocean Blue installed new BMP in storm drain.	04/02/2012
06/04/2012	Quarterly Inspection	Outdoor street sweeping dumpster without cover and material spill.	Work order submitted. Dump- ster was covered and area cleaned.	06/19/2012
06/04/2012	Quarterly Inspection	Portable lavatory observed without secondary containment.	Email was sent to tenant. Vendor was contacted, and installed containment pan.	06/11/2012
06/04/2012	Quarterly Inspection	Accumulation of trash observed behind blast fence.	Work order submitted. Area was cleaned.	06/22/2012
06/04/2012	Quarterly Inspection	Gravel bags of stormdrain BMP observed to be broken.	Ocean Blue was contacted, and replaced BMP.	06/08/2012
06/04/2012	Quarterly Inspection	Trash, sediment and broken glass accumulation observed in corporate yard.	Work order submitted. Area was cleaned.	06/22/2012

### 4.4 ENHANCED PROGRAM ELEMENTS

This section of the annual report discusses areas where enhancements have been made to the Authority's stormwater management program which go above and beyond what is required by the Municipal Permit.

### **Curb Inlet Screen Covers**



During FY11-12, 65 curb inlet screen covers were installed along the interior public roadway system of the airport. The covers are designed to allow water to pass through but keep larger trash items on the curb where they can be picked up by street sweepers. These inlet covers have been added to the municipal inventory. A street sweeping characterization study that was conducted before and after the installation of the screens confirmed that the curb inlet screen covers were an effective BMP for preventing large pieces of trash and debris from entering the storm drain system.

### **Enhanced Street Sweeping Schedule**

The Airport Authority strives to reduce the accumulation of metals, oil and grease, organics sediments, and trash on streets, roadways, and parking lots by sweeping these areas more frequently than the Municipal Permit requires. The Authority hires a contractor to sweep the interior public roadway system of the airport 5 days a week. The parking lot management service provider sweeps all seven main lots daily, one employee lot twice daily, and five additional smaller lots on an as needed basis. All street and parking lot sweepings/debris are properly disposed. 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 the need for cleaning or maintenance.

This element is also more thoroughly discussed in the San Diego Bay WURMP Annual Report.

### Pet waste bags

The Authority 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. Pet waste bags are available at the Pet Relief Areas. The goals of the program are to reduce the amount of pet waste that might inadvertently enter the stormwater conveyance system and to provide public education

about potential stormwater pollution related to pet waste and the need to clean up after their pets. These efforts reduce the amount of bacteria and nutrients which are released into San Diego Bay.

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 1,000 pet waste bags were used at the two Service Animal and Pet Relief Areas in FY11-12. This is consistent with the 1,200 bags used in FY10-11, and an increase from 733 pet waste bags dispensed in FY09-10 and 690 bags in FY08-09. This element is also more thoroughly discussed in the San Diego Bay WURMP Annual Report.

### E- Waste Collection Events

In addition to providing education about universal waste to Authority staff and tenants, the Authority has maintained a universal waste collection program for staff and tenants since 2006. Several times each year, the Authority hosts a one-day Electronic and Universal Waste Collection Events which are open to all staff and tenants. These events allow 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 in August, January, and April. A combined total of approximately 8.2 tons of electronic waste was collected at these events during FY11-12.

### 4.5 ASPECTS OF THE PERMIT THAT ARE NOT APPLICABLE

The following municipal areas/activities listed in Section D.3.a(7) of the Permit are not found in the Authority's jurisdiction: 1) flood management projects and flood control devices; 2) publicly owned water or wastewater treatment works/plants; 3) land application sites; 4) household hazardous waste collection facilities; and 5) parks and recreation facilities.



### 4.6 PROGRAM MODIFICATION AND REVIEW

In June of 2012, the Environmental Affairs Department reviewed the inventory of municipal operations at SDIA and made several updates. Solid Waste Operations areas were increased from four to five due to the addition of a dumpster for landscaping refuse. The category of "below grade box structures" was added in FY11-12 to Structural Treatment Controls. This category now includes the previously existing vortech unit but was added due to the addition of one new storm filter located in the new South Side Interim Parking Lot, which was put into service in June 2012.

Storm Water Management Plan - Municipal Stormwater Permit





# 5 INDUSTRIAL AND COMMERCIAL COMPONENT

### 5.1 INTRODUCTION

TABLE 5-1 PERMIT COMPLIANCE REPORTING REQUIREMENTS

No.	Compliance Item	Annual Report Section
1	Any updates to the industrial and commercial inventory.	Section 5.3.1 Table 5-3
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	Section 5.3.1
3	A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	Section 5.2.3
4	Identification of the total number of industrial and commercial sites/ sources inventoried and the total number inspected.	Sections 5.3.1 and 5.3.2 Tables 5-3 and 5-4

TABLE 5-1 PERMIT COMPLIANCE REPORTING REQUIREMENTS (CONTINUED)

5	Justification and rationale for why the industrial and commercial sites/ sources inspected were chosen for inspection.	Section 5.2.4
6	Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	Section 5.3.1, 5.3.2 and Table 5-4
7	Identification of the number of third party inspections conducted.	Section 5.5
8	Identification of efforts conducted to verify third party inspection effectiveness.	Section 5.5
9	A description of efforts implemented to address mobile businesses.	Section 5.5
10	The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Section 5.3.2, 5.3.3 and Table 5-4
11	A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	Section 5.3.3

This chapter of the Annual Report discusses compliance activities relative to industrial and commercial activities at SDIA during FY11-12. Table 5-1 above outlines the requirements of the Municipal Permit, our compliance, and/or where to find a description of our compliance within this report. Section 7 (Industrial and Commercial Component) of the SWMP has been prepared, in part to outline the means and methods used to ensure that these requirements are satisfied.



### 5.2 PROCESS

### 5.2.1 OVERVIEW AND PROGRAM REQUIREMENTS

The Authority and a number of airport tenants conduct industrial activities that are subject to section D.3.b of the Municipal Permit and the General Industrial Permit (General Permit). There are 30 tenants conducting industrial or commercial activities, plus the ARFF Facility and the Authority itself as operator of the Airport, for a total of 32 entities conducting industrial or commercial activities that could contribute a significant pollutant load to the storm drain system.

The Municipal Permit requires that copermittees prioritize their inventories of industrial and commercial sites/sources based on threat to water quality. The Municipal Permit also requires that the prioritization be updated annually. All other airport tenants not listed in the provided inventories are either a) subtenants to and/or operate as integral parts of the 32 industrial/commercial tenants or b) not considered to be sources of significant pollutant loads to the storm drain system.

### 5.2.2 SOURCE CHARACTERIZATION

Section 7.2.2 of the SWMP outlines the significant materials and potential pollutant sources associated with industrial and commercial operations at SDIA. Sources and potential pollutants as SDIA are presented in table 5-2 below.

TABLE 5-2 INDUSTRIAL/COMMERCIAL SOURCES AND POTENTIAL POLLUTANTS AT SDIA

Activity / source	Potential pollutants
Industrial Activities	petroleum products
(specific airport-industry processes, material handling and storage, spills and leaks, dust and particulate generating activities, soil erosion, non-stormwater discharges)	solvents, soaps, cleaning fluids trash
	metals
	lavatory chemicals and waste
	paints
	used batteries and battery acid
	anti-freeze, deicing chemicals
	herbicides and pesticides
	adhesives and sealants
	rust preventers
	various fire suppression chemicals
Commercial Activities	trash
(parking lot management and vehicle storage, food ser-	vehicle maintenance fluids
vice, janitorial service)	food preparation oils
	various maintenance and cleaning chemicals

## 5.2.3 EFFORTS TAKEN TO NOTIFY OPERATIONS OF BEST MANAGEMENT PRACTICE REQUIREMENTS

Industrial and commercial operations at SDIA are required to implement those BMPs discussed in Chapter 7 and listed in Appendices B and E of the SWMP relevant to their operations, including the generally applicable sitewide BMPs and pollution prevention measures. A list of these BMPs is provided in Appendix A of this report as well. Owners/operators of industrial and commercial sites/sources were notified of the BMPs and pollution prevention measures via e-mail, the Authority's webpage, meetings, and individualized tenant summary sheets provided in Appendix E of the SWMP. BMPs are also discussed with tenants and staff, as necessary, during the site inspections described below in the Implementation section.



### 5.2.4 INSPECTIONS

Industrial and commercial operations in the SDIA industrial / commercial inventory were inspected on a quarter-annual basis. This fulfills the quarterly inspection requirement of the Industrial Permit and the annual inspection requirement of the Municipal Permit. All tenants/operations are considered high priority due to their potential direct impact to stormwater runoff. 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 third quarter inspection in FY11-12 was expanded to become 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. In between the quarterly inspections, the Environmental Affairs Department also performs ad hoc or random inspections to help keep tenants educated and aware of stormwater pollution prevention issues.

In those instances where inspections found BMPs were 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. Tenant/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 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. In general, issues and concerns identified during inspections were corrected as soon as they were brought to the attention of the tenant.

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.

### 5.3 IMPLEMENTATION

### 5.3.1 CONFIRMATIONS AND INVENTORY

During FY11-12 the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources. Inspections conducted addressed all the required inspection steps to determine full compliance.

The Municipal Permit requires the Authority to maintain an inventory of industrial and commercial sites/sources and to annually update the inventory and prioritize these sites/sources. Table 5-3 presents the inventory and prioritization for industrial and commercial activities/operations at SDIA as of June 30, 2012. An inventory table that provides more detail on each tenant can be found in Appendix B of this report. All 32 of these entities are considered stationary sources. There are no "mobile" sites/sources within the Authority's jurisdiction.

### 5.3.2 INSPECTIONS

In FY11-12, the Environmental Affairs Department inspected 32 of the current 32 industrial and high priority commercial operations in the SDIA industrial / commercial inventory on a quarter-annual basis. Inspections conducted in FY11-12 generally found industrial activities to be in compliance with the requirements of the SWMP and the Industrial and Commercial Component of the Municipal Permit. The majority of the required BMPs are being implemented properly.

Table 5-4 presents the dates, types of industrial and commercial activity inspections conducted by the Authority, the number and types of violations, the type of enforcement actions taken, and the dates that confirmation of compliance was achieved.

The Airport Authority conducted all industrial and commercial activities inspections in accordance with Section D.3.b.(3) of the Municipal Permit to determine if operations were in full compliance with the Permit. Poor materials/waste management was again frequently identified as an issue of



concern (37 out of 118 issues had to do with waste handling and disposal). 74These concerns were also identified in the FY04-05 through FY10-11 Annual Reports. These issues require constant attention from industrial and commercial activity site managers/supervisors, and have been made a priority by inspectors when educating tenants on BMPs.

TABLE 5-3 INDUSTRIAL/COMMERCIAL INVENTORY

	Facility Name	Principal Products / Services	Industrial / Commercial	Priority Level
1	ACE	Parking Lot Management	Commercial	High
2	Air Canada Jazz	Passenger Carrier	Industrial	High
3	Alaska Airlines	Passenger Carrier	Industrial	High
4	Allegiant	Passenger Carrier	Industrial	High
5	Allied Aviation	Fuel Storage	Industrial	High
6	American Airlines	Passenger Carrier	Industrial	High
7	American Eagle	Passenger Carrier	Industrial	High
8	ARFF	Aircraft Rescue and Fire Fighting	Industrial	High
9	ASIG	Fueling Services	Industrial	High
10	British Airways	Passenger Carrier	Industrial	High
11	Continental	Passenger Carrier	Industrial	High
12	Delta	Passenger Carrier	Industrial	High
13	DHL	Cargo Handling	Industrial	High
14	Elite Line Services	Maintenance (Passenger boarding bridges & baggage conveyor)	Industrial	High

TABLE 5-3 INDUSTRIAL/COMMERCIAL INVENTORY (CONTINUED)

	Facility Name	Principal Products / Services	Industrial / Commercial	Priority Level
15	FedEx	Cargo Handling	Industrial	High
16	Flagship	Janitorial	Commercial	High
17	Frontier	Passenger Carrier	Industrial	High
18	Hawaiian	Passenger Carrier	Industrial	High
19	HMS Host	Food & Beverage	Commercial	High
20	Jet Blue	Passenger Carrier	Industrial	High
21	Landmark Aviation	Fixed Base Operator - General Aviation	Industrial	High
22	SDCRAA	Facilities Maintenance	Industrial	High
23	Sky West	Passenger Carrier	Industrial	High
24	Southwest	Passenger Carrier	Industrial	High
25	Spirit	Passenger Carrier	Industrial	High
26	Sun Country	Passenger Carrier	Industrial	High
27	United	Passenger Carrier	Industrial	High
28	UPS	Cargo Handling	Industrial	High
29	US Airways	Passenger Carrier	Industrial	High
30	Virgin America	Passenger Carrier	Industrial	High
31	Volaris	Passenger Carrier	Industrial	High
32	WestJet	Passenger Carrier	Industrial	High



TABLE 5-4 INDUSTRIAL/COMMERCIAL OPERATION COMPLIANCE CONCERNS IDENTIFIED DURING SITE INSPECTIONS AND DATES OF COMPLIANCE CONFIRMATION – FY11-12

Date of Inspection	ID Source	Tenant/ Operation	Compliance Issue	Type of Enforcement and Resolution Method	Date full compliance achieved
07/07/11	Ad Hoc Inspection	HMS Host	Observed grease spills on and around bin near gate 1.	Email was sent to tenant. Area was cleaned.	07/15/11
07/12/11	Ad Hoc Inspection	Southwest Airlines	Outdoor trash can without lid.	Email sent to tenant. Lid was provided for trash can.	07/12/11
07/12/11	Ad Hoc Inspection	American Eagle Air- lines	Outdoor trash can without lid.	Email sent to tenant. Trash can was moved indoors.	07/12/11
07/12/11	Ad Hoc Inspection	American Eagle	Trash was left on outdoor table in eating area on the CT ramp.	Email sent to tenant. Trash was removed.	07/12/11
07/12/11	Ad Hoc Inspection	American Eagle	Trash bag was left out-doors without containment.	Email sent to tenant. Trash was properly disposed of.	07/12/11
07/12/11	Ad Hoc Inspection	Alaska Airlines	Outdoor trash can without lid.	Email sent to tenant. Lid was provided for trash can.	07/12/11
09/13/11	Ad Hoc Inspection	United Airlines	Significant oil staining observed on the ramp under gate 17.	Spoke with tenant. Area was cleaned and leaking vehicle repaired.	09/21/11
09/13/11	Ad Hoc Inspection	HMS Host	Grease spill observed on ramp between gates 10 and 11.	Email sent to tenant. Spill was cleaned with absorbent.	09/13/11
09/13/11	Ad Hoc Inspection	Southwest Airlines	Absorbent material spill under equipment at gate 10.	Email sent to tenant. Tenant swept area.	09/21/11
09/13/11	Ad Hoc Inspection	SDCRAA	Outdoor trash cans without lids and loose debris observed in construction area under gate 3.	Email was sent to project manager. Area was cleaned and lids were provided.	09/19/11
09/13/11	Ad Hoc Inspection	American Eagle	Outdoor trash can without a lid.	Email sent to tenant. Trash can was removed from area.	10/03/11
09/21/11	Quarterly Inspection	Alaska Airlines	Outdoor trash cans without a lid.	Email sent to tenant. Trash cans were removed from area.	10/08/11
09/21/11	Quarterly Inspection	SDCRAA	Herbicide bottles left out- doors without overhead cover.	Work order submitted. Bottles were relocated.	09/28/11

TABLE 5-4 INDUSTRIAL/COMMERCIAL OPERATION COMPLIANCE CONCERNS IDENTIFIED DURING SITE INSPECTIONS AND DATES OF COMPLIANCE CONFIRMATION – FY11-12 (CONTINUED)

Date of Inspection	ID Source	Tenant/ Operation	Compliance Issue	Type of Enforcement and Resolution Method	Date full compliance achieved
09/21/11	Quarterly Inspection	Delta Airlines	Fresh oily staining on ramp at Gate 26.	Tenant was contacted via telephone. Area was cleaned by tenant.	09/21/11
09/21/11	Quarterly Inspection	HMS Host	Outdoor trash can observed overflowing and without a lid.	Email sent to tenant. Tenant restored lid to can and emptied trash.	10/07/11
09/21/11	Quarterly Inspection	ACE	Accumulation of cigarette butts on ground at outdoor break area in lot 10.	Tenant was contacted via telephone and email. Tenant had area cleaned.	09/25/11
09/21/11	Quarterly Inspection	Southwest Airlines	Drums in cargo yard stored outdoors without proper secondary contain- ment.	Email sent to tenant. Drums were empty, and tenant had them labeled as such.	09/28/11
09/21/11	Quarterly Inspection	ARFF	Drums stored outdoors without secondary containment.	Spoke with tenant in person. Drums were empty, and tenant had them labeled as such.	10/03/11
09/21/11	Quarterly Inspection	ARFF	Outdoor dumpster with lid left off.	Spoke with tenant in person. Tenant closed lid and reminded staff of proper procedures.	10/03/11
09/21/11	Quarterly Inspection	SDCRAA	Outdoor trash container without lid.	Work order submitted. Trash container removed from area.	09/28/11
09/21/11	Quarterly Inspection	Landmark Aviation	Outdoor trash can without lid.	Email sent to tenant. Trash can was removed from area.	10/11/11
09/21/11	Quarterly Inspection	SDCRAA	Staining observed around triturator.	Ocean Blue contacted to clean area.	09/26/11
09/21/11	Quarterly Inspection	United Airlines	Leaking from Accufleet wash cart observed.	Email sent to tenant. Tenant repaired leaks.	10/03/11
09/21/11	Quarterly Inspection	Landmark Aviation	Drums stored outdoors without proper containment or labeling.	Email sent to tenant. Tenant had drums removed from site.	10/11/11
09/21/11	Quarterly Inspection	US Airways	Improperly stored trash containers at gate 34.	Email sent to tenant. Tenant removed containers from area and briefed staff on proper procedures.	09/26/11



TABLE 5-4 INDUSTRIAL/COMMERCIAL OPERATION COMPLIANCE CONCERNS IDENTIFIED DURING SITE INSPECTIONS AND DATES OF COMPLIANCE CONFIRMATION – FY11-12 (CONTINUED)

Date of Inspection	ID Source	Tenant/ Operation	Compliance Issue	Type of Enforcement and Resolution Method	Date full compliance achieved
09/21/11	Quarterly Inspection	Landmark Aviation	Fresh staining observed under trucks in fuel truck parking area.	Email sent to tenant. Tenant placed drip pans under leaking equipment, and equipment repairs were made.	10/11/11
10/12/11	Ad Hoc Inspection	FlagShip	Outdoor trash cans with broken lids.	Email was sent to the tenant. Tenant had lids replaced.	10/12/11
10/12/11	Ad Hoc Inspection	Allegiant Air	Fresh staining observed under ATS equipment between gates 20 and 21.	Email sent to tenant. Tenant had area cleaned and equipment checked.	10/12/11
10/12/11	Ad Hoc Inspection	Allegiant Air	FOD and absorbent material accumulation observed between gates 26 and 28.	Email was sent to the tenant. Tenant had area swept.	10/12/11
11/08/11	Ad Hoc Inspection	Southwest Airlines	Accumulation of construction debris near gate 9.	Email sent to tenant. Project was completed, and area was cleaned.	11/10/11
11/08/11	Ad Hoc Inspection	SDCRAA	Absorbent material spill near storm drain.	Work order submitted. Area was swept.	11/11/11
11/08/11	Ad Hoc Inspection	US Airways	Hazardous materials and waste stored outdoors without proper containment.	Email sent to tenant. Hazardous materials and waste was stored properly and area was cleaned.	04/04/12
12/06/11	Ad Hoc Inspection	Allegiant Air	ATS equipment had minor leaking.	Email sent to tenant. Staining was cleaned and equipment was checked for leaks.	12/06/11
12/06/11	Ad Hoc Inspection	US Airways	Absorbent material spill observed under stairs near gate 33.	Email sent to tenant. Tenant had area swept.	12/06/11
12/06/11	Ad Hoc Inspection	Delta Airlines	Absorbent material spill observed near gate 39.	Email sent to tenant. Tenant had area swept.	12/06/11
12/08/11	Quarterly Inspection	United Airlines	US Aviation services lavatory truck parked behind trash compactors was observed leaking.	Email was sent to tenant. Tenant had truck repaired to prevent leaks.	01/16/12

TABLE 5-4 INDUSTRIAL/COMMERCIAL OPERATION COMPLIANCE CONCERNS IDENTIFIED DURING SITE INSPECTIONS AND DATES OF COMPLIANCE CONFIRMATION – FY11-12 (CONTINUED)

Date of Inspection	ID Source	Tenant/ Operation	Compliance Issue	Type of Enforcement and Resolution Method	Date full compliance achieved
12/08/11	Quarterly Inspection	Landmark Aviation	Unlabeled drums stored outdoors without secondary containment.	Email was sent to tenant. Tenant had drum removed from site.	12/29/11
12/08/11	Quarterly Inspection	FedEx	Fresh oily staining observed along the lead in line at gate 2.	Email was sent to tenant. Tenant confirmed that staining was deicing fluid, and that area is cleaned daily.	12/24/11
12/08/11	Quarterly Inspection	SDCRAA	Trays of absorbent material left outdoors at runway lighting vault area.	Work order submitted. Material was properly disposed of.	12/14/11
12/08/11	Quarterly Inspection	SDCRAA	Low boy street sweeping dumpster is without cover.	Spoke with FMD. Cover was provided.	12/08/11
12/08/11	Quarterly Inspection	United Airlines	Leaking from Accufleet wash cart observed.	Email sent to tenant. Tenant repaired leaks.	01/16/12
12/08/11	Quarterly Inspection	SDCRAA	Drums stored outdoors without cover in boneyard.	Spoke with Ocean Blue. Drums were removed from site.	12/12/11
12/09/11	Quarterly Inspection	Hawaiian Airlines	Staining observed in APS parking area.	Email sent to tenant. Tenant had area cleaned.	01/12/12
12/09/11	Quarterly Inspection	US Airways	Leaking trash cart observed at gate.	Tenant contact via tele- phone and email. Tenant fixed cart and cleaned area.	01/09/12
12/09/11	Quarterly Inspection	Alaska Airlines	Outdoor trash can without lid.	Email sent to tenant. Tenant installed lid on trash can.	01/20/12
12/09/11	Quarterly Inspection	Alaska Airlines	Outdoor recycle container without lid.	Email sent to tenant. Tenant removed uncovered containers from area.	12/20/11
12/09/11	Quarterly Inspection	US Airways	Absorbent material spill observed near gate.	Email sent to tenant. Tenant had area cleaned.	3/31/11
12/09/11	Quarterly Inspection	Delta Airlines	Tug equipment leaking red oily fluid on ramp.	Tenant contacted via telephone and email. Tenant had tug repaired and area cleaned.	01/09/12



TABLE 5-4 INDUSTRIAL/COMMERCIAL OPERATION COMPLIANCE CONCERNS IDENTIFIED DURING SITE INSPECTIONS AND DATES OF COMPLIANCE CONFIRMATION – FY11-12 (CONTINUED)

Date of Inspection	ID Source	Tenant/ Operation	Compliance Issue	Type of Enforcement and Resolution Method	Date full compliance achieved
12/09/11	Quarterly Inspection	US Airways	Outdoor trash container without lid.	Email sent to tenant. Tenant provided lid for trash can.	01/09/12
01/03/12	Ad Hoc Inspection	ASIG	Truck observed leaking oil on commuter terminal ramp.	Email sent to tenant. Tenant had equipment checked for leaks.	01/03/12
02/09/12	Ad Hoc Inspection	Allegiant Air	ATS equipment observed leaking near gate 21.	Email sent to tenant. Equipment was checked for leaks, leaks were AC condensate.	02/23/12
02/09/12	Ad Hoc Inspection	Spirit Airlines	Maintenance material stored outside without proper containment.	Email sent to tenant. Tenant moved items to an appropriate location.	02/15/12
02/09/12	Ad Hoc Inspection	US Airways	Absorbent material spill observed near gate 36.	Email was sent to tenant. Tenant had the area cleaned.	02/23/12
02/09/12	Ad Hoc Inspection	US Airways	Leaking equipment observed near gate 37.	Email sent to tenant. Tenant had equipment fixed and area cleaned.	02/23/12
03/01/12	Annual Inspection	Allied Aviation	Leaking water pipe observed in area.	Email sent to tenant. Tenant replaced leaking valve.	03/09/12
03/01/12	Annual Inspection	Allied Aviation	Drums stored outdoors without proper labels.	Email was sent to tenant. Tenant provided labels for drums.	03/02/12
03/07/12	Annual Inspection	US Airways	Outdoor trash containers without lids.	Email sent to tenant. Tenant provided lids for containers and briefed staff on proper procedures.	03/07/12
03/07/12	Annual Inspection	US Airways	Improper storage of materials outside.	Email sent to tenant. Tenant removed items from outside.	03/07/12
03/08/12	Ad Hoc Inspection	American Eagle Airlines	Absorbent material left on ramp after lavatory truck leak.	Email sent to tenant. Tenant swept area.	03/16/12
03/08/12	Annual Inspection	ARFF	Bags of recyclables stored outdoors without containment.	Email was sent to tenant. Tenant removed recyclables from site.	04/08/12

TABLE 5-4 INDUSTRIAL/COMMERCIAL OPERATION COMPLIANCE CONCERNS IDENTIFIED DURING SITE INSPECTIONS AND DATES OF COMPLIANCE CONFIRMATION – FY11-12 (CONTINUED)

Date of Inspection	ID Source	Tenant/ Operation	Compliance Issue	Type of Enforcement and Resolution Method	Date full compliance achieved
03/08/12	Annual Inspection	ARFF	Fuel containers stored without secondary containment.	Email was sent to tenant. Secondary containment pallet provided.	06/06/12
03/08/12	Annual Inspection	ARFF	Damage to storm drain BMP observed.	Email sent to tenant. Ocean Blue installed new BMP in storm drain.	04/02/12
03/09/12	Annual Inspection	United Airlines	Fresh oil staining observed outside Timco office.	Email sent to tenant. Tenant cleaned area and inspected equipment.	04/08/12
03/09/12	Annual Inspection	United Airlines	Radiator fluid spill from drum at gate 12 observed.	Email was sent to tenant. Area was cleaned and employees were briefed on proper procedures.	04/08/12
03/09/12	Annual Inspection	United Airlines	Improper storage of alkaline cleaner containers in maintenance yard.	Email was sent to tenant. Tenant had containers moved to a covered area.	05/24/12
03/09/12	Annual Inspection	United Airlines	Trash accumulation observed in maintenance yard.	Email was sent to tenant. Area was cleaned.	06/14/12
03/09/12	Annual Inspection	United Airlines	Leaking observed from Accufleet cart in maintenance yard.	Email was sent to tenant. Equipment was repaired.	05/24/12
03/19/12	Annual Inspection	Landmark Aviation	Oily sheen observed in various locations on ramp and near maintenance building.	Email was sent to tenant. Area was cleaned and equipment was checked for leaks.	03/22/12
03/19/12	Annual Inspection	Landmark Aviation	Broken gravel bags observed in parking lot.	Email was sent to tenant. Tenant had area cleaned and broken gravel bags disposed of.	03/22/12
03/19/12	Annual Inspection	Landmark Aviation	Outdoor trash containers observed without lids.	Email was sent to tenant. Tenant provided lids for trash containers and discussed procedures with staff.	03/22/12
03/21/12	Ad Hoc Inspection	US Airways	Large stains observed in area.	Email was sent to tenant. Tenant had area cleaned.	04/04/12



Table 5-4 Industrial/Commercial Operation Compliance Concerns Identified during Site Inspections and Dates of Compliance Confirmation – FY11-12 (Continued)

Date of Inspection	ID Source	Tenant/ Operation	Compliance Issue	Type of Enforcement and Resolution Method	Date full compliance achieved
03/21/12	Ad Hoc Inspection	US Airways	Outdoor trash containers without lids.	Email was sent to tenant. Tenant provided lids for trash containers.	04/04/12
03/21/12	Ad Hoc Inspection	US Airways	Improper storage of batteries.	Email was sent to tenant. Batteries were moved to an appropriate area.	04/04/12
03/21/12	Ad Hoc Inspection	US Airways	Improper storage of oil containers.	Email was sent to tenant. Tenant removed oil containers.	04/04/12
03/21/12	Ad Hoc Inspection	US Airways	Sediment accumulation within operational area.	Email was sent to tenant. Tenant had area cleaned.	04/04/12
03/21/12	Ad Hoc Inspection	US Airways	Improper storage of oily rags without containment.	Email was sent to tenant. Tenant disposed of rags properly.	04/04/12
03/21/12	Ad Hoc Inspection	US Airways	Observed transport trucks with exposed fuel containers.	Email was sent to tenant. Tenant ensured truck containers were covered.	04/04/12
03/21/12	Ad Hoc Inspection	US Airways	Debris accumulation within operational area.	Email was sent to tenant. Tenant had area cleaned.	04/04/12
03/23/12	Annual Inspection	UPS	Fresh oil stains observed near plane.	Email was sent to tenant. Equipment was inspected, and area was cleaned.	04/26/12
03/27/12	Annual Inspection	FedEx	Outdoor trash cart observed without lid.	Email was sent to tenant. Tenant provided lid for trash cart.	04/30/12
03/27/12	Annual Inspection	Delta Airlines	Fresh oil stain observed on lead in line at Gate 41.	Email was sent to tenant. Tenant had area cleaned.	04/26/12
03/27/12	Annual Inspection	Delta Airlines	Full drip pan observed under equipment in DGS maintenance yard.	Email was sent to tenant. Tenant had pan properly emptied and disposed of.	04/26/12
05/01/12	Ad Hoc Inspection	HMS Host	Observed grease spills and leaking containers without proper containment.	Email was sent to tenant. Tenant had leaking containers disposed of, and area power washed.	05/03/12

TABLE 5-4 INDUSTRIAL/COMMERCIAL OPERATION COMPLIANCE CONCERNS IDENTIFIED DURING SITE INSPECTIONS AND DATES OF COMPLIANCE CONFIRMATION – FY11-12 (CONTINUED)

Date of Inspection	ID Source	Tenant/ Operation	Compliance Issue	Type of Enforcement and Resolution Method	Date full compliance achieved
05/01/12	Ad Hoc Inspection	Southwest Airlines	Lavatory truck at Gate 2 observed dripping fluid on ramp.	Email was sent to tenant. Tenant had truck repaired and briefed employees on proper procedures.	05/17/12
06/04/12	Quarterly Inspection	SDCRAA	Outdoor street sweeping dumpster without cover and material spill.	Work order submitted. Dumpster was covered and area cleaned.	06/19/12
06/04/12	Quarterly Inspection	SDCRAA	Portable lavatory observed without secondary containment.	Email was sent to tenant. Vendor was contacted, and installed containment pan.	06/11/12
06/04/12	Quarterly Inspection	SDCRAA	Accumulation of trash observed behind blast fence.	Work order submitted. Area was cleaned.	06/22/12
06/04/12	Quarterly Inspection	SDCRAA	Gravel Bags of Stormdrain BMP observed to be broken.	Ocean Blue was contacted, and replaced BMP.	06/08/12
06/04/12	Quarterly Inspection	SDCRAA	Trash, sediment and broken glass accumulation observed in corporate yard.	Work order submitted. Area was cleaned.	06/22/12
06/04/12	Quarterly Inspection	FedEx	Trash accumulation observed under processing area.	Email was sent to tenant. Tenant had area cleaned.	06/19/12
06/04/12	Quarterly Inspection	FedEx	Trash accumulation behind office trailer.	Email was sent to tenant. Tenant had area cleaned.	06/19/12
06/04/12	Quarterly Inspection	Landmark Aviation	Outdoor trash container without lid.	Email was sent to tenant. Tenant had lid closed and briefed employees on proper procedures.	06/13/12
06/04/12	Quarterly Inspection	Landmark Aviation	Several areas of petroleum staining under fuel trucks.	Email was sent to tenant. Tenant purchased drip pans and cleaned area.	06/13/12
06/04/12	Quarterly Inspection	Landmark Aviation	Piles of trash observed on ramp in DHL area.	Email sent to tenant. Tenant had trash piles removed and disposed of.	06/13/12
06/04/12	Quarterly Inspection	IAS	Outdoor trash container without lid.	Email sent to tenant. Tenant provided lid.	06/19/12



TABLE 5-4 INDUSTRIAL/COMMERCIAL OPERATION COMPLIANCE CONCERNS IDENTIFIED DURING SITE INSPECTIONS AND DATES OF COMPLIANCE CONFIRMATION – FY11-12 (CONTINUED)

Date of Inspection	ID Source	Tenant/ Operation	Compliance Issue	Type of Enforcement and Resolution Method	Date full compliance achieved
06/04/12	Quarterly Inspection	IAS	Spilled absorbent material observed in operational area.	Email sent to tenant. Tenant had area cleaned.	06/19/12
06/04/12	Quarterly Inspection	IAS	Large area of staining in operational area.	Sent email to tenant. Tenant had area cleaned.	06/19/12
06/04/12	Quarterly Inspection	IAS	Portable lavatory observed without secondary containment.	Email was sent to tenant. Tenant had secondary containment pan installed.	06/19/12
06/04/12	Quarterly Inspection	IAS	Area of staining observed under equipment on the ramp.	Email sent to tenant. Tenant had the area cleaned.	06/19/12
06/05/12	Quarterly Inspection	Air Canada- Jazz Airlines	ATS equipment leak observed.	Email was sent to tenant. Tenant had equipment repaired and area cleaned.	06/26/12
06/05/12	Quarterly Inspection	Delta Airlines	Oil stains on either side of lead in line at Gate 26.	Email was sent to tenant. Tenant had area cleaned.	06/05/12
06/05/12	Quarterly Inspection	Hawaiian Airlines	APS equipment leaking at Gate 28.	Email was sent to tenant. Tenant had vendor clean area.	06/21/12
06/05/12	Quarterly Inspection	American Airlines	Vehicle observed with possible leak.	Email was sent to tenant. Tenant moved unit and had area cleaned.	06/18/12
06/05/12	Quarterly Inspection	American Airlines	Area of staining observed in maintenance yard.	Email was sent to tenant. Tenant had area cleaned.	06/18/12
06/05/12	Quarterly Inspection	Jet Blue Airlines	Oil stain observed under jet bridge at Gate 23.	Email was sent to tenant. Tenant cleaned area and briefed team on proper spill procedures.	06/07/12
06/05/12	Quarterly Inspection	United Airlines	Outdoor overflowing trash can with no lid.	Email was sent to tenant. Tenant had trash can emptied, and installed lid.	06/26/12
06/05/12	Quarterly Inspection	United Airlines	Blue juice drums stored outdoors without lids.	Email was sent to tenant. Tenant provided new secondary containment for drums.	06/26/12

TABLE 5-4 INDUSTRIAL/COMMERCIAL OPERATION COMPLIANCE CONCERNS IDENTIFIED DURING SITE INSPECTIONS AND DATES OF COMPLIANCE CONFIRMATION – FY11-12 (CONTINUED)

Date of Inspection	ID Source	Tenant/ Operation	Compliance Issue	Type of Enforcement and Resolution Method	Date full compliance achieved
06/05/12	Quarterly Inspection	United Airlines	Accumulation of trash observed in maintenance yard.	Email was sent to tenant. Tenant had area cleaned.	06/26/12
06/05/12	Quarterly Inspection	US Airways	Outdoor trash can without lid at Gate 36.	Email was sent to tenant. Tenant removed trash can from area.	06/14/12
06/05/12	Quarterly Inspection	US Airways	Hazardous material and waste storage area is unkempt and trash is overflowing.	Email was sent to tenant. Tenant cleaned area and emptied trash cans.	06/14/12
06/05/12	Quarterly Inspection	Alaska Airlines	Outdoor trash can without lid.	Email was sent to tenant. Tenant had trash can removed from area.	06/11/12
06/05/12	Quarterly Inspection	HMS Host	Grease bin area near gate 11 is messy with evidence of spills.	Email was sent to tenant. Tenant had area power washed.	06/13/12
06/05/12	Quarterly Inspection	Southwest Airlines	Outdoor trash can without lid.	Email was sent to tenant. Tenant had trash can removed from area.	06/21/12
06/05/12	Quarterly Inspection	Southwest Airlines	Pallet and an accumulation of debris were observed on ramp.	Email was sent to tenant. Tenant removed pallet, and had area cleaned.	06/21/12
/05/2012	Quarterly Inspection	Southwest Airlines	Trash accumulation observed in PAM operational area.	Email was sent to tenant. Tenant had area cleaned.	06/21/12
06/05/12	Quarterly Inspection	ASIG	Vehicle observed leaking during performance of maintenance.	Email was sent to tenant. Tenant had area cleaned and installed drip pan under equipment.	06/19/12
06/05/12	Quarterly Inspection	DHL	Outdoor trash container without lid.	Email was sent to tenant. Tenant had trash can moved indoors.	06/26/12
06/05/12	Quarterly Inspection	DHL	Area of staining observed on ramp.	Email was sent to tenant. Tenant had area cleaned.	06/26/12

 $<sup>\</sup>ast$  "Ad Hoc" inspections are inspections that are performed on a random or as needed basis.



TABLE 5-5 TYPES OF ACTIVITIES FOR WHICH BMPS WERE MOST FREQUENTLY IDENTIFIED AS NOT BEING PROPERLY IMPLEMENTED DURING SITE INSPECTIONS – FY11-12

Activity	Count	ВМР	Count
SC08 Waste Handling & Dis-	32	SC08-05 Cover & contain all wastes	26
posal		SC08-08 Inspect waste containers frequently	6
SC18 Housekeeping	20	SC18-02 Keep facility/operation clean & orderly	12
		SC18-04 Sweep facility/operation at least once per week	8
SR01 Spill Prevention, Control & Clean Up	13	SR01-07 Follow appropriate procedures for all spills	13
SC02B Aircraft, Ground Vehicle & Equipment Maintenance	15	SC02B-05 Inspect equipment/vehicles for leaks	15
SC07 Outdoor Material Storage	14	SC07-02 Cover and contain outdoor storage areas	14

<sup>\*</sup> This table presents only those issues that were identified more than 5 times across the entire inspection program.

### 5.3.3 FOLLOW-UP AND ENFORCEMENT

Each item of concern, identified during inspections, was addressed satisfactorily within the time-frame allowed and no further enforcement actions were initiated.

No unauthorized discharges to receiving waters were identified during inspections in FY11-12. No operations were identified to be in need of filing for coverage under the General Industrial Permit.

Based on these inspections, the Authority determined that the BMPs listed in the SAN SWMP were adequate, and no additions or modifications were required.

### 5.4 ENHANCED PROGRAM ELEMENTS

During FY11-12 the Airport Authority developed and deployed SANTrack, a new online stormwater data management system, which allows for greater accuracy and efficiency in stormwater inspection tracking and reporting. The

new system is an interactive platform that allows for inspectors and tenants to view and correspond to inspection data on a centralized website. It also allows for better historical record tracking of tenants' inspection violations, which provides needed justification for increased enforcement penalties. Although still in the first year of use, the Authority anticipates SANtrack will improve the quality of our service, while saving time and saving money.

### 5.5 ASPECTS OF THE PERMIT THAT ARE NOT APPLICABLE

The following aspects of the Municipal Permit are not applicable to the Authority for the reasons outlined below.

### Regulation of Mobile Businesses

There are no mobile businesses within the Authority's jurisdiction. As noted above in Section 7.3 of the SWMP, 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.

### Third Party Inspections

To date, the Authority has not developed a third party inspection program for industrial/commercial sites/sources at SDIA. As such, there were no efforts conducted to verify third party inspection effectiveness.

### 5.6 PROGRAM REVIEW AND MODIFICATION

The Authority last revised the SWMP 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. In FY11-12 LPI changed their name to ACE, ATI was removed from the inventory, Spirit and Volaris air carriers were added to the inventory, and DHL split from the Landmark lease and became an additional tenant holding their own lease with the Airport Authority. Any and all proposed revisions to the SWMP are discussed and summarized in Chapter 14 of this Annual Report.





### 6 RESIDENTIAL COMPONENT

### TABLE 6-1 PERMIT COMPLIANCE REPORTING REQUIREMENTS

No.	Compliance Item	Outcome
1	Identification of the high threat to water quality residential areas and activities that were focused on.	NA
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	NA
3	A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	NA
4	Types and amounts of household hazardous wastes collected, if applicable.	NA
5	The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	NA
6	A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	See below

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 FY11-12 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 the Education and Residential Sources Copermittee workgroup, in which regional residential education efforts are developed.





# 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 15<sup>th</sup> 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 material disposal, wet and dry weather monitoring,

### Storm Water Management Plan - Municipal Stormwater Permit

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, 2012.





### 8 EDUCATION COMPONENT

### 8.1 INTRODUCTION

TABLE 8-1 PERMIT COMPLIANCE REPORTING REQUIREMENTS

No.	Compliance Item	Annual Report Section
1	A description of education efforts conducted for each target community.	Section 8.2
2	A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	Section 8.2; Table 8-2
3	A description of education efforts conducted for municipal (Authority) departments and personnel.	Table 8.3
4	A description of education efforts conducted for the new development and construction communities.	Table 8.4
5	A description of jurisdictional education efforts conducted for residents, the general public, and school children.	Table 8.5

This chapter of the Annual Report discusses compliance activities relative to educating various audiences about stormwater pollution and stormwater pollution control at SDIA during FY11-12. Table 8-1 above outlines the requirements of the Municipal Permit, our compliance, and/or where to find a description of our compliance within this report. Section 8z (Education Component) of the SWMP has been prepared, in part, to outline the means and methods used to ensure that these requirements are satisfied.

### 8.2 PROCESS

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.

Each element of the education program is designed to present the appropriate Municipal Permit "agenda" message to a particular audience. The education programs emphasize the consistent presentation of readily understandable information about the causes and effects of stormwater pollution, laws and regulations, as well as the proper use of BMPs. 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.

The stormwater training programs developed by the Authority are designed to provide information appropriate to the duties and activities of the particular audience. Section 10 of the SWMP provides details on the education mechanisms and proposed training frequencies.

The inventory of industrial and commercial entities presented in the SWMP essentially lists the Authority's target audience of those conducting high-risk behaviors and "allowable" behaviors and discharges at the airport. The training presented to airport tenants 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.

The training presented to Authority departments and personnel typically addresses: 1) laws, regulations, and permit requirements; 2) urban runoff concepts; 3) the SWMP; 4) development planning; 5) construction activities; 6) municipal activities; 7) industrial/commercial activities; 8) BMPs and requirements for use; 9) illicit discharges, inspections, and reporting; and 10) other water conservation and pollution prevention concepts.

The training presented to the new development and construction community typically addresses: 1) laws, regulations, and permit requirements; 2) urban runoff concepts; 3) the SWMP; 4) development planning; 5) construction activities; 6) BMPs and requirements for use; 7) inspections and reporting; and 8) other water conservation and pollution prevention concepts.

The training presented to the general public and school children typically addresses: 1) laws, regulations, and permits; 2) urban runoff and stormwater pollution concepts; and3) other water conservation and pollution prevention concepts.

### 8.3 IMPLEMENTATION

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 webpage, airport storm drain stenciling, and the airport recycling brochure were each developed to address all the target audiences. Tables 8-2 through 8-5 present information relative to the education efforts directed at the following composite audiences during FY11-12: a) "high-risk, allowable behavior audience" (namely, airport industrial and commercial tenants); b) Authority departments and personnel; c) new development and construction communities; and d) residents, the general public, and school children.

Table 8-2 A description of education efforts conducted for the "high-risk, allowable behavior audience" (airport industrial and commercial tenants) during FY11-12

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).	1,000s
	Airport Authority promoted California Coastal Clean Up Day with a web banner, one of top five referring websites to the event (www.cleanup-day.org/event website).	
	Airport Recycling Guide, Pollution Prevention Information, and Energy Savings Checklist remain posted on the intranet and internet.	
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	1,000s
Brochures	Recycling Guide provided in terminals and at various outreach events.	Up to 2,500
Media News Releases	October 18, 2011. News release announces, "Airport Authority receives FAA grant for renewable energy project."	1,000s
	November 17, 2011. News release announces, "First 'Green' Taxis Coming to San Diego International Airport. Vehicle rebate program provides rebates and incentives for hybrid cabs."	
	January 10, 2012. News release announces, "Airport Authority achieves LEED Gold Certification - High rating achieved for existing maintenance building."	
	March 1, 2012. News release announces, "Airport Authority wins award for energy efficiency - Honored for airfield lighting project."	
	March 1, 2012. News release announces, "Green Build Discovery Center Opens at San Diego International Airport - Center showcases sustainable features of coming airport improvements; visitors through June 30, 2012, have an opportunity to win a Tommy Bahama electric beach cruiser."	
	June 26, 2012. News release announces, "San Diego International Airport launches first sustainability report." First airport in nation to follow Global Reporting Initiatives Guidelines.	



Table 8-2 A description of education efforts conducted for the "high-risk, allowable behavior audience" (airport industrial and commercial tenants) during FY11-12 (Continued)

Program Element	Description of Acti	vities		Estimated Audience Size
Tenant Safety Com- mittee Meetings		Department presented sto nant Safety & Security Con		320
	July 20, 2011	November 16, 2011	March 21, 2012	
	August 17, 2011	December 14, 2011	April 18, 2012	
	September 21, 2011	January 18, 2012	May 16, 2012	
	October 19, 2011	February 15, 2012	June 20, 2012	
Lindbergh Airport Managers Commit-		Department presented sto line station managers at mo		up to 50
tee (LAMC) Meetings	July 20, 2011	November 16, 2011	March 21, 2012	
	August 17, 2011	December 14, 2011	April 18, 2012	
	September 21, 2011	January 18, 2012	May 16, 2012	
	October 19, 2011	February 15, 2012	June 20, 2012	
Special Presentations	August 19, 2011. Envir	ronmental Affairs Departm n event.	ent hosted the Elec-	100s
	fornia Stormwater and	rironmental Affairs Departs Waters of the U.S. Issues," nmittee Pre-Conference Ser	at the ACI-NA Envi-	
		Environmental Affairs Departmental Residential Sources 'athout a Bag."		
	January 27, 2012. Envi	ronmental Affairs Departn n event.	nent hosted the Elec-	
	April 20, 2012. Enviro Waste Collection even	nmental Affairs Department.	nt hosted the Electronic	
		port Authority distributed a ooks at the KidFest San Die		
Targeted Training/ Presentations for	July 20, 2011. Environ Tenants the 2011 SAN	mental Affairs Department Stormwater Audit.	presented to Airport	100s
Specific Tenant Groups		nvironmental Affairs Depa SUSMP) to Project Manage		14
	November 7, 2011. En ronmental Sustainabili	vironmental Affairs Depar ty tour for CleanTech.	tment hosted an Envi-	10

Table 8-2 A description of education efforts conducted for the "high-risk, allowable behavior audience" (airport industrial and commercial tenants) during FY11-12 (Continued)

Program Element	Description of Activities	Estimated Audience Size
	January 4, 2012. Environmental Affairs Department trained the Facilities Management Department on BMP Maintenance and provided a demonstration.	15

Table 8-3 Description of education efforts conducted for Authority departments and personnel FY11-12

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 Authority promoted California Coastal Clean Up Day with a web banner, one of top five referring websites to the event (www.cleanup-day.org/event website).	
	Airport Recycling Guide, Pollution Prevention Information, and Energy Savings Checklist remain posted on the intranet and internet.	
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	Up to 350
Posters/ Banners/ Signage in Terminals and Parking Lots	June through October 2012. Collaboration with the City of San Diego Utilities Department held a Water Conservation Poster Contest, "Don't Waste Water" displaying on the Children's Art Wall in Terminal 2.	Up to 350
Brochures	Recycling Guide provided in terminals and at various outreach events.	Up to 350
Media News Releases	October 18, 2011. News Release announces, "Airport Authority receives FAA grant for renewable energy project."	Up to 350
	November 17, 2011. News Release announces, "First "Green" Taxis Coming to San Diego International Airport - Vehicle rebate program provides rebates and incentives for hybrid cabs ."	



Table 8-3 Description of education efforts conducted for Authority departments and personnel FY11-12 (Continued)

Program Element	Description of Activities	Estimated Audience Size*
	January 10, 2012. News Release announces, "Airport Authority achieves LEED Gold Certification - High rating achieved for existing maintenance building."	
	March 1, 2012. News Release announces, "Airport Authority wins award for energy efficiency, honored for airfield lighting project."	
	March 1, 2012. News Release announces, "Green Build Discovery Center Opens at San Diego International Airport - Center showcases sustainable features of coming airport improvements; visitors through June 30, 2012, have an opportunity to win a Tommy Bahama electric beach cruiser."	
	June 26, 2012. News Release announces, "San Diego International Airport launches first sustainability report." First airport in nation to follow Global Reporting Initiatives Guidelines.	

Table 8-3 Description of education efforts conducted for Authority departments and personnel FY11-12 (Continued)

Program Element	Description of Activities	Estimated Audience Size*
E-mail Announce- ments/ Tenant Advi- sories	July 1, 2011. The Green Flash e-bulletin announcing, "20-Gallon Challenge," "Ocean-Friendly Gardens San Diego," "Free Mulch from Miramar Greenery," and "Reduce Chemical Spills."	Up to 350
	August 1, 2011. The Green Flash e-bulletin announcing the new waste containers and promoting the Airport Authority Summer Clean Up and E-waste Collection event.	
	August 2, 2011. Tenant Informational Notice reminding tenants to "Push out Ground Support Equipment for Ramp Sweeping."	
	September 7, 2011. The Green Flash e-bulletin promoting "Five Green Phone Apps and "California Coastal Clean Up Day."	
	September 30, 2011. Tenant Informational Notice, announcing the "California Least Tern Nesting Season Ends – Rainy Season Begins."	
	October 7, 2011. The Green Flash e-bulletin announcing, "Energy Awareness Month."	
	October 26, 2011. E-Newsletter announcing, "Prescription Drug Take Back Program."	
	November 3, 2011. The Green Flash e-bulletin announcing, "November 15, America Recycles Day," and reminding employees and tenants to recycle at work."	
	November 18, 2011. E-Newsletter announcing, "Cardboard Recycling Updates."	
	November 30, 2011. Tenant Informational Notice reminding tenants to "Push Out Ground Support Equipment for Sweeping."	
	December 1, 2011. The Green Flash e-bulletin informing, "Holiday Saving Tips," including recycling and paper waste reduction and conservation.	
	December 27, 2011. Tenant Informational Notice reminding tenants to "Push Out Ground Support Equipment for Sweeping."	
	January 3, 2012. The Green Flash e-bulletin announcing, the "E-waste Collection Event happening January 27, 2012 and the importance of recycling high lead content materials."	
	January 30, 2012. Tenant Informational Notice reminding tenants to "Push Out Ground Support Equipment for Sweeping."	
	January 19, 2012. Tenant Informational Notice announcing, "Electronic Waste Collection Event on January 27, 2012."	



Table 8-3 Description of education efforts conducted for Authority departments and personnel FY11-12 (Continued)

Program Element	Description of Activiti	ies		Estimated Audience Size*
Department Meetings	Environmental Affairs staff attendance at Facilities Management Department – Monthly Status Meetings:			Up to 120
	July 26, 2011	November 29, 2011	April 24, 2012	
	August 30, 2011	January 30, 2012	May 29, 2012	
	September 27, 2011	February 28, 2012	June 28, 2012	
	October 25, 2011	March 27, 2012		
Targeted Training for Specific Employees	Annual mandatory Storm	Water Program training	g made available on-line.	350
Special Presentations	August 19, 2011. Environment tronic Waste Collection Ex		nent hosted the Elec-	100s
	October 15, 2011. Environmental Affairs Department presented "California Stormwater and Waters of the U.S. Issues," at the ACI-NA Environmental Affairs Committee Pre-Conference Seminar.			
	December 18, 2011. Envir with the Regional Education event entitled "Day Without	on Residential Sources		
	January 27, 2012. Environment tronic Waste Collection Ex	_	nent hosted the Elec-	
	April 20, 2012. Environme Waste Collection Event.	ental Affairs Departmen	nt hosted the Electronic	
	June 9 & 10, 2012. Airport Prevention coloring books	2		

Table 8-3 Description of education efforts conducted for Authority departments and personnel FY11-12 (Continued)

Program Element	Description of Activities	Estimated Audience Size*
Attendance at External	July 28, 2011. HAZWOPER 8 hour refresher training.	6
Professional Training/Workshops	August 21 & 25, 2011. StormCon's 10 <sup>th</sup> Annual Conference & Exposition.	1
	September 25-28, 2011. 7 <sup>th</sup> Annual California Stormwater Quality Association Conference.	1
	October 15 & 16, 2011. ACI-NA Environmental Affairs Committee Pre-Conference Seminar.	4
	November 9 & 10, 2011. IEA Environmental Conference – 2011 Statewide Environmental Summit.	2
	November 10, 2011. California Stormwater Quality Association Meeting via web.	1
	November 15, 2011. TMDL – Total Maximum Daily Load Webinar.	1
	May 29-31, 2012. 10th Annual 2011 Headwaters to Ocean ("H2O") Conference.	2

<sup>\*</sup>There are approximately 350 Authority Employees at any time during the reporting period.

TABLE 8-4 A DESCRIPTION OF EDUCATION EFFORTS CONDUCTED FOR THE NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES DURING FY11-12

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).	100s
	Airport Authority promoted California Coastal Clean Up Day with a web banner, one of top five referring websites to the event (www.cleanup-day.org/event website).	
	Airport Recycling Guide, Pollution Prevention Information, and Energy Savings Checklist remain posted on the intranet and internet.	
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	100s



TABLE 8-4 A DESCRIPTION OF EDUCATION EFFORTS CONDUCTED FOR THE NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES DURING FY11-12 (CONTINUED)

Program Element	Description of Activities	Estimated Audience Size
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: 23 meetings	422
Meetings and Inspections	Environmental Affairs Department staff attendance at regularly scheduled Project Progress meetings: 160 meetings	1858
	Environmental Affairs Department follow-up meetings to site inspections and tailgate meetings. Typically, one-on-one with construction contract site supervisor: 200 meetings	333

Table 8-5 A description of jurisdictional education efforts conducted for residents, the general public and school children during FY11-12

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).	10s of thou- sands
	Airport Authority promoted California Coastal Clean Up Day with a web banner, one of top five referring websites to the event (www.cleanup-day.org/event website).	
	Airport Recycling Guide, Pollution Prevention information, and Energy Savings Checklist remain posted on the intranet and internet.	
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	100s
Brochures	Recycling Guide provided in terminals and at various outreach events.	Up to 2,500

Table 8-5 A description of jurisdictional education efforts conducted for residents, the general public and school children during FY11-12 (Continued)

Program Element	Description of Activities	Estimated Audience Size
Media News Releases	October 18, 2011. News Release announces, "Airport Authority receives FAA grant for renewable energy project."	100s of thousands
	November 17, 2011. News Release announces, "First "Green" Taxis Coming to San Diego International Airport. Vehicle rebate program pro- vides rebates and incentives for hybrid cabs ."	
	January 10, 2012. News Release announces, "Airport Authority achieves LEED Gold Certification - High rating achieved for existing maintenance building."	
	March 1, 2012. News Release announces, "Airport Authority wins award for energy efficiency, honored for airfield lighting project."	
	March 1, 2012. News Release announces, "Green Build Discovery Center Opens at San Diego International Airport. Center showcases sustainable features of coming airport improvements; visitors through June 30, 2012, have an opportunity to win a Tommy Bahama electric beach cruiser."	
	June 26, 2012. News Release announces, "San Diego International Airport launches first sustainability report." First airport in nation to follow Global Reporting Initiatives Guidelines.	



Table 8-5 A description of jurisdictional education efforts conducted for residents, the general public and school children during FY11-12 (Continued)

Program Element	Description of Activities	Estimated Audience Size
Collaborative Efforts	Continued collaboration with WiLDCOAST on the "Wildlife Outreach Program" to encourage conservation of local wildlife and habitats.	Not Applica- ble
	Continued collaboration with San Diego CoastKeeper on "Project Swell" (providing children with a water-quality-based educational curricula) and to support the "Common Grounds" water quality monitoring database.	
	Continued collaboration with Surfrider Foundation on "Hold On To Your Butt" public education campaign about cigarette butts as a stormwater pollutant.	
	Continued collaboration with San Diego CoastKeeper, I Love a Clean San Diego and others on the Annual California Coastal Cleanup Day event, held on September 17, 2011.	
	Continued collaboration with I Love A Clean San Diego to sponsor the Annual Creek to Bay Cleanup event held April 28, 2012.	
	Continued collaboration with SANDAG supporting the iCommute regional program: Bike To Work 2012 Corporate Challenge held on May 18, 2012.	
	December 18, 2011. Environmental Affairs Department collaborated with the Regional Education Residential Sources Workgroup outreach event entitled "Day Without a Bag."	
Special Presentations		100s

### 8.4 ENHANCED PROGRAM ELEMENTS

The Authority has not implemented any activities relative to outreach and education that are above and beyond the requirements of the Municipal Permit.

### 8.5 ASPECTS OF THE PERMIT THAT ARE NOT APPLICABLE

For the record, while there is no residential land use within the Authority's jurisdiction, the Authority does make an effort to educate the general public as they travel through our facilities, as noted in Table 8-5 above. During FY11-12, the Authority supported in the Copermittee's regional outreach efforts to the residential communities. The Authority participated in the Regional Education Residential Sources Workgroup outreach event entitled "Day Without a Bag," held on December 18, 2011. The workgroup provided a \$5,000 sponsorship for reusable tote bags. These bags were distributed at sites across the region on the day of the event.

### 8.6 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.





## 9 Public Participation Component

### 9.1 INTRODUCTION

TABLE 9-1 PERMIT COMPLIANCE REQUIREMENTS

No.	Compliance Item	Outcomes
1	A description of public participation efforts conducted.	Section 9.3

This chapter of the Annual Report discusses compliance activities relative to public participation in the stormwater management program at SDIA during FY11-12. Table 9-1 above outlines the requirements of the Municipal Permit, our compliance, and/or where to find a description of our compliance within this report. Section 11 (Public Participation Component) of the SWMP has been prepared, in part, to outline the means and methods used to ensure that these requirements are satisfied.

### 9.2 PROCESS

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 FY11-12 are described here.

### 9.2.1 PUBLIC PARTICIPATION ELEMENT FOR AUTHORITY STAFF AND AIRPORT TENANTS

In addition to daily interactions between the Authority staff and the airport tenants, several mechanisms are used to provide staff and airport tenants the opportunity to participate in the implementation and ongoing development of the Authority's SWMP. These mechanisms include: 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 (Airport Hotline); e) the Authority's webpages; and f) various outreach events.

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 staff and its tenants.

### 9.2.2 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 Municipal Permit Copermittees; c) the Authority's webpage; d) the Project Clean Water webpage; e) the Airport Hotline; f) the Copermittee's regional hotline telephone numbers; and g) 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.

### 9.3 IMPLEMENTATION

Table 9-2 summarizes the public participation mechanisms/opportunities available for Authority staff, airport tenants, and the general public during the reporting period. As noted above, there are instances where a particular public participation mechanism/opportunity has been available to Authority staff, airport tenants, and the general public. For example, Airport Authority Board Meetings, the webpages, and the hotlines provide public participation opportunities for each of these 3 groups.

TABLE 9-2 PUBLIC PARTICIPATION OPPORTUNITIES AVAILABLE TO AUTHORITY STAFF, AIRPORT TENANTS, AND THE GENERAL PUBLIC DURING FY11-12

Pul	blic Participation Mechanism / Opportunity	Authority Staff	Airport Tenants	General Public
1	Airport Authority Board Meetings	18	18	18
2	Lindbergh Airport Managers Committee Meetings	12	12	
3	Tenant Safety Committee Meetings	12	12	
4	Municipal Permit Copermittee Meetings	37		37
5	Authority Webpage	continuously available, 24 hrs/day, 7 days/wk		
6	Project Clean Water Webpage	continuously available, 24 hrs/day, 7 days/wk		
7	THINK BLUE Webpage	continuously available, 24 hrs/day, 7 days/wk		
8	Authority 24-Hour Telephone Line/Airport Hotline	continuously available, 24 hrs/day, 7 days/wk		
9	THINK BLUE Hotline	continuously available, 24 hrs/day, 7 days/wk		
10	Outreach Events	3	3	3

### 9.3.1 OUTREACH EVENTS FOR AUTHORITY STAFF, AIRPORT TENANTS, AND THE GENERAL PUBLIC

During the reporting period, there were 3 outreach events which provided opportunities for public participation by Authority staff and airport tenants. Specifically, the Authority promoted two local watershed cleanup events, namely: a) the 27th Annual California Coastal Cleanup Day on September 17, 2011; b) the Day Without A Bag held on December 15, 2011; and c) the 9th Annual Creek to Bay Cleanup Event held April 28, 2012. These three events drew participation by Authority staff and airport tenants and their families

### 9.4 ENHANCED PROGRAM ELEMENTS

The Authority has not implemented any activities relative to public participation that are above and beyond the requirements of the Municipal Permit.

### 9.5 ASPECTS OF THE PERMIT THAT ARE NOT APPLICABLE

All aspects of the Municipal Permit applicable to public participation are applicable to the Authority and the information presented in this chapter demonstrates the Authority's compliance with the Permit.

### 9.6 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 FY11-12 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. The Authority first used the method in the FY10-11 Annual Report and now uses the method again here to frame the fiscal information presented below.

#### 10.2 GENERAL BUDGET INFORMATION

The San Diego County Regional Airport Authority Act, the Authority's enabling legislation, outlines 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

As noted above, this FY11-12 Annual Report uses the Copermittee Fiscal Analysis Method to conduct and present this review.



#### 10.4 FISCAL YEAR 2011-2012 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 Regional. The total expenditures for FY11-12 are presented in Table 10-1 and equal \$2,629,200.

TABLE 10-1 STORM WATER MANAGEMENT PROGRAM EXPENDITURE SUMMARY FOR FY11-12

Description	Costs	
A. Jurisdictional Components		
1. Administration	\$97,800	
2. Development Planning	\$59,700	
3. Construction	\$86,100	
4. Municipal	\$1,803,200	
5. Industrial	\$260,900	
6. Residential	\$0	
7. IDDE	\$125,200	
8. Education	\$40,500	
9. Public Participation	\$6,000	
10. Special Investigations	\$7,500	
11. Non-emergency Firefighting	\$29,000	
Jurisdictional Total	\$2,515,900	
B. Watershed - San Diego Bay Watershed		
1. Administration	\$2,000	
2. Watershed Activities	\$94,500	
WatershedTotal	\$96,500	

TABLE 10-1 STORM WATER MANAGEMENT PROGRAM EXPENDITURE SUMMARY FOR FY11-12

Description	Costs	
C. Regional		
1. Administration	\$6,000	
2. Copermittee Cost Share	\$10,800	
Regional Total	\$16,800	
TOTAL COSTS	\$2,629,200	

#### A) Jurisdictional Expenditures

The annual costs to implement the Jurisdictional elements of the SWMP include the overall 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, if any, 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



100

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.

#### 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.

#### **Funding Sources**

The Authority has four sources of revenue: 1) airline revenue; 2) non-airline revenue; 3) non-operating revenue; 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 shortterm borrowing using commercial paper.

#### 10.5 PROGRAM REVIEW AND MODIFICATION

As noted in the FY09-10 Annual Report, with the adoption of the Fiscal Analysis Method by the Copermittees in January 2009, the fiscal analysis methodology presented in Chapter 12 (Fiscal Analysis Component) of the SWMP was updated to incorporate the standardized method. There have been no other revisions to the SWMP since that time.





# 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 FY11-12 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 FY11-12. 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 last revised in January of 2011. Six (6) of the development projects initiated at the airport in FY11-12 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 FY11-12. While the education and outreach efforts continue to be evaluated and improved, the Education Component of the SWMP is considered to be effective.

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 FY11-12, 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 FY11-12.

#### 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	6	5
F.2	Number of high priority construction sites subject to inspection	6	6
Construction	Number of medium/low priority construction sites subject to inspection	9	9
	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	147	147
	Quantity of debris and material removed from the MS4 (in tons)	NA	35.5
	Quantity of debris and material captured by street sweeping (in tons)	NA	13.8
	Quantity of debris captured by parking lot sweeping (in tons)	NA	136
	Quantity of debris and material captured by airside sweeping (in tons)	NA	78
F.3.b. Industrial and	Number of high, medium, or low priority industrial/commercial operations subject to inspection	32	32
Commercial	Number of enforcement actions taken	118	118
	Number of operations referred to RWQCB for enforcement of State General Industrial Storm Water Permit	NA	0
F.4 Education	Number of stormwater educational materials/ brochures	NA	~2,500
	Number of stormwater education mechanisms for the general public	6	6
	Number of stormwater training mechanisms for staff	10	10
	Number of stormwater training mechanisms for tenants	8	8
	Number of stormwater training mechanisms for construction project managers, developers, and contractors	4	4

TABLE 11-1 ASSESSMENT OF ACTIVITY-BASED PERMIT REQUIREMENTS (CONTINUED)

Permit Section	Activity	Identified	Completed
F.5 IDDE	The IDDE Component will be reported in the IDDE Annual Re	port in Decemb	er 2011.
F.6 Public Participation	Number of types of participation mechanisms for staff and tenants	10	10
	Number of types of participation mechanisms for the general public	8	8

The Authority made revisions to its education program and assessment approach during FY10-11. 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 modified from the previous year due to changes in the format of the online training module. 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.

All Authority staff is required to participate in mandatory annual stormwater pollution prevention awareness training. During FY09-10, the Authority began a process to convert the annual stormwater training into an online computer course, in FY10-11 employees had the option to either attend an instructor lead class or take the class online, and in FY11-12 all employees were required to take the training online. Due to the Authority's training program being run on the calendar year, not all employees took the training within the fiscal year time frame. Of the 275 employees who took the training during the FY11-12 time frame, 63 employees (29.3%) took the pre test and passed with 100% of the questions answered correctly. This shows excellent retention from the previous year's training. Those who did not score 100% on the pre test were required to retake the training and take a post test at the end of the training. Of the remaining 212 employees who retook the annual training approximately 90% received a score of 100% on the post test. A summary of the post test scores are presented below.



Pre test	No. of Employees	% of Employees
# of employees who scored 100%	63	29.3%
Post test		
# of Employees who scored 70%	2	0.94%
# of Employees who scored 80%	11	5.19%
# of Employees who scored 90%	9	4.25%
# of Employees who scored 100%	190	89.62%
Total	212	

<sup>\*</sup>employees who scored 100% on the pre test were not required to retake the training.

The Authority continues its dedication to the improvement of knowledge and awareness of stormwater issues through education and outreach efforts. Due to continued economic constraints in FY11-12, 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, 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, 2009, and 2011. 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, 2009, and 2011.

The results of the site audits have shown an overall increase in the number of tenants properly implementing BMPs. The site audits have 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 2011 Site Audit, 25 out of 29 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 housekeeping and improper storage issues. The Authority is continuing to improve the inspection program and seek out opportunities for tenant education. The audits continue to be used for tracking and assessing our BMP implementation rates but are conducted every other year, so an audit was not performed in FY11-12 and therefore there is no update.

#### 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. The source identification element of the Authority's wet weather monitoring program identified copper and zinc as the primary pollutants of concern at SDIA. The site audits have reported that the primary contributors of these pollutants are activities and sources most closely associated with the land use categories of airport operations, industrial land use, and ground transportation. 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 source identification sampling element of the Authority wet weather monitoring program (completed in FY07-08) also 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.

Annual load reductions can also be characterized based on the amount of potential pollutant removed during the year. The following totals reflect additional wastes and potential pollutants that were removed in FY11-12.

- Street sweeping debris (landside) 13.8 tons
- Parking lot sweeping debris 136 tons
- $\bullet$  Airfield cleaning debris (sweeping, scrubbing, rubber removal, and MS4 cleaning) -78 tons
- MS4 cleaning debris 35.5 tons
- Pet waste bags -1,000 bags

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 load reductions and provides a methodology for drawing 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 will be presented in the FY11-12 Annual IDDE Report yet to be submitted in December of this year. 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 FY11-12 Annual IDDE Report.

Preliminary analysis of the 2011 dry weather sampling data and FY10-11 wet weather sampling data continues to match the historical trend of exceeding benchmarks for metals, specifically copper and zinc. FY11-12 wet weather sampling result median concentrations were calculated for the compliance sampling pollutants of concern and were compared to the benchmarks listed in the wet weather sampling plan (Appendix D-2 of the SWMP) to determine the number of benchmark exceedances that occurred. Biologic oxygen demand (BOD), chemical oxygen demand (COD), specific conductivity, oil and grease, pH, total suspended solids, PCBs, total aluminum, total iron, total lead, and ethylene glycol did not exceed the benchmarks. Total copper had an exceedance frequency of 100% and dissolved copper had an exceedance frequency of 90%. Total zinc and dissolved zinc both had exceedance frequencies of 80%.

#### 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 attainment/maintenance of beneficial uses. 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. A water quality assessment is currently underway for the 2012 303(d) list update. No additional listings occurred during FY11-12.

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, 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 monitor and 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 FY11-12 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 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 2011 Audit, and the results of the 2012 dry weather and FY11-12 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, third and fourth audits performed in 2007, 2009 and 2011. All four 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 FY11-12 and discussed in the Level 5 assessment above noted that discharge water quality continues to match the historical trend of exceeding benchmarks for metals. 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 metals, specifically copper and zinc. The results of the dry weather monitoring conducted in FY11-12 also appear to confirm copper and zinc as pollutants of concern. Continued implementation of the dry weather and wet weather stormwater monitoring programs will lead to future evaluation and

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validation of discharge water quality at SDIA using trend analysis and other statistical methods. The FY11-12 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

During FY11-12, two programs (discussed here under "special investigations") were implemented by the Authority and aimed at addressing pollutants in urban runoff by improving the Authority's stormwater inspection program. One was the creation of the "Ramp Walk," a new effort that involved a team of Authority and tenant representatives that perform joint inspections on the ramp (the tarmac and aircraft gate areas). The second was the development of SANTrack, a new online stormwater data management system that allows the Authority to interact with tenants via the world-wide web. These two projects are discussed below.

#### 12.2 THE RAMP WALK

Several departments in the Airport Authority, including the Environmental Affairs Department (EAD), individually conduct inspections of the tenant's operations for a variety of purposes. In response to a tenant suggestion, in FY11-12, a group of Authority and tenant representatives was formed in order to perform monthly "ramp walks" and to collaboratively address issues identified on the ramp. The group sought to resolve joint concerns about abandoned equipment, cleaning and sweeping needs and issues of trash in common use areas. The ramp is one of the main areas that the EAD focuses

on during stormwater inspections because it is the primary area of operational activity for our airline and airline-support tenants. With the creation and implementation of the ramp walk, representatives from EAD, Real Estate, Aviation and Public Safety, Facilities Management, the Airlines, and Airport vendors were now all looking at ramp issues, including stormwater issues, together. Not only did this lead to significant improvements in the cleanliness of the ramp, but provided opportunities to educate tenants and Authority staff on stormwater pollutions prevention. This effort has also enhanced communication between Authority Departments and between the Authority and its tenants.

Since the formation of this group, staff from EAD conducting stormwater inspections has observed a significant improvement in the general cleanliness of the ramp. This improvement is reflected in the decrease in housekeeping concerns identified during inspections as reported in Chapter 5 of this report.

#### 12.3 SANTRACK STORMWATER DATA MANAGEMENT SYSTEM

TableThe Authority identified the need to refine the data collection and tracking aspects of the stormwater inspection program. Several file management systems, computer spreadsheet programs, and database management programs had been set up in the past, but none of the systems had been dynamic enough to grow with the expanding inspection program. During FY11-12, the Airport Authority worked with a consulting team to develop and deploy SANTrack, a new online stormwater data management system, which allows for greater efficiency and flexibility in stormwater inspection tracking and reporting. The new system is an interactive platform that allows for inspectors and tenants to view and correspond about inspections in a web based platform that is easily accessible to tenants and Authority Inspectors. It also allows for better tracking of historical records of inspections and violations.

The Authority used the annual comprehensive stormwater site inspection in March of 2012 as an opportunity to rollout the new SANTrack system. The Authority sat down with tenants and explained the new system and provided instruction for how tenants will use the system to process the resolution of



issues identified during inspections. In June of 2012, SANTrack was fully incorporated into the inspection process for the final quarterly inspection of the year. The Authority received very positive feedback from tenants that the system is intuitive and easy to use.

Although still in the first year of use, the Authority anticipates SANTrack will improve our stormwater inspection program recordkeeping and allow for the better analysis of trends through the more searchable historical record that the system provides. The efficiency of SANTrack will also saving time and money, while improving the quality of service to our customers (our tenants).

#### 12.4 CLOSING

The ramp walk and SANTrack are the latest example of the Authority's continuing efforts to better understand our sources, educate our tenants, and improve the stormwater management program. Other than these two programs, there were no other special investigations underway at SDIA during the FY11-12 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.

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## 13 Non-Emergency Fire Fighting

#### 13.1 INTRODUCTION

TABLE 13-1 PERMIT COMPLIANCE REPORTING REQUIREMENTS

No.	Compliance Item	Outcomes
1	A description of any efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	Section 13.1

This chapter of the Annual Report discusses compliance activities relative to non-emergency fire fighting activities at SDIA during FY11-12. Table 13-1 above outlines the requirements of the Municipal Permit, our compliance, and/or where to find a description of our compliance within this report. Section 3.4 (Program for Non-Emergency Fire Fighting Flows) of the SWMP has been prepared, in part, to outline the means and methods used to ensure that these requirements are satisfied.

#### 13.2 PROCESS

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 Airport Rescue and Fire Fighting (ARFF) rigs during fire fighting practice drills and other exercises.

As outlined in Section 3.4 of the SWMP, the Authority requires the use of one of the following procedures to control potential stormwater pollutants from fire suppression system flushing: 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 routine maintenance 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 the 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.

#### 13.3 IMPLEMENTATION

During FY11-12, there were no fire suppression, maintenance, or flushing activities conducted that had the potential to generate or transport stormwater pollutants to the storm drain system. Fire fighting chemical suppressant testing was performed on May 7 and 8, 2012 and fire fighting foam testing was performed on May 7, 8 and June 21, 2012. All required stormwater pollutant control measures were in place on May 7, 8, and June 21, 2012.

#### 13.4 ENHANCED PROGRAM ELEMENTS

The Authority has not implemented any activities relative to non-emergency fire-fighting above and beyond the requirements of the Municipal Permit.

#### 13.5 ASPECTS OF THE PERMIT THAT ARE NOT APPLICABLE

All aspects of the Municipal Permit applicable to non-emergency fire-fighting are applicable to the Authority and the information presented in this chapter demonstrates the Authority's compliance with the Permit.

#### 13.6 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.





## 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.

#### 14.1 PROPOSED REVISIONS TO THE STORM WATER MANAGEMENT PLAN

- **1.** Chapter 2 Development Planning Component Update of the inventory of approved and verified treatment control BMPs.
- 2. Chapter 3 Construction Component Updates to the Monthly Inventory of Active Construction Sites and related tables.
- 3. Chapter 4 Municipal Component Updates to the Municipal Inventory
- **4.** Chapter 5 Industrial and Commercial Component Updates to Inventory of Industrial/Commercial Sites/Sources and related tables.

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## 15 CONCLUSIONS AND RECOMMENDATIONS

#### 15.1 INTRODUCTION

The FY11-12 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, FY08-09, FY09-10, and FY10-11, 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 FY11-12 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

As noted in Chapter 14, proposed revisions to the SWMP, identified during this reporting period, include updates of the inventory of approved and verified treatment control BMPs, updates to the inventory of active construction sites, updates to the municipal inventory, and updates to the industrial/commercial inventory.

#### 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 improve this program while balancing the staffing



and budgetary constraints resulting from the continued fragility of the national economy. 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 management efforts, there are no further specific recommendations at this time.

#### 15.4 CLOSING

The FY11-12 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.



## Appendix A

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#### Industrial, Commercial, and Municipal BMPs

#### SC01, Non-Storm Water Management

SC01-01 Notify Airport Operations (619-400-2710, and the Airport Authority Environmental Affairs Department (619-400-2784) if there is any evidence of illicit connections or illegal discharges.

SC01-02 Employees, tenants, and the public have been educated about non-storm water discharges, i.e., spill response and prevention, non-storm water pollution prevention, and hazardous materials management.

SC01-03 Outdoor water supplies (hose bibs) are limited and posted with appropriate use signs to discourage uses that may pollute the storm drain system/receiving water.

SC01-04 The site is free of evidence of illicit connections and illegal discharges.

#### SC02A, Outdoor Equipment Ops and Maintenance Areas

SC02A-01 Equipment operations and maintenance areas are not located directly in the path of storm drains.

SC02A-02 There is a designated equipment operations and maintenance area with overhead cover for pollutant sources and/or activity areas.

#### SC02B, Aircraft, Ground Vehicle and Equipment Maintenance

SC02B-01 Employees are trained in safe vehicle and equipment operations.

SC02B-02 Aircraft, vehicle and equipment maintenance areas are not located directly in the path of storm drains.

SC02B-03 There is a designated vehicle and equipment maintenance area that is either indoors or covered, bermed, enclosed, or sloped/positioned away from the MS4.

SC02B-04 Equipment is regularly inspected and tested.

SC02B-05 Visual observations are performed to detect fluids leaking from aircraft, vehicles and equipment. Place drip pans under leaks as needed.

SC02B-06 Aircraft, vehicles and equipment are maintained in good condition to prevent or correct any leakage of oil or other fluids.

SC02B-07 Drip pans are used during maintenance.

SC02B-08 Drip pans containing fluids or other open containers are not left lying around. Regularly transfer fluids for recycling or proper disposal.

SC02B-09 Minimize the use of solvents or use less toxic solvents whenever possible. If solvents cannot be avoided, clean or drain parts in self-contained sinks or drum units, and check those units regularly for leaks.

SC02B-10 Mechanical parts, equipment, and vehicles awaiting repair are stored under cover and away from storm drains.

SC02B-11 Maintenance vehicles and maintenance areas are furnished with spill response materials.

- SC02B-12 Fluids and batteries are removed from salvage vehicles and equipment and disposed of properly.
- SC02B-13 Obsolete and inoperable vehicles and equipment are disposed of properly.

#### SC03, Aircraft, Ground Vehicle and Equipment Fueling

- SC03-01 There is a designated fueling area that is covered, bermed, enclosed, or sloped/positioned away from the MS4.
- SC03-02 Fueling areas are not located directly in the path of storm drains.
- SC03-03 Tanks, piping, and valves are labeled, regularly inspected, and kept in good condition.
- SC03-04 Absorbent booms, spill kits, or vacuum equipment are located in fueling areas or on fueling vehicles.
- SC03-05 Fueling areas are regularly inspected.
- SC03-06 Major fueling operations are monitored.
- SC03-07 Secondary containment or cover is used when transferring fuel from a tanker truck to a fuel tank.
- SC03-08 Leak detection, overfill protection, and spill prevention devices are used for tanks and piping.
- SC03-09 Automatic shut-off mechanisms are used for fuel tankers and hose connections.
- SC03-10 Fuel tanks are not topped off.
- SC03-11 Access to tanks and fueling vehicles is restricted.

### SC04, Aircraft, Ground Vehicle and Equipment Cleaning

- SC04-01 Vehicles, equipment, and washing areas are kept clean and free of waste.
- SC04-02 Dry washing and surface preparation techniques are used where feasible.
- SC04-03 Wash areas are not located directly in the path of storm drains.
- SC04-04 Pigs and cover mats are used to cover all catch basins in the surrounding area to contain the wash water during washing activities.
- SC04-05 There is a designated wash area that captures or diverts all wash water to structural treatment control BMP, sanitary sewer, or dead end sump with pump.
- SC04-06 Visual observations and inspections of nearby storm drains are performed to detect discharges from cleaning activities.
- SC04-07 Wash water is filtered and recycled where possible. If not possible, collect and properly dispose of the contained wash water.
- SC04-08 Drippings, residue, etc., are removed using vacuum methods. Properly dispose of all waste materials

#### SC05, Aircraft Deicing/Anti-Icing

SC05-01 There is a designated deicing/anti-icing area that is covered, bermed, enclosed, or sloped/positioned away from the MS4.

SC05-02 Deicing and anti-icing operations are regularly monitored to ensure quantities of fluids used are at a minimum while not jeopardizing aircraft safety and operation.

SC05-03 All fluids are captured or diverted to a treatment plant, recycling system, sanitary sewer, or dead end sump with pump.

SC05-04 Deicing/anti-icing areas are cleaned with wet-type sweepers and the fluids are recycled or disposed of properly.

#### SC06, Outdoor Loading/Unloading of Materials

SC06-01 Contractors/haulers are aware of and adhere to BMP specifications.

SC06-02 Loading/unloading areas are not located directly in the path of storm drains .

SC06-03 Loading/unloading are areas graded, bermed, covered, or otherwise protected to prevent contact with rainfall and stormwater run-on and run-off.

SC06-04 Loading/unloading equipment is regularly checked for leaks.

SC06-05 Drip pans or other containment measures are used under hoses.

SC06-06 Loading and unloading areas are kept free of spills and debris by containing and absorbing leaks during transfers and spillage from hose disconnections or cargo pallets; dispose of residue or debris properly.

SC06-07 Spill kits or other measures are available in accessible locations near areas where spills may be likely to occur to contain spills and/or prevent tracking off-site.

#### SC07, Outdoor/Indoor Material Storage

SC07-01 Outdoor material storage areas are not located directly in the path of storm drains.

SC07-02 Outdoor material storage areas have areas with overhead cover and secondary containment.

SC07-03 Outdoor material storage areas are prevented from contacting stormwater run-on and run-off (e.g. by the use of berms, wood pallets etc).

SC07-04 Cover and contain material stockpiles or implement erosion control practices at the perimeter of the site and at any inlets or catch basins to prevent the off-site transport of eroded material.

SC07-05 Wood products treated with preservative chemicals are covered with tarps or stored indoors.

SC07-06 Install protection guards (bollards, posts, or guardrails) around ASTs and piping to prevent damage from vehicles or forklifts and any subsequent release.

SC07-07 Regular inspections are performed on tanks, containers, and berms to check for corrosion, structural failure, loose fittings, poor welds, leaks, etc. Repairs or replacements are performed as needed.

SC07-08 Liquid materials in ASTs should be stored in double-walled, valved storage tanks or within concrete bermed secondary containment areas to provide the capacity to contain the entire volume of the single largest container, with sufficient freeboard to contain precipitation. The area inside the curb should slope to a drain.

SC07-09 Precipitation from bermed areas should be drained to the sanitary sewer if available, or inspected and tested according to applicable regulations prior to its release to a storm drain. The drain must have a positive control, such as a lock, valve, or plug, below the product level in the tank to prevent release of contaminated liquids.

SC07-10 Properly dispose of ponded storm water removed from bermed or containment areas.

SC07-11 The facility/operation has and displays a County hazardous materials permit for hazardous materials storage.

SC07-12 Accurate, up-to-date inventory of the materials delivered and stored on site is maintained.

#### SC08, Waste Handling and Disposal

SC08-01 The facility/operation makes efforts to reduce waste (using only amount needed, using solvents more than once, practicing good inventory control, not overbuying, purchasing long-lasting products, etc.).

SC08-02 The facility recycles waste materials when possible.

SC08-03 There is a designated waste/recycling area with restricted access.

SC08-04 Waste/recycling areas are not located directly in the path of storm drains.

SC08-05 Secondary containment and cover for waste is provided.

SC08-06 Wastes that are not contained or covered are prevented from contacting stormwater run-on and run-off (e.g. by the use of berms).

SC08-07 All dumpsters are covered and kept closed and any drain holes plugged.

SC08-08 Waste containers are inspected frequently for leaks, structural integrity, and proper closure seal.

SC08-09 Employees are trained to properly handle and dispose of wastes.

SC08-10 Wastes and recycling materials are appropriately stored in containers, segregated, and labeled.

SC08-11 Wastes are properly characterized and disposed of properly.

SC08-12 Waste containers and sanitary facilities are prevented from overflowing by timely service and removal.

SC08-13 Dumpster cleaning is performed in designated areas that are bermed to contain wash water. Properly dispose of all fluids collected or discharge to the sanitary sewer.

SC08-14 Track waste generated, stored, and disposed.

#### SC09, Building and Grounds Maintenance

SC09-01 All areas of exposed soil have been revegetated, landscaped, or otherwise contain erosion or sediment controls.

SC09-02 Landscaped areas are irrigated regularly.

SC09-03 Implement integrated pest management methods, minimize the use of pesticides, herbicides, and fertilizers and use according to directions.

SC09-04 Temporary BMPs such as portable booms and vacuum trucks are used to contain water from outdoor building or structure washdown activities. Collect and properly dispose of all waste water through a permitted connection to the sanitary sewer.

### SC10, Employee Training

SC10-01 The Authority SWMP and tenant SWPPPs covering the facility or operation are updated on a periodic basis and amendment pages for the SWMP or SWPPP are inserted as needed.

SC10-02 Employees and contractors have been trained on storm water issues, implementation and effectiveness of BMPs, spill prevention and cleanup, hazardous materials management, right-to-know awareness, and SMWP or SWPPP implementation.

SC10-03 Implement additional training programs for relevant employees and contractors covering SPCC implementation, the prohibition on cross-connections between sanitary sewers and storm drains, and contractor responsibility to comply with adopted BMPs.

SC10-04 The facility/operation has current employee training records.

## SC11, Lavatory Service Operation

SC11-01 Triturator facilities are covered and have low roll-over type berming.

SC11-02 The triturator facility/operation is not located directly in the path of storm drains.

SC11-03 Hoses and fittings used for transferring lavatory waste are regularly inspected and kept in good condition.

SC11-04 Absorbent booms, spill kits, and other containment equipment is present on lavatory service equipment and in the triturator facility/operation.

SC11-05 Surfactant/disinfectant mixing and transfers are performed in the triturator area or under a cover.

SC11-06 Drip pans are used when draining the aircraft and the drippage is dumped into the bulk storage tank of the lavatory service equipment.

SC11-07 Spills of lavatory wastes and lavatory chemicals are immediately cleaned and properly disposed of at the triturator facility.

SC11-08 All hoses, valves, and equipment are properly secured when transporting lavatory waste.

SC11-09 Lavatory truck cleanouts/back flushing and lavatory waste discharging to sanitary sewer connections are performed ONLY at triturator facilities.

SC11-10 Hoses are completely drained.

#### SC12, Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing)

SC12-01 Sweeping and scrubbing equipment is regularly inspected and maintained to ensure effectiveness at removing pollutants and to avoid leaks.

- SC12-02 Roads, ramp areas, apron areas, and, if feasible, runway/taxiway areas are swept on a regular basis.
- SC12-03 Sweeping is performed during dry weather using dry sweeping techniques are used where feasible.
- SC12-04 Sweepers are operated at manufacturer-recommended optimal speeds
- SC12-05 Debris and sediment from sweeping are disposed of properly.
- SC12-06 Outdoor washdown areas are bermed contain wash water and to prevent run-on to other areas.
- SC12-07 The amount of water used during outdoor washdown activities is minimized.
- SC12-08 Wash water is collected and discharged to the sanitary sewer system through a permitted connection at designated and approved discharge facilities (i.e., dewatering bin).
- SC12-09 Records of the sweeping or scrubbing activities including the miles swept or scrubbed and the amount of waste collected are maintained.

### SC13, Fire Fighting Foam Discharge

- SC13-01 Fire fighting foam discharge/testing areas are not located directly in the path of storm drains.
- SC13-02 Fire fighting equipment is regularly inspected.
- SC13-03 There is a designated fire fighting foam testing area that captures or diverts all foam waste to a treatment/recycling plant, sanitary sewer, or dead end sump with pump.
- SC13-04 Sump(s) and/or oil water separator are serviced regularly.
- SC13-05 Fire fighting foam testing areas are prevented from contacting stormwater run-on and run-off (e.g. by the use of berms).

#### SC14, Potable Water System Flushing

- SC14-01 The aircraft potable water system and water truck cleaning/flushing areas are not located directly in the path of storm drains.
- SC14-02 There is a designated cleaning/flushing area that captures or diverts all wastewater to a treatment/recycling plant, sanitary sewer, or dead end sump with pump.
- SC14-03 Cleaning/flushing areas are prevented from contacting stormwater run-on and run-off (e.g. by the use of berms).

#### SC15, Runway Rubber Removal

- SC15-01 The amount of water used during runway rubber removal activities is minimized.
- SC15-02 Waste water produced from runway rubber removal activities is prevented from entering the storm drainage system by immediately collecting and properly disposing of it.
- SC15-03 Runways and adjacent paved areas are swept, either manually or using mechanical sweepers, following runway rubber removal activities.

SC15-04 Storm drain inlets, catch basins, and runway drainage areas are inspected following runway rubber removal activities for any resulting debris, and remove and properly dispose of debris.

#### SC16, Parking Lots

- SC16-01 Parking lots are posted with "No Littering" signs and have regularly emptied trash receptacles.
- SC16-02 Parking lots are regularly swept.
- SC16-03 Sweepers are operated at the manufacturer-recommended optimal speeds
- SC16-04 Sweeping is performed in parking lot areas when the number of parked vehicles is lowest to maximize areas swept.
- SC16-05 Records of the sweeping activities are maintained including the miles swept and the amount of waste collected.
- SC16-06 Oily spots are cleaned with absorbent materials.
- SC16-07 Repairs are performed during dry weather.
- SC16-08 Nearby storm drain inlets, catch basins, and manholes are covered and sealed during parking lot repairs.
- SC16-09 Drip pans are used under paving equipment.
- SC16-10 Hot bituminous materials are preheated, and transferred or loaded away from storm drain inlets.
- SC16-11 Absorbent materials, debris, and drips are disposed of properly.
- SC16-12 Rooftops do not drain onto paved surfaces.

#### SC17, Storm Drain Maintenance

- SC17-01 Storm drains are stenciled with "No Dumping" messages.
- SC17-02 The facility/operation conducts routine self-inspections of the storm water conveyance system. The Authority should inspect the entire MS4 at least annually, between the dates of May 1 and September 30.
- SC17-03 Appropriate measures are used to prevent discharges during MS4 cleaning and maintenance.
- SC17-04 Storm drains, inlets, and catch basins are cleaned and maintained before the wet season and when accumulated trash and debris is greater than 33 percent of design capacity.
- SC17-05 Open channels are cleared of accumulated litter in a timely manner.
- SC17-06 Debris from cleaning activities is disposed of properly.
- SC17-07 Records are kept for all inspections, cleaning, and maintenance, including the quantity of waste removed.

#### SC18, Housekeeping

SC18-01 The facility conducts routine self-inspections of BMPs.

SC18-02 The facility/operation is kept clean and orderly.

SC18-03 Trash receptacles are placed in appropriate locations.

SC18-04 The facility/operation is swept at least once per week.

SC18-05 Sweepings and sediment are disposed of properly.

SC18-06 Potentially significant materials are stored in appropriate containers, properly sealed, and labeled.

SC18-07 Secondary containment is provided for significant materials.

SC18-08 Significant materials are stored in a restricted access area.

SC18-09 Material Safety Data Sheets (MSDSs) are readily available for all significant materials.

#### SC19, Safer/Alternative Products

SC19-01 This facility/operation uses "Regionally Accepted" products identified as non-toxic, less toxic, or biodegradable.

SC19-02 Whenever possible, maximize the purchase and use of products containing recycled materials.

# SR01, Spill Prevention, Control, and Clean-up

SR01-01 The facility/operation has a current Spill Prevention, Control, and Countermeasure (SPCC) Plan or Spill Response Plan.

SR01-02 A summary of the SPCC Plan, or spill response procedures, is posted at key locations, identifying the spill cleanup coordinators, location of cleanup equipment, and phone numbers of regulatory agencies to be contacted in the event of a spill.

SR01-03 Relevant employees and contractors are trained in the implementation of the SPCC Plan, if applicable, or spill control procedures.

SR01-04 Leak and spill prevention devices are used.

SR01-05 The facility/operation has placed adequate spill kits in appropriate locations.

SR01-06 Airport Operations (619-400-2710), the Airport Authority Environmental Affairs Department (619-400-2784), and any agencies or companies identified in the SPCC or facility spill prevention and response procedures, are notified in the event of a spill.

SR01-07 Procedures identified in the SPCC or facility spill prevention and response procedures are followed in the event of a spill or release.

SR01-08 The facility/operation uses only dry cleaning methods.

SR01-09 Used spill control/clean-up materials are disposed of properly.

SR01-10 Wash water is captured by vacuum and properly disposed of, or is diverted to a structural treatment control, sanitary sewer, or dead end sump with pump.

#### TC01, Treatment Controls

TC01-01 Structural and treatment control BMPs are regularly inspected, cleaned and maintained.

TC01-02 During cleaning operations of the treatment control device, close any effluent valves at the device. Standing water and accumulated waste are removed and properly disposed of, and oil absorbent pads are replaced prior to the start of the wet season and as needed.

TC01-03 Records are kept for all inspections and maintenance of structural and treatment control BMPs.

TC01-04 An annual inventory of all treatment control BMPs is conducted.

#### **Construction BMPs**

BMPs listed below are listed in the California BMP Handbook for Construction Activity (2003), produced by the California Stormwater Quality Association and available at http://www.cabmphandbooks.com or in the Caltrans Construction Site BMP Manual available at http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm.

### Non-Stormwater Management BMPs

NS-1 Water Conservation Practices

NS-2 Dewatering Operations

NS-3 Paving and Grinding Operations

NS-4 Temporary Stream Crossing

NS-5 Clear Water Diversion

NS-6 Illicit Connection/Discharge

NS-7 Potable Water/Irrigation

NS-8 Vehicle and Equipment Cleaning

NS-9 Vehicle and Equipment Fueling

NS-10 Vehicle and Equipment Maintenance

NS-11 Pile Driving Operations

NS-12 Concrete Curing

NS-13 Concrete Finishing

NS-14 Material and Equipment Use

NS-15 Demolition Adjacent to Water

NS-16 Temporary Batch Plants

### Waste Management & Materials Pollution Control BMPs

- WM-1 Material Delivery and Storage
- WM-2 Material Use
- WM-3 Stockpile Management
- WM-4 Spill Prevention and Control
- WM-5 Solid Waste Management
- WM-6 Hazardous Waste Management
- WM-7 Contaminated Soil Management
- WM-8 Concrete Waste Management
- WM-9 Sanitary/ Septic Waste Management
- WM-10 Liquid Waste Management

#### Erosion Control BMPs

- EC-1 Scheduling
- EC-2 Preservation of Existing Vegetation
- EC-3 Hydraulic Mulch
- EC-4 Hydroseeding
- EC-5 Soil Binders
- EC-6 Straw Mulch
- EC-7 Geotextiles & Mats
- EC-8 Wood Mulching
- EC-9 Earth Dikes and Drainage Swales
- EC-10 Velocity Dissipation Devices
- EC-11 Slope Drains
- EC-12 Streambank Stabilization
- EC-13 Polyacrylamide

# Temporary Sediment Control BMPs

- SE-1 Silt Fence
- SE-2 Sediment Basin
- SE-3 Sediment Trap
- SE-4 Check Dam
- SE-5 Fiber Rolls
- SE-6 Gravel Bag Berm
- SE-7 Street Sweeping and Vacuuming
- SE-8 Sandbag Barrier
- SE-9 Straw Bale Barrier
- SE-10 Storm Drain Inlet Protection

### Wind Erosion Control BMPs

WE-1 Wind Erosion Control

# Temporary Tracking Control BMPs

- TC-1 Stabilized Construction Entrance/ Exit
- TC-2 Stabilized Construction Roadway
- TC-3 Entrance/Outlet Tire Wash



# Appendix B

Industrial / Commercial Inventory

Storm Water Management Plan - Municipal Stormwater Permit													



# FY11-12 Inventory for Stationary Industrial and Commercial Facilities

Field	Agency  Jurisdiction responsible for inspection of facility (Co-permittee )	-	Number  Street number of facility this is the numeric	**		e City	State	Zip Code	Hydrologic Area  This field requires both the Hydrological unit and Hydrologicarea where facility is located. This field must be populated to one decimal place. Copermittees may elect to populate to two decimal places.	This field requires the use of SIC Codes. If facility has more than one SIC code use the primary SIC code. NAICS codes must be transferred to an appropriate SIC code if possible. If there is no SIC		services provided by the facility.	Potential Pollutants							Tributary to 303(d) Listed	Threat to water quality	GIS Mapping Options					
cription							This is a de located to CA.						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.						onal judgement to ect to use "likely" or	Is facility a tributary 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.					
Field Desc										NAICS must be filled in. S NAICS (www.census.gov)	SIC code (www.OSHA.gov		Bacteria	Gross Pollutants  Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment Trash		threat to water quality.	Assessors Parcel Number (APN)	Latitude / Longitude	e (Decimal Degrees)	х-ү С	oordinates	If entering coordinates either by Lat/Long or Northing/Easting, identification of the coorinate system used is required.
Required Field Type	Text	Text	Number	General	Text	Text	Text	Numeric	Numeric (T a minimum of 1 decimal, 2 decimals are optional)	Numeric	NAICS Code Numeric (six Digits)	Text	Text 1	ext Tex	t Te	xt Te	ext Tex	ct Text	Text Text	Text	Text	Numeric	Latitude Numeric	Longitude Numeric	Easting Numeric	Northings Numeric	Coordinate System (Text)
	AA	ACE	3705		North Harbor Drive	San Diego	CA	92101	908.0-908.21	7521	812930	Parking lot managemen	ıt Yes Ye	s Yes	No	Yes	Yes	No	No Yes	Yes	Yes						
	AA	Air Canada Jazz	3707		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	Alaska Airlines	3665	#228	North Harbor Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Ye	Yes	No	Yes	Yes	No	No Yes	Yes	Yes						
	AA	Allegiant	3707	T2E	North Harbor Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	no Ye	s Yes	No	Yes	Yes	No	No Yes	Yes	Yes						
	AA	Allied Aviation American	3698-C		Pacific Highway North Harbor	T T	CA	92101	908.0-908.21	4581	424710	Fuel Storage	No Yes	yes	Yes	Yes	Yes	Yes	No Yes	Yes	Yes						
	AA	Airlines	3707	#103	Drive North Harbor	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes	s res	No	Yes	Yes	No	Yes	Yes	Yes						
	AA	American Eagle	3225	#109	Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes	yes Yes	No	Yes	Yes	No	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 Ye	s Yes	No	Yes	Yes	No	No Yes	Yes	Yes						
	AA	ASIG	2340		Stillwater Road North Harbor	San Diego	CA	92101	908.0-908.21	4581	488190	Fueling services	No Ye	yes Yes	No	Yes	Yes	No	Yes Yes	Yes	Yes						
	AA	British Airways Continental	3707	#103	Drive North Harbor	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	yes 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 Ye	s Yes	No	Yes	Yes	No	No Yes	Yes	Yes						
	AA	Delta Air Lines	3835	#107	Drive	San Diego	CA	92101	908.0-908.21		481111, 487990	Passenger Carrier	Yes Yes	Yes	No	Yes	Yes	No	No Yes	Yes	Yes						
	AA	DHL Elite Line	2221 3707	#121	Washington Stree North Harbor	et San Diego San Diego	CA CA	92101 92101	908.0-908.21	4513	492110	Cargo Handling Maintenance (Passenger	Yes Yes	yes Yes	No	Yes	Yes	No	No Yes	Yes	Yes						-
		Services			Drive							boarding bridges&baggage															
	AA			ļ	West Washington				908.0-908.21	4581	488190	conveyor)	No Ye	yes Yes	No	Yes	Yes	No	No Yes	Yes	Yes						
	AA	FedEx	2221		Street	San Diego	CA	92110	908.0-908.21	4513	492110	Cargo Handling	Yes Ye	yes 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	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 Ye	Yes	No	Yes	Yes	No	No Yes	Yes	Yes						
	AA	HMS Host	3665		North Harbor Drive	San Diego	CA	92101	908.0-908.21	4581	722310	Food & beverage	Yes Yes	s No	Yes	Yes	Yes	Yes	No Yes	Yes	Yes						
	AA	JetBlue Airways	3835	#108	North Harbor Drive	San Diego		92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	s Yes	No	Yes	Yes	No	No Yes	Yes	Yes						
	AA	Landmark Aviation	2904					92101	908,0-908,21		481111, 487990	Corporate General Aviation	Yes Vo	yes	No	Yes	Yes	No	No Yes	Yes	Yes						
	AA	SDCRAA	3835	1	North Harbor Drive	San Diego		92101	908.0-908.21		488119	Facility maintenance	., .,	s Yes	Yes	Yes	Yes	Yes	Vec Vec	Yes	Yes					1	
		SkyWest		ш104	North Harbor							,	Vac V	, 165	NT NT	.,		NT-	No. 105						<u> </u>		
	AA	Airlines Southwest	3225	#104	Drive North Harbor	San Diego		92101	908.0-908.21		481111, 487990	Passenger Carrier	res Ye	Yes	No	Yes		IN0	NO Yes	Yes	Yes					+	+
	AA	Airlines	3665	Terminal 1	Drive North Harbor	San Diego		92101	908.0-908.21	,	481111, 487990	Passenger Carrier	Yes Yes	S Yes	Yes	Yes	Yes	No	No Yes No	Yes	Yes						+
	AA	Spirit Sun Country	3707	227	Drive North Harbor	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	Yes Yes	No	Yes	Yes	No	Yes No	Yes	Yes					+	+
	AA	Airlines	3835	#107	Drive North Harbor	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	yes Yes	No	Yes	Yes	No	Yes	Yes	Yes					1	<del>                                     </del>
	AA	United Airlines	3665	# 223	Drive	San Diego	CA	92101	908.0-908.21		481111, 487990	Passenger carrier	Yes Yes	Yes	No	Yes	Yes	No	No Yes	Yes	Yes					1	
	AA	UP5	2221	+	Washington Stree North Harbor		CA		908.0-908.21	4513	492110	Cargo Handling	No Ye	S Yes	Yes	Yes	Yes	No	No Yes	Yes	Yes			-		+	+
	AA	US Airways	3701	#28	Drive North Harbor	San Diego	CA	92101	908.0-908.21		481111, 487990	Passenger Carrier	Yes Yes	Yes	No	Yes	Yes	No	No Yes	Yes	Yes					1	+
		Virgin America		T2E	Drive North Harbor	San Diego	CA	92101	908.0-908.21	· ·	481111, 487990	Passenger Carrier	Yes Yes	Yes	No	Yes	Yes	No	No Yes No	Yes	Yes				-	+	+
	AA	Volaris	3707	2025	Drive North Harbor	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes						
	AA	WestJet	3707	T2E	Drive	San Diego	CA	92101	908.0-908.21	4512, 4522	481111, 487990	Passenger Carrier	Yes Yes	Yes	No	Yes	Yes	No	No Yes	Yes	Yes						