

San Diego County Regional Airport Authority

Fiscal-Year 2004-2005 Municipal Stormwater Permit Annual Report

January 2006



Statement of Certification for the 2004-2005 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:	January 26, 2006	
Signature:	-	
Printed Name:	Paul Manasjan	
Title:	Director, Environmental Affairs	

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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 May 03



Acknowledgements

The San Diego County Regional Airport Authority fiscal-year 2004-2005 Municipal Stormwater Permit Annual Report has been prepared by the Authority Environmental Affairs Department with the assistance of the Facilities Maintenance Department, the Landside Operations Department, the Airside Operations Department, the Facilities Development Department, the Real Estate Management Department, and the Airport Planning Department. Staff from these departments are 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 talents and experience of several individuals. Special recognition and acknowledgement are thereby expressed to the following individuals for their contributions and insight in making this document a collective success for the environment and the San Diego County Regional Airport Authority:

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Storm Water Management Plan - Municipal Stormwater Permit



Municipal Stormwater Permit

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Executive Summary

The San Diego County Regional Airport Authority (Authority) submits the fiscal-year 2004-2005 (FY04-05) Annual Report in compliance with California Regional Water Quality Control Board, San Diego Region (RWQCB), Order No. 2001-01, NPDES Permit #CAS0108758 (Municipal Permit). The FY04-05 Annual Report describes all the stormwater management activities conducted by the Authority between July 1, 2004 and June 30, 2005 to ensure compliance with the Municipal Permit.

The Authority was created by state legislation to operate the San Diego International Airport (SDIA) as of January 1, 2003. The SDIA is located on approximately 615 acres adjacent to San Diego Bay, north of downtown San Diego in San Diego County. The entire jurisdictional area of the Authority, namely, the 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 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 Airport Storm Water Management Plan (SWMP) and are required to implement the 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 the reporting period, the Authority conducted MS4 and municipal facility maintenance activities which included a 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 being properly implemented and no formal enforcement actions were initiated.

The Authority's pollution prevention efforts included an award winning waste reduction and recycling program and the development of an effective outreach program to educate all potential uses of the single-stream recycling element of the pollution prevention efforts. In addition, the Authority has established an integrated pest management (IPM) program designed to minimize the amount of pesticides and herbicides necessary to maintain the buildings and grounds at SDIA.

Thirty-five (35) airport tenants, and the Authority itself, conduct activities that are subject to the Industrial Component of the Municipal Permit. These 36 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 conducted both a quarterly inspection program and a comprehensive annual inspection program of all industrial activities at SDIA. These inspection resulted in 8 recorded enforcement actions. All issues of concern were resolved.

Fifteen (15) airport tenants conduct commercial activities that are subject to the Commercial Component of the Municipal Permit. All are required to implement the BMPs listed in the SWMP. During the reporting period, the Environmental Affairs Department conducted both a quarterly inspection program and a comprehensive annual inspection program of all commercial activities at SDIA. All commercial operations were found to be in compliance and no enforcement actions were initiated.



During this reporting period, the Authority Airport Planning Department began preparation of Master Plan 2030. On June 6, 2005, the Authority Board adopted a resolution authorizing staff to prepare an implementation plan for the Airport Master Plan and to initiate the environmental review processes.

Both the Authority and airport tenants conduct construction activities at SDIA that are subject to the Construction Component of the Municipal Permit. There were 9 construction projects at SDIA during the reporting period that required the implementation of storm water management controls. During the reporting period, the Environmental Affairs Department conducted regular site inspections of all 9 construction projects. No formal enforcement actions were initiated.

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. During the reporting period, there were 218 IDDE incidents recorded, 17 of which involved sewage, and 7 of which were identified as unauthorized discharges. All of the sewage incidents were cleaned up without impacting the MS4. The 7 unauthorized discharge events resulted in 4 verbal notices to clean up the incident, and 3 written notices to cleanup. Only one incident involving sediment-laden runoff impacted the MS4, and this incident was cleaned up without impact to receiving waters.

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 the 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, and brochures, public service announcements, news releases, meetings, and focused training sessions.

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, and regular meetings of the Tenant Safety Committee, a 24-hour telephone hotline, the Authority webpage, and outreach events in collaboration with local environmental groups.

This Annual Report presents information on a special project initiated during the reporting period entitled the "Storm Drainage System BMP Project." The project consists of 10 tasks, 4 of which were completed during FY04-05. The Storm Drainage System BMP Project is designed to: increase understanding of the site hydrology, the hydraulics of the MS4, and the pollutant sources on the airport site; evaluate historic stormwater sampling data and recommend improvements to the SDIA wet- and dry-weather stormwater sampling programs; evaluate the appropriateness and adequacy of the BMPs required by the Authority SWMP to address those sources; and provide recommendations for additional BMPs and for overall improvements to the Authority's stormwater management program.

The Authority presents an assessment of each component of the stormwater management program implemented during FY04-05. The assessment uses the Copermittee guidance document entitled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" (Framework). 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. One assessment tool suggests that the Authority's education and outreach efforts developed for the tenants may need to be expanded and/or more frequently employed. The assessment of the 10-year history of stormwater discharge quality data suggests that stormwater at SDIA contains elevated concentrations of copper and zinc. Taken as a whole, the Authority's program is in compliance with the Municipal Permit.



The report presents an accounting of the Authority's stormwater management program expenditures for FY04-05, and the budget for FY05-06. Costs are categorized by Personnel, Non-personnel, and Capital Improvement Program.

The FY04-05 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, although the education and outreach efforts developed for the tenants may need to be expanded and/or more frequently employed. The Authority will take steps to improve: 1) the education and outreach efforts for the tenants; and 2) the implementation rates for required BMPs by both staff and tenants. During FY05-06, the Authority will also revise program elements and the Storm Water Management Plan itself in response to the anticipated outcomes from the Storm Drainage System BMP Project currently underway. The FY04-05 Annual Report clearly demonstrates that the stormwater management program at SDIA is adequately planned, executed, reviewed, and funded and generally fulfills the requirements of the Municipal Permit.

Storm Water Management Plan - Municipal Stormwater Permit





1 Introduction

The San Diego County Regional Airport Authority (Authority) strives to operate San Diego International Airport (SDIA) in a manner that shows the utmost respect for our unique natural setting - in an urban center on the shore of San Diego Bay. The Authority is determined to conduct 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 one characteristic of the airport's "environmental footprint" that the Authority aims to prevent or minimize.

This report describes the stormwater management activities of the Authority during the period of July 1, 2004 to June 30, 2005 - the fiscal year 2004-2005 (FY04-05). The Authority submits this FY04-05 Annual Report in compliance with California Regional Water Quality Control Board, San Diego Region (RWQCB), Order No. 2001-01, 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 Citiesof San Diego County, and the San Diego Unified Port District (Municipal Permit).

This report has been prepared by the Authority Environmental Affairs Department with the assistance of the Facilities Maintenance Department, the Landside Operations Department, the Airside Operations Department, the Facilities Development Department, the Real Estate Management Department, and the Airport Planning 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.

ORGANIZATION OF THE FY04-05 ANNUAL REPORT

This report has been organized in a manner consistent with the standardized format developed and agreed upon by the the County of San Diego, the eighteen incorporated cities of San Diego County, the Port District, and the Authority (the Copermittees). In instances where strict adherence to the approved outline might hamper effective communication, we have made minor adjustments to improve clarity.

The FY04-05 Annual Report presents a compilation of the Authority's stormwater management efforts for each component of the Municipal Permit in the following order:

Executive Summary

- 1 Introduction
- 2 Municipal Component of Existing Development
- 3 Industrial Component of Existing Development
- 4 Commercial Component of Existing Development
- 5 Residential Component of Existing Development
- 6 Land Use Planning for New Development/Redevelopment Component
- 7 Construction Component
- 8 Illicit Discharge Detection and Elimination Component
- 9 Education Component
- 10 Public Participation Component
- 11 Special Investigations
- 12 Assessment of Program Effectiveness
- 13 Fiscal Analysis Component
- 14 Conclusions and Recommendations



BACKGROUND ON THE SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY On January 1, 2003, the Authority became the owner and operator of SDIA, created by state legislation (AB93 and SB1896) to operate SDIA and to lead regional strategic air transportation planning efforts. With an annual budget of approximately \$100 million and approximately 300 employees, the Authority manages SDIA, a regional asset responsible for contributing some \$4.5 billion a year to the San Diego area's local economy.

SDIA is located on approximately 615 acres adjacent to San Diego Bay and just north of downtown San Diego in San Diego County. 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, a closed landfill site, an airplane wash-rack, overnight airplane parking areas, and the Airport Rescue and Fire Fighting Facility (ARFF). Approximately 85-90% of the airport property is currently covered by impervious surfaces.

Average annual rainfall at SDIA is approximately 12 inches with the majority of rainfall occurring during the period from October to April. The climate 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.

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. The entire jurisdictional area of the Authority consists of the airport itself. Stormwater runoff from SDIA, discharges into San Diego Bay through 14 storm drain outfalls.

The distinguishing characteristics of the Authority, in terms of the Municipal Permit, are: 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.

REGULATORY FRAMEWORK FOR STORMWATER MANAGEMENT AT SAN DIEGO INTERNATIONAL AIRPORT The operations at SDIA require the Authority to maintain compliance with two applicable NPDES Permits. As such, the Authority has prepared a single document, the SDIA SWMP, to fulfill the requirements of:

California Regional Water Quality Control Board, San Diego Region
(RWQCB), Order No. 2001-01, 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 Municipal Permit specifies the waste discharge requirements for discharges of urban runoff from the MS4s draining the watersheds of the jurisdictions named. The Municipal Permit outlines the responsibilities of the Copermittees, including the implementation of 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 SDIA SWMP fulfills the Municipal Permit requirement to prepare a JURMP Document.

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

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



SAN DIEGO INTERNATIONAL AIRPORT STORM WATER MANAGEMENT PLAN To facilitate review of the FY04-05 Annual Report, the report first presents the general structure of the SDIA SWMP, since the SWMP has been prepared as a single document to meet NPDES permit requirements as both a SWPPP and a JURMP.

The majority of the SWMP is based on a standardized format for JURMP Documents that was developed and agreed upon by the Copermittees. However, due to the unique nature of the Authority's jurisdiction, there are a few aspects of the SWMP that differ significantly from the organization and approach of the JURMP Documents prepared by the other Copermittees. Where the Copermittee JURMP Documents generally present information in the order outlined in the Municipal Permit itself, the SDIA SWMP has combined information in a manner that is more compatible with the Authority's operations and that facilitates understanding of the SWMP by Authority staff and SDIA tenants. The significant differences between the SWMP and a JURMP Document are described here.

Chapter 2 of the SWMP, entitled "Description of Facility and Pollutant Sources," provides an overview of the Authority and the SDIA, a site map of the SDIA, a detailed descriptions of the drainage areas of the SDIA, and descriptions of those activities conducted by the Authority and its tenants that could generate stormwater pollutants. Chapter 2 addresses the inventory and prioritization requirements of the Existing Municipal, Industrial, and Commercial Development Components [Municipal Permit Requirements F.3.a-d. and H.1.a(2-5)].

Chapter 3 of the SWMP, entitled "Operational Storm Water Management Practices," outlines the BMPs that are implemented or required for implementation at the SDIA by the Authority and its tenants during day-to-day operations. The Chapter addresses both the Existing Development BMP implementation requirements. The requirements for identification of pollution prevention and the maintenance of the MS4 are also addressed [Municipal Permit Requirements F.3.a-d. and H.1.a(2-5)].

Chapter 6 of the SWMP, entitled "Inspection and Enforcement," describes how the Authority inspects Authority and tenant areas and activities, except for construction activities (which are discussed in Chapter 5, along with the other aspects of construction stormwater management). Chapter 6 details the mechanisms in place to enforce the implementation of BMPs and other storm water requirements at SDIA. Chapter 6 addresses the inspection and enforcement requirements of the Municipal Permit for Existing Development [Municipal Permit Requirements F.3.a-d. and H.1.a(2-5)].

The remaining chapters of the SWMP present information on the remaining stormwater management activities required by the permit in a format similar to the Copermittee JURMP Documents. Chapter 4 addresses the Land Use Planning for New Development and Redevelopment requirements of the Municipal Permit. As noted above, Chapter 5 addresses all of the Construction Component requirements of the Municipal Permit, including the description of approval processes, inventory and prioritization of construction activities, implementation of construction BMPs, and inspection and enforcement. The Authority's illicit discharge detection and elimination programs are described in Chapter 7. The education efforts undertaken to meet the requirements of the Municipal Permit are discussed in Chapter 8, and the public participation efforts are discussed in Chapter 9. Strategies to assess the effectiveness of the Authority's SWMP are presented in Chapter 10. The fiscal analysis of Authority's stormwater management program is featured in Chapter 11, and Chapter 12 presents the conclusions and recommendations required by section H.3 of the Municipal Permit.

Table 1-1 shows the topics addressed by each chapter of the SWMP in relation to the requirements of the Municipal Permit.



Table 1-1. San Diego International Airport Storm Water Management Plan in Relation to the JURMP Requirements of the Municipal Permit

SDIA SWMP Chapter	Municipal Permit JURMP Requirements
Signed Certified Statement	Н.3
Executive Summary	H.3
1. Introduction and Responsibilities	H.3
2. Description of Facility and Pollutant Sources	F.3.a-d & H.1.a.(2-5)
3. Operational Storm Water Management Practices	F.3.a-d & H.1.a.(2-5)
4. Planning and Poste Construction Storm Water Management	F.1. & H.1.a.(11)
5. Construction Storm Water Management	F.2. & H.1.a.(1)
6. Inspection and Enforcement	F.3.a-d & H.1.a.(2-5)
7. Illicit Discharge Detection and Elimination	F.5. & H.1.a.(7)
8. Education Program	F.4. & H.1.a.(6)
9. Public Participation	F.6. & H.1.a.(8)
10. Assessment of SWMP Effectiveness	F.7. & H.1.a.(9)
11. Fiscal Analysis	F.8. & H.1.a.(10)
12. Conclusions and Recommendations	Н.3
Monitoring Plans	Appendix E

ANNUAL REPORT HIGHLIGHTS

Chapter 11 (Special Investigations) of the Annual Report features an extensive outline of a significant project the Authority initiated in FY04-05. Entitled the "Storm Drainage System BMP Project," it is designed to:

1) increase understanding of the site hydrology and hydraulics of the airport MS4, as well as the pollutant sources on the airport site; 2) evaluate historic stormwater sampling data and recommend improvements to the SDIA wet- and dry-weather stormwater sampling programs; 3) evaluate the appropriateness and adequacy of the BMPs required by the Authority SWMP to address pollutant sources; and 4) provide recommendations for additional BMPs and for overall improvements to the SDIA stormwater management program and the SDIA SWMP document.

Although many parts of the project remained unfinished at the end of FY04-05, it is anticipated that several project outputs will lead to program improvements, such as revisions to the BMPs currently required by the SDIA SWMP, updates to inspection procedures and forms, and updates to the stormwater monitoring programs. Anticipated program changes, resulting from consideration of the outputs from the Storm Drainage System BMP Project, are referred to several times throughout this Annual Report. It should be noted, however, that most of the anticipated changes to the Authority's stormwater management program resulting from the Storm Drainage System BMP Project as a whole will be discussed more thoroughly in the annual report for FY05-06.





2 Municipal Component of Existing Development

The Authority conducts a number of operations that are defined as "municipal activities" by the Municipal Permit. This chapter describes the Authority's efforts during FY04-05 to comply with the Municipal Component of the Municipal Permit. The areas and activities at SDIA considered "municipal" include: a) the roads and parking lots; b) the closed NTC Landfill; c) the stormwater conveyance system (MS4) maintained by the Authority; d) the grounds and buildings; e) the maintenance and storage facilities operated by the Authority; and f) the airfield itself, consisting of the entire Airside Operations Area (AOA). The Authority's municipal operations and the stormwater management controls placed on them are outlined in Chapters 2, 3, 6, and 7 of the SDIA SWMP.

SOURCE IDENTIFICATION AND PRIORITIES (INVENTORY) Table 2-1 presents the inventory of Authority municipal operations at SDIA. As shown in Table 2-1, only the landscaped areas of the facility grounds and the buildings are identified as low priority threats to surface water quality. Each of the remaining land uses and areas listed in Table 2-1 are defined as high priority threats to surface water quality by the Municipal Permit.

Table 2-1. Municipal Operations at SDIA

Type of Activity	Water Quality Threat Priority	Tenant Name	
Roads	High	SPC Airport Services, Inc.	
Parking Lots	High	9 Lots	
		6,321 total parking spaces	
		47 acres	
Closed Landfill	High	39 acres	
MS4	High	210 inlets	
		86,000 feet of storm drain pipe	
Maintenance and Storage Areas	High	Hazardous Waste Storage Area	
		Vehicle Storage Area	
		Runway Generator Shop	
		Terminal 2 West Equipment Storage Area	
Solid Waste Operations High		Trash and Recycling Compactor Area	
		Terminal 2 East Trash Compactor	
		Terminal 2 West Trash and Recycling Compactor Area	
		Landscape Waste Dumpster	
Airside Operations Areas	High	Ramp Scrubbing	
		Runway Rubber Removal	
Grounds (Landscaped)	Low	12.5 acres	
Buildings	Low	Commuter Terminal	
		Terminal 1	
		Terminal 2	
		Cargo Terminal	
		West Wing (offices)	
		Building A (offices)	
		HVAC Building (HVAC and Power Plant)	
		LPi Building (Offices)	



BMP IMPLEMENTATION AND POLLUTION PREVENTION

All municipal operations at SDIA are required to implement the relevant BMPs listed in Chapter 3 and Appendix B of the SWMP, including the generally applicable site-wide BMPs and the pollution prevention measures. In addition to the hard-copies provided to each department, Authority staff are advised that they can access the SWMP through the Authority's intranet and internet websites.

During the reporting period, the Authority pollution prevention efforts included an award winning waste reduction and recycling program. The elements of the Authority's waste reduction and recycling program are presented in Table 2-2. The Authority's recycling campaign is designed to educate staff about the single-stream recycling program. Available in hard-copy and accessible through the Authority's intranet website, the Authority's bilingual (English-Spanish) Recycling Guide was developed to describe and promote the program. The brochure also includes suggestions for other ways to help reduce the amount of waste being generated at work or at home. Due in large part to the recycling element of the pollution prevention efforts at SDIA, approximately 25% of the solid wastes generated at SDIA were recycled during the reporting period (that is, 1458 tons of materials were recycled out of the 5758 tons of waste generated).

Another innovative pollution prevention measure at SDIA is the Service Animal and Pet Relief Area. Located between Terminal 1 and Terminal 2, the area provides 475 square feet of space for animals to enjoy a water or restroom break while waiting for departure. Features of the area include: a) a perimeter surrounded by 4-foot-tall privet hedges; b) surface compromised of tall fescue grass; c) low voltage solar lights; d) fresh water drinking fountain; and e) a refuse material bag dispenser and disposal unit.

Table 2-2. SDIA Pollution Prevention - Waste Reduction and Recycling Programs

Waste Reduction and Recycling Program	Description	
Recycled-Content Product Procurement Program	Procurement Department program designed to purchase products and supplies that feature recycled contents. Approximately 80% of the office paper purchased is at least 30% recycled content, all of the new packaging material purchased is at least 30% recycled content, all of the 30-gallon or larger capacity trash bags and all the floor mats are made from recycled plastics and rubber, all the toner cartridges purchased are recycled cartridges, cleaning and maintenance supplies (such as gloves and dust masks) partially made from recycled materials, and all Authority brochures are printed on recycled paper.	
Office Waste Reduction Program	Program cultivated a corporate culture that provides for and requests the use of electronic formats for virtually all communication within and between departments. Electronic communication with outside entities is also preferred where feasible. Ten "document processing centers" in shared work areas that are computer-network accessible and feature double-sided printing and copying, document scanning and electronic mailing capacity. Employees are encouraged to use clean waste paper for note and scratch paper. Interoffice mail is distributed using reusable envelopes. Document destruction service providers are required by contract to recycle the waste paper.	
Single-Stream Recycling Program	Single stream-recycling program in which all recyclable material can be collected in the same container. Acceptable recyclable materials include cardboard, mixed paper, old newspapers, aluminum, glass, tin cans, and plastics. A total of 50 recycling bins throughout the airport terminals to collect and store recyclables generated by travelers/visitors, airport staff, vendors, and the airline companies. The Authority office staff use desk side recycling containers. The airport janitorial staff, vendors, and the airport tenants also have access to 2 recyclables compactors and several front load recycle bins.	
Office Paper Recycling Program	Waste paper recycling containers are provided at each workstation and in all shared document-processing areas, allowing for 100% of office waste paper being recycled.	
Package Material Recycling Program	Approximately 100% of the recyclable package material waste is recycled.	
Green Waste Reduction Program	Approximately 95% of the landscape plants at SDIA are drought tolerant and low waste generating varieties of ground covers, shrubs, and trees. Mulch is used throughout the landscape areas to help retain water, soil, and fertilizers.	
Integrated Pest Management Program	Program reduces the use of fertilizers, herbicides, and pesticides on airport property.	
Alternative Fuels Program	The Authority operates a compressed natural gas (CNG) fueling station and operates four CNG vehicles.	



MAINTENANCE OF MS4 AND MUNICIPAL FACILITIES The Authority conducts MS4 and municipal facility maintenance activities on a basis year-round. These activities include inspection and cleaning of MS4 components, proper disposal of sediment and debris removed from the MS4, and implementation of measures to prevent waste discharges to receiving waters during these maintenance activities. Table 2-3 presents information summarizing the MS4 and municipal facility maintenance activities conducted during the reporting period.

Table 2-3. MS4 and Municipal Operation Maintenance Activities during FY04-05

Type of Activity	Manpower Metric*	Materials Metric*
Street Sweeping - Landside	468 hours	8 tons
Ramp/Apron Sweeping and Scrubbing - Airside, as needed	624 hours	6.5 tons
Runway Rubber Removal -Airside, as needed	227 hours	30,000 gallons of wastewater
MS4 Cleaning, as needed	270 hours	>1 ton
Storm Drain Inlet Stenciling, as needed	8 hours	12 inlets stenciled
Landscape Maintenance	1560 hours	1000 cubic yards
Pesticide/Herbicide Application, as needed	100 hours	120 gallons
Solid Waste Disposed	Not applicable	4300 tons
Recyclable Waste Recovered	Not applicable	1458 tons

^{*} All metrics are approximated.

MANAGEMENT OF PESTICIDES, HERBICIDES, AND FERTILIZERS As noted in Table 2-2 above, the Authority has established an integrated pest management (IPM) program designed to minimize the use of herbicides, pesticides, and fertilizers in maintaining the buildings and grounds at SDIA. The IPM program encourages the use of native plant species in the landscaped areas to help minimize the need for excessive irrigation and the need for excessive application of fertilizers and/or herbicides. In addition to encouraging the proper use and disposal of chemicals, the IPM program also ensures that the Facilities Maintenance Department minimizes their inventory of pesticides, herbicides, and fertilizers. Approximately 120 gallons of pesticides and/or herbicides were applied at SDIA during FY04-05.

SUMMARY OF INSPECTIONS

The Environmental Affairs Department inspected municipal operations during FY04-05. The inspections conducted by the Environmental Affairs Department are listed in Table 2-4 and included: a) quarterly inspections; b) municipal land use area-specific inspections; and c) a comprehensive annual inspection conducted in the final quarter of the fiscal year. All areas of municipal land use and activity, the associated sources of stormwater pollution, and authorized non-stormwater discharges were visually inspected during the quarterly inspections and unauthorized discharges were noted. The annual comprehensive site inspection also included: 1) a review of records; 2) a review and evaluation of all BMPs; 3) visual inspection of all the equipment needed to implement the BMPs; and 4) the preparation of an evaluation report that summarized the inspection and highlighted any revisions necessary to the BMPs The Environmental Affairs Department also conducted a site-specific inspection of the closed NTC Landfill portion of SDIA on a quarterly basis. Inspection of the below-grade MS4 components was conducted over a 2-week period in June of 2005.

Inspections of the municipal operations at SDIA generally found the facilities to be clean and orderly. No unauthorized discharges or other concerns were identified. The annual comprehensive site inspection found that the BMPs required for municipal operations, as listed in the SWMP, were adequate and being implemented properly.



Table 2-4. Municipal Activity Site Inspections Conducted during FY04-05

Date	Inspection Element
09/02/04	Site-specific Inspection of Closed Landfill
09/09/04	Quarterly Site Inspection
12/17/04	Site-specific Inspection of Closed Landfill
12/22/04	Quarterly Site Inspection
02/09/05	Quarterly Site Inspection
03/28/05	Site-specific Inspection of Closed Landfill
04/13/05	Quarterly FAA 139.321(b) Fuel/Fueler Inspection
05/23/05 05/31/05 06/06/05 06/14/05 06/23/05 06/24/05	Annual Comprehensive Site Inspection
06/20/05 - 06/30/05	Below-grade Inspection of MS4
06/28/05	Site-specific Inspection of Closed Landfill

COMPLIANCE AND ENFORCEMENT ACTIONS

As noted above, municipal operations were found to be in compliance with the SWMP. As such, no enforcement actions were initiated during FY04-05.

REVISIONS TO THE SWMP

The SWMP was revised in January of 2005. Implementation of stormwater management controls for municipal activities did not suggest the need for any further revisions. However, it should be noted that information presented in Chapter 11 of this Annual Report indicates that future SWMP revisions will be necessary in response to a special project implemented during FY04-05. Those revisions will effect the Authority's stormwater management controls for municipal activities. The actual revisions will be presented in the FY05-06 Annual Report.

Storm Water Management Plan - Municipal Stormwater Permit





3 Industrial Component of Existing Development

This chapter presents the Authority's stormwater management activities during FY04-05 that address the Industrial Component of the Municipal Permit. A number of airport tenants, and the Authority itself, conduct regular activities subject to the Industrial Component. Chapters 2, 3, 6, and 7 of the SDIA SWMP outline the stormwater management controls placed on industrial activities.

SOURCE IDENTIFICATION AND PRIORITIES (INVENTORY) Thirty-five (35) of the 57 tenants listed in the facility inventory of the SWMP are identified as industrial operations. Given that the Authority itself also conducts industrial activities at SDIA, there are a total of 36 entities at the SDIA that are considered subject to the Industrial Component of the Municipal Permit. These 36 entities are considered high priority threats to water quality by Municipal Permit definition. These 36 operations are listed below in Table 3-1. Please note that 4 tenants appear in the table more than once due to the industrial activity they conduct and the categorization of those activities in the SWMP. These 4 are American Airlines, JimsAir Aviation Services, Swiss Port, and United Airlines.

Table 3-1. Industrial Operations at SDIA

Type of Activity	Tenant Name
Passenger Carrier	Aerovias De Mexico
	Alaska Airlines
	Aloha Airlines
	American West Airlines
	American Airlines
	American Eagle Airlines
	Continental Airlines
	Delta Air Lines
	Frontier Airlines
	Hawaiian Airlines
	Jet Blue Airlines
	Northwest Airlines
	Skywest Airlines
	Southwest Airlines
	United Airlines
	USAirway
Cargo Carrier	ABX Air, Incorporated (dba Airborne Express)
	Ameriflight
	BAX Global (ATI)
	DHL Airways
	Federal Express
	Menlo Worldwide Forwarding
	United Parcel Service Company
Fixed Base Operation	Jimsair Aviation Services
Aircraft Fueler	Aircraft Services International Group, Incorporated
	American Airlines
	Jimsair Aviation Services



Table 3-1. Industrial Operations at SDIA (continued)

Type of Activity	Tenant Name
Fuel Vendor	Allied Aviation Services
	Jimsair Aviation Services
Aircraft Ground	GAT
Handling Services	Integrated Airline Services
	Ontario Aircraft Service
	Swift Air Service
	Swiss Port
Cargo Handler	California Air Cartage (dba Shaker Express)
	Swiss Port
Food Services - Major	HMS Host Corporation
Aircraft and Ground	American Airlines
Service Equipment Maintenance	ExecAir
	United Airlines
Jetway Maintenance Service	Elite Line Services
Airport Operations	SDCRAA - Airside Operations Department and Facilities Maintenance Department

BMP IMPLEMENTATION AND POLLUTION PREVENTION Industrial operations at SDIA are required to implement those BMPs in Chapter 3 and Appendix B of the SWMP relevant their operations, including the generally applicable site-wide BMPs and pollution prevention measures. These BMPs and pollution prevention measures were discussed with tenants and staff, as necessary, during the site inspections described below.

SUMMARY OF INSPECTIONS

The Environmental Affairs Department inspected industrial operations at SDIA on a quarter-annual basis, with the fourth quarter inspection part of a comprehensive annual site inspection program. All areas of industrial activity and associated sources of stormwater pollution were visually inspected during the quarterly inspections and unauthorized discharges were noted. The annual comprehensive site inspection also included: 1) a review of records; 2) a review and evaluation of all BMPs; 3) visual inspection of all the equipment needed to implement the BMPs; and 4) the preparation of an evaluation report that summarized the inspection and highlighted any revisions necessary to the BMPs.

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 at the airport in accordance with Federal Aviation Administration regulations. There are 4 tenants on the airport that conduct fuel related activities. These quarterly inspections are primarily designed to identify safety concerns, but also identify poorly maintained or leaking equipment. Environmental issues discovered during these inspections are brought to the attention of the Environmental Affairs Department. Table 3-2 presents the dates and types of industrial activity inspections conducted by the Authority during FY04-05.

Overall, the inspections found the airport facility to be clean and orderly. There were, however, eight instances in which an unauthorized discharge or other concern were identified. One unauthorized discharge was observed during the December 22, 2004 quarterly inspection, 4 unauthorized discharges and 4 other issues of concern were observed during the annual comprehensive site inspection. The inspections found 8 separate industrial operations not implementing fully the relevant BMPs required for these types of industrial activity. In each instance, a determination was made that BMPs were adequately listed in the SWMP. As such, each operation was directed to begin proper implementation of relevant BMPs. Table 3-3 identifies the 4 types of industrial activity for which BMPs were not being properly implementing at the time of inspection.



Table 3-2. Industrial Activity Site Inspections Conducted during FY04-05

Date	Inspection Element
07/13/04	Quarterly FAA 139.321(b) Fuel/Fueler Inspection
09/09/04	Quarterly Site Inspection
10/14/04	Quarterly FAA 139.321(b) Fuel/Fueler Inspection
12/22/04	Quarterly Site Inspection
01/06/05	Quarterly FAA 139.321(b) Fuel/Fueler Inspection
02/09/05	Quarterly Site Inspection
04/13/05	Quarterly FAA 139.321(b) Fuel/Fueler Inspection
05/23/05	Annual Comprehensive Site Inspection
05/31/05	
06/06/05	
06/14/05	
06/23/05	
06/24/05	

Table 3-3. Types of Industrial Activities for which BMPs Were Not Properly Implemented as Determined during Site Inspections

Industrial Activity	BMPs Required by SDIA SWMP
Used absorbent left on the ground surface.	SC-2 - Aircraft, Ground Vehicle and Equipment Maintenance SC-3 - Aircraft, Ground Vehicle and Equipment Fueling SC-8 - Waste/Garbage Handling and Disposal
Improper storage of materials and waste.	SC-7 - Outdoor Storage of Significant Materials SC-8 - Waste/Garbage Handling and Disposal
Uncontrolled washing activities.	SC-4 - Aircraft, Ground Vehicle and Equipment Washing
Leaking vehicles or equipment.	SC-2 - Aircraft, Ground Vehicle and Equipment Maintenance

COMPLIANCE AND ENFORCEMENT ACTIONS

During the December 22, 2004 quarterly site inspection, one (1) industrial operation at the airport was issued at verbal directive to cleanup used absorbent material. This issue was addressed the same day. Seven (7) industrial operations were issued a written notice in response to issues identified during the annual comprehensive site inspection. Each notice detailed the concerns identified by the Environmental Affairs Department during the inspection, required corrective action within a specific time-frame, and provided information on the proper implementation the particular BMPs required for their activities. All the concerns identified during inspections are listed in Table 3-4 below. Each item was addressed satisfactorily and no further enforcement actions were initiated.

Table 3-4. Industrial Operation Compliance Concerns Identified during Quarterly Site Inspections and Dates of Resolution

Operation	Compliance Issue	Type & Date of Notice	Date of Resolution
Swiss Port	Used absorbent left on ground surface.	Verbal - 12/22/04	12/22/04
Delta Air Lines	Used absorbent left on ground surface. Improper storage of materials and waste.	Written - 06/02/05	06/06/05
HMS Host Corporation	Improper storage of materials and waste. Uncontrolled washing activities.	Written - 06/02/05	06/23/05
Jimsair Aviation Services	Uncontrolled washing activities. Leaking vehicles or equipment.	Written - 06/02/05	06/23/05
Northwest Airlines	Improper storage of materials and waste.	Written - 06/02/05	06/14/05
Swiss Port	Used absorbent left on ground surface. Improper storage of materials and waste.	Written - 06/02/05	06/06/05
United Airlines	Improper storage of materials and waste. Uncontrolled washing activities.	Written - 06/02/05	06/24/05
USAirways	Uncontrolled washing activities.	Written - 06/02/05	06/24/05



STORMWATER MONITORING RELATED TO INDUSTRIAL ACTIVITIES One component of the SDIA SWMP is a wet-weather stormwater runoff monitoring designed to comply with the General Industrial Stormwater Permit. For purposes of the stormwater monitoring component, SDIA has been divided into 6 general discharge areas based on similar land use and operations (see SWMP Figure 2-4, page 2-5). The 6 areas and the corresponding sample identifiers for each wet-weather sampling location are:

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SDIA #1 aircraft runway (Sample site LBF#1)
SDIA #2 perimeter road and taxiway ovals (Sample site LBF#2)
SDIA #3 terminal 1 airside apron (Sample site LBF#3)
SDIA #4 terminal 2 airside apron (Sample site LBF#4)
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SDIA #6 fence-line between airfield and NTC landfill (Sample site LBF#6)

SDIA #5 north ramp/parking apron (Sample site LBF#5)

Wet weather monitoring samples were collected during storm events on October 27, 2004, and December 28, 2004. The laboratory analytical results for these stormwater samples are presented in Table 3-5A and Table 3-5B.

Based upon review of the analytical data, the Environmental Affairs Department determined that overall water quality parameters and concentrations of contaminants in the wet weather monitoring samples collected during the reporting period were below the Multi-Sector Permit Benchmark values. There were, however, two sample locations in particular that accounted for nearly half of all the benchmark values exceedances, namely, sample locations LBF#2 and LBF#3. In addition, four contaminants accounted for nearly four-fifths of all the benchmark value exceedances.

Samples collected at sample location LBF#2 had concentrations of total iron, total aluminum, total copper, dissolved copper, total lead, and total zinc, which exceeded the Multi-Sector Permit Benchmark values. The sample site is within an airport taxiway oval, the majority of which is comprised of gravel. While the gravel may be a source of heavy metals, the site is also close to the aircraft touchdown area of the runway, where tire wear from landing aircraft is most pronounced. Tire wear is a likely source for the heavy metals found in runoff collected at sample location LBF#2.

Table 3-5A. Analytical Results of Wet Weather Samples Collected October 27, 2004

		Sample Site					
Constituent	Units	LBF #1	LBF #2	LBF #3	LBF #4	LBF #5	LBF #6
рН	pH units	6.8	6.6	6.6	6.4	5.8	6.2
TSS	mg/L	5.0	16.0	3.0	2.0	<1.0	2.0
Specific Conductance	umhos/cm	42.9	53.0	40.2	33.6	7.53	31.0
BOD	mg/L	2.8	4.0	9.2	4.3	<1.0	3.4
COD	mg/L	6.0	9.0	21.0	10.0	<5.0	8.0
Ammonia	mg/L	0.14	0.47	0.11	0.18	0.45	0.22
Glycols	mg/L	<50	<50	<50	<50	<50	<50
Oil & Grease	mg/L	1.2	2.6	1.0	<1.0	<1.0	1.5
BTEX	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
TPH (Gasoline)	ug/L	<100	<100	<100	55	<100	<100
TRPH	mg/L	<1.0	<1.0	1.4	<1.0	<1.0	<1.0
VOCs	ug/L	<0.5-10	<0.5-10	<0.5-10	<0.5-10	<0.5-10	<0.5-10
Total Aluminum	mg/L	0.22	0.97	0.076	>0.05	0.5	0.12
Total Copper	mg/L	7.9	80	21	7.3	18	6.9
Dissolved Copper	mg/L	<0.001	53	14	7.1	9.2	<0.001
Total Iron	mg/L	0.25	1.1	0.1	<0.10	0.48	0.12
Total Lead	mg/L	3.7	5.6	<0.001	<0.001	2.3	<0.001
Dissolved Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Zinc	mg/L	22	19	130	37	18	67



Table 3-5B. Analytical Results of Wet Weather Samples Collected December 28, 2004

		Sample Site					
Constituent	Units	LBF #1	LBF #2	LBF #3	LBF #4	LBF #5	LBF #6
рН	pH units	6.3	6.1	6.5	6.0	6.0	5.9
TSS	mg/L	6.0	44.0	9.0	2.0	10.0	17.0
Specific Conductance	umhos/cm	43.5	125	69.2	28.5	26.1	44.1
BOD	mg/L	4.2	26.0	4.8	<1.0	12.6	15.0
COD	mg/L	9.0	63.0	10.0	<5.0	28.0	34.0
Ammonia	mg/L	0.21	0.28	0.35	0.26	0.57	0.23
Glycols	mg/L	<50	<50	<50	<50	<50	<50
Oil & Grease	mg/L	1.7	2.1	1.9	1.3	1.5	2.3
BTEX	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
TPH (Gasoline)	ug/L	<100	<100	59	<100	<100	<100
TRPH	mg/L	<1.0	1.5	2.3	<1.0	<1.0	1.1
VOCs	ug/L	<0.5-10	<0.5-10	<0.5-10	<0.5-10	<0.5-10	<0.5-10
Total Aluminum	mg/L	0.41	1.2	0.12	0.12	0.39	0.78
Total Copper	mg/L	20.0	120.0	26.0	15.0	29.0	22.0
Dissolved Copper	mg/L	7.1	85	12	<0.001	20.0	7.1
Total Iron	mg/L	0.61	1.6	0.24	0.21	0.45	0.98
Total Lead	mg/L	11.0	6.5	2.0	2.0	2.3	6.6
Dissolved Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Zinc	mg/L	150.0	32.0	120.0	59.0	28.0	310.0

Samples collected at sample location LBF#3 had concentrations of TPH, total copper, dissolved copper, total lead, and total zinc, which exceed the Multi-Sector Permit Benchmark values. The sample site is within a terminal ramp and gate area, the majority of which is impervious concrete. The aircraft fueling activities in the gate area may be a source of TPH. Brake pad wear from aircraft and other ground support vehicles in this area are likely sources for the heavy metals found in runoff collected at location LBF#3.

As noted in the discussion of analytical results above, total copper, dissolved copper, total lead, and total zinc represent contaminants of concern in the stormwater runoff at the airport. These four contaminants accounted for 42 of the 55 (or 76%) Multi-Sector Permit Benchmark value exceedances. These heavy metals are likely associated with the aircraft tire wear and aircraft/vehicle brake wear at the airport.

The analytical results for stormwater samples collected during the FY04-05 reporting period are consistent with historic sampling data from the airport. Total copper, dissolved copper, total lead, and total zinc have previously been identified as contaminants of concern. The Authority is currently developing a revised stormwater sampling plan designed to identify the sources of these heavy metals (See Chapter 13 of this report). The Authority is also evaluating the BMPs currently in place to control and eliminate heavy metal concentrations in stormwater runoff at the airport. This effort is intended to outline new, additional, or modified BMPs that can be implemented to control or eliminate these contaminants.

REVISIONS TO THE SWMP

The SWMP was revised in January of 2005. Implementation of stormwater management controls for industrial activities during the reporting period do not suggest the need to revise major portions of the SWMP. It should be noted, however, that the inventory of industrial operations has changed with one tenant being deleted (Sun County Airlines) and two new tenants being added (Aloha Airlines, Skywest Airlines). Furthermore, information presented in Chapter 11 of this Annual Report indicates that future SWMP revisions will be necessary in response to a special project implemented during FY04-05. Those revisions will effect the Authority's stormwater management controls for industrial activities. The actual revisions will be presented in the FY05-06 Annual Report.





4 Commercial Component of Existing Development

The stormwater management activities of the Authority during FY04-05 that address the Commercial Component of the Municipal Permit are discussed below. There are several airport tenants facilities and/or operations subject to the Commercial Component. Chapters 2, 3, 6, and 7 of the SDIA SWMP describe the stormwater management controls placed on them.

SOURCE IDENTIFICATION AND PRIORITIES (INVENTORY)

Fifteen (15) of the 58 tenants listed in the facility inventory of the SWMP are identified as commercial operations subject to the Commercial Component requirements of the Municipal Permit. The 15 entities are listed in Table 4-1.

BMP IMPLEMENTATION AND POLLUTION PREVENTION

Commercial operations at SDIA are required to implement those BMPs in Chapter 3 and Appendix B of the SWMP relevant to their operations, including the generally applicable site-wide BMPs and pollution prevention measures. These BMPs and pollution prevention measures were discussed with tenants, as necessary, during the site inspections described below.

Table 4-1. Commercial Operations at SDIA

Type of Activity	Water Quality Threat Priority	Tenant Name
Janitorial Services	High	SPC Airport Services, Inc.
Food Service	Medium	La Salsa/Submarina
	Medium	McDonald's
	Medium	Nine Dragons
	Medium	Gate Gourmet
Passenger Services	Medium	Huntleigh USA Corporation
	Medium	ITS (aka SMS)
Retail Concessionaires	Low	Procurement Concepts
	Low	Project Horizon, Incorporated (dba Inmotion Pictures)
	Low	Smarte Carte, Incorporated
	Low	Sunglass Hut
	Low	Travelex America, Incorporated
Other	Low	Aeronautical Radio, Incorporated
	Low	NSEI
	Low	Travelers Aid Society of San Diego, Incorporated

SUMMARY OF INSPECTIONS

The Environmental Affairs Department inspected commercial operations on a quarter-annual basis, with the fourth quarter inspection part of a comprehensive annual site inspection program. All areas of commercial activity and associated sources of stormwater pollution were visually inspected and unauthorized discharges were noted. The annual comprehensive site inspection also included: 1) a review of records; 2) a review and evaluation of all BMPs; 3) visual inspection of all the equipment needed to implement the BMPs; and 4) the preparation of an evaluation report that summarized the inspection and highlighted any revisions necessary to the BMPs.



Table 4-2. Commercial Activity Site Inspections Conducted during FY04-05

Date	Inspection Element
09/09/04	Quarterly Site Inspection
12/22/04	Quarterly Site Inspection
02/09/05	Quarterly Site Inspection
05/23/05	Annual Comprehensive Site Inspection
05/31/05	
06/06/05	
06/14/05	
06/23/05	
06/24/05	

The annual comprehensive site inspection included: 1) a review of records; 2) visual inspection of all potential pollutant sources; 3) a review and evaluation of all BMPs; 4) visual inspection of all the equipment needed to implement the SWMP; 5) investigation for unauthorized discharges; and 6) the preparation of an evaluation report that summarized the inspection and highlighted any revisions necessary to the BMPs.

Overall, the quarterly and annual inspections found the facilities to be clean and orderly. No unauthorized discharges or other concerns were identified during the quarterly inspections. No unauthorized discharges or other concerns were identified during the annual comprehensive site inspection and a determination was made that the BMPs listed in the SWMP were adequate, requiring no additions or modifications. There was no indication of any discharge to the receiving waters. Results of the annual comprehensive site inspection were briefly presented to the tenants at the June 15, 2005 Lindbergh Airline Managers Committee meeting.

COMPLIANCE AND ENFORCEMENT ACTIONS

As noted above, tenants conducting commercial activities at SDIA were found to be in compliance with the SWMP during quarterly and annual site inspections. As such, there were no enforcement actions taken during FY04-05.

REVISIONS TO THE SWMP

The SWMP was revised in January of 2005. Implementation of stormwater management controls for commercial activities during the reporting period do not suggest the need for any further revisions. However, it should be noted that information presented in Chapter 11 of this Annual Report indicates that future SWMP revisions will be necessary in response to a special project implemented during FY04-05. Those revisions will effect the Authority's stormwater management controls for commercial activities. The actual revisions will be presented in the FY05-06 Annual Report.





5 Residential Component of Existing Development

As stated several times in the SDIA SWMP (namely, in the Executive Summary, Section 5.2, and Appendix A), as well as the Introduction to this Annual Report, there are no residential land uses or activity areas within the Authority's jurisdiction. For this reason and consistent with the previous Annual Report, the FY04-05 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 SDIA SWMP and Annual Reports discuss issues relative to the general public in Chapter 9 Education and in Chapter 10 Public Participation.

Storm Water Management Plan - Municipal Stormwater Permit





6 Land Use Planning for New Development and Redevelopment Component

The Municipal Permit directs that the Authority's land use planning policies, principles, and processes be aligned with the Municipal Permit requirement to minimize the short- and long-term impacts of land development activities on receiving water quality. The Municipal Permit requires that the Authority evaluate the SDIA Master Plan and modify the development project approval process and environmental review process, as necessary, to reduce pollutants and runoff flows from development and redevelopment projects to the maximum extent practicable. The Authority's master planning process, development approval process, and relevant aspects of the stormwater management controls placed on these processes are outlined in Chapter 4 of the SDIA SWMP. This chapter of the Annual Report discusses compliance activities relative to land use planning and development/redevelopment activities at the SDIA during FY04-05.

LAND USE PLANNING ACTIVITIES

The Authority Airport Planning Department is responsible for development and implementation of the Airport Master Plan and the environmental review processes required by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). There was one significant land use planning activity related to the Airport Master Plan completed by the Authority during the reporting period.

The Airport Master Plan provides long-range planning for SDIA facilities, including: the airfield, the terminals, the roadways, the parking, and airport-related support facilities. There are five primary steps to the Airport Master Plan process, namely:

- 1) Completion of the Aviation Activity Forecast
- 2) Verification of Master Plan Findings
- 3) Preparation of Master Plan 2030
- 4) Preparation of a Cost Estimate and Finance Plan
- 5) Completion of Environmental Review in accordance with CEQA/NEPA

The Airport Planning Department released the final SDIA Aviation Activity Forecasts in June of 2004. The verification of Master Plan Findings and the preparation of the actual Master Plan 2030 began in January of 2005. The draft Airport Master Plan was the subject of 4 public workshops held on March 29 and 30, 2005. On June 6, 2005, the Authority Board adopted a resolution authorizing staff to prepare an implementation plan for the SDIA Airport Master Plan and to initiate the environmental review processes.

SUSMP IMPLEMENTATION AND POST-CONSTRUCTION BMPS

The Authority Standard Storm Water Mitigation Planning (SUSMP) process, required by the Municipal Permit, is outlined in Section 4.2.2 and Appendix C of the SDIA SWMP. During the reporting period, none of the development projects at SDIA were at that point in the design or approval phase that would have required SUSMP compliance.

REVISIONS TO THE SWMP

There are no revisions to the Land Use Planning for New Development and Redevelopment Component portions of the SWMP.





7 Construction Component

All construction activities at SDIA are subject to the Construction Component of the Municipal Permit, whether conducted by the Authority or airport tenants. These activities and the stormwater management controls placed on them are outlined in Chapters 5 of the SDIA SWMP. This section of the Annual Report discusses construction activities at the SDIA. during FY04-05.

SOURCE IDENTIFICATION AND PRIORITIES (INVENTORY) There were 9 construction projects at SDIA during the reporting period that required the implementation of storm water management controls. All other construction activities were conducted either entirely indoors or without elements that required the implementation of BMPs. The Authority initiated 7 of the 9 projects, and two tenants initiated the others, namely, the Federal Aviation Administration (FAA) and Allied Aviation. The Authority has determined that all 9 construction projects are medium threats to water quality in accordance with the Municipal Permit. The 9 projects subject to the Construction Component requirements of the Municipal Permit are listed in Table 7-1 below.

Table 7-1. SDIA Construction Projects during FY04-05

#	Sponsor	Project Name	Project Description	Project Status during FY04-05
1	Authority	CIP Project # 3095 - Implement ADA Recommendations	Modifications to curbs, sidewalks, pedestrian ramps, and parking lot amenities to conform to Americans with Disabilities Act (ADA) requirements.	Continued from June '04, completed August '04
2	Authority	CIP Project # 3109 - Terminal 2 West Floor Stone Replacement	Remove and replace interior floor stone in Terminal 2 West.	Continued from June '04, completed June '05
3	Authority	CIP Project # 1456 - NTC Employee Parking Lot	Construction of approximately 14.5 acre parking lot and associated sidewalk and off-site utilities, including approximately 3900 feet of below-grade storm drain.	Continued from June '04, completed June '05
4	Authority	CIP Project # 3096H - Reconfigure Checkpoints 1 & 2	Modification of tenant spaces to enlarge the security checkpoint and provide additional passenger check lane.	Started August '04, completed November '04
5	Authority	CIP Project # 4013A - San Park Parking Lot (Harbor Drive)	Improve drainage and surface of approximately 4 acres of parking lot.	Started August '04, completed April '05
6	Authority	CIP Project # 3054A - Gates 1 & 2 Expansion	Conversion of the Gates 1 and 2 area into one open gate.	Started November '04, completed May '05
7	Federal Aviation Administration (FAA)	FAA Project #008-012-320 Runway Status Lights	Installation of Runway Status Lights.	Started December '04, completed April '05
8	Authority	CIP Project # 3096M - Baggage Screening Project	Construct structural canopy and baggage conveyor system in Terminal 2 East.	Started March '05, continued through June '05
9	Allied Aviation	Tenant Project # 012-035-370 Remote Fuel Dispensing Site - UST Upgrades	Required regulatory upgrades at existing 12,000 and 3,000 gallon underground storage tanks at the remote fuel dispensing island.	Started June '05, continued through June '05



BMP IMPLEMENTATION AND POLLUTION PREVENTION

All construction activities at SDIA are subject to the SDIA SWMP and are required to implement the BMPs relative to these activities discussed in Chapter 5 of the SWMP, including the generally applicable pollution prevention measures. These BMP requirements and pollution prevention measures were discussed, as necessary, with Authority staff, FAA staff, tenants, and the construction contractors performing the work during inspections and regularly-scheduled (typically weekly) progress meetings.

SUMMARY OF INSPECTIONS

During the reporting period, the Environmental Affairs Department conducted regular inspections of all construction projects listed in Table 7-1. Inspections were typically conducted on a weekly basis during both the wet- and dry-seasons. All areas of construction activity, the associated sources of stormwater pollution, and the adequacy and effectiveness of the BMPs being implemented were visually inspected. Inspectors also investigated construction project sites for evidence of existing or potential unauthorized discharges.

Table 7-2 presents the dates of construction site inspection conducted by the Environmental Affairs Department for each of the 9 construction projects underway during the reporting period.

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

Table 7-2. Construction Activity Inspections at SDIA during FY04-05

#	Project Name	Inspection Date
1	CIP Project # 3095 - Implement ADA Recommendations	July 8, 2004 July 12, 2004 July 19, 2004 August 2, 2004 August 12, 2004
2	CIP Project # 3109 - Terminal 2 West Floor Stone Replacement	July 1, 2004 January 6, 2005 July 8, 2004 January 13, 2005 July 15, 2004 January 20, 2005 July 29, 2004 January 27, 2005 August 5, 2004 February 3, 2005 August 12, 2004 February 18, 2005 September 2, 2004 February 24, 2005 September 16, 2004 March 31, 2005 October 7, 2004 April 14, 2005 October 28, 2004 April 21, 2005 November 4, 2004 April 28, 2005 December 16, 2004 May 5, 2005
3	CIP Project # 1456 - NTC Employee Parking Lot	July 21, 2004 August 19, 2004 September 24, 2004 October 19, 2004 November 8, 2004 December 13, 2004 December 30, 2004 April 1, 2005 April 21, 2005 April 28, 2005 May 4, 2005 May 12, 2005 May 19, 2005



Table 7-2. Construction Activity Inspections at SDIA during FY04-05 (continued)

#	Project Name	Inspection Date
4	CIP Project # 3096H - Reconfigure Checkpoints 1 & 2	September 14, 2004 September 21, 2004 September 28, 2004 October 19, 2004 October 26, 2004 November 2, 2004 November 9, 2004 November 16, 2004
5	CIP Project # 4013A - San Park Parking Lot (Harbor Drive)	November 23, 2004 December 9, 2004 March 11, 2005 March 18, 2005 March 25, 2005 April 1, 2005 April 13, 2005
6	CIP Project # 3054A - Gates 1 & 2 Expansion	December 13, 2004 April 1, 2005 December 30, 2004 April 8, 2005 January 12, 2004 April 15, 2005 January 21, 2004 April 22, 2005 February 1, 2005 April 25, 2005 February 17, 2005 April 28, 2005 February 22, 2005 April 29, 2005 March 15, 2005 May 5, 2005 March 18, 2005 May 6, 2005 March 25, 2005 May 12, 2005 May 19, 2005

Table 7-2. Construction Activity Inspections at SDIA during FY04-05 (continued)

#	Project Name	Inspection Date
7	FAA Project #008-012-320 Runway Status Lights	December 22, 2004 January 7, 2005 January 24, 2005 February 2, 2005 February 7, 2005 February 14, 2005 February 28, 2005 March 7, 2005 March 14, 2005 March 21, 2005
8	CIP Project # 3096M - Baggage Screening Project	March 25, 2005 April 1, 2005 April 8, 2005 April 15, 2005 April 21, 2005 April 21, 2005 April 22, 2005 April 28, 2005 April 29, 2005 June 27, 2005 June 30, 2005
9	Tenant Project # 012-035-370 Remote Fuel Dispensing Site - UST Upgrades	June 9, 2005 June 16, 2005 June 23, 2005 June 30, 2005



In general, the construction project inspections conducted by the Environmental Affairs Department found these 9 projects to be in substantial compliance with the requirements of the SDIA SWMP and with the Municipal Permit Construction Component. Poor housekeeping, poor materials/waste management, and poor concrete waste management were the issues of concern most frequently identified. These same concerns were identified in the Annual Report for Fiscal Year 2003-2004 and tend to be issues that require constant attention of construction contract site supervisors. In response, the Environmental Affairs Department has now enhanced the stormwater pollution prevention training for construction project managers, developers, and contractors. No unauthorized discharges to receiving waters were identified during the inspections. The results of the inspections were discussed with the construction contract site supervisor, typically at the end of each inspection and again during regular progress meetings. When necessary, inspectors required corrective actions and/or modification to the BMPs being employed on the project site. Table 7-3 identifies the construction activities for which BMPs were not being properly implemented. These issues were generally corrected once brought to the attention of the construction contract supervisor at the end of the inspection.

Table 7-3. Types of Construction Activity for which BMPs Were Not Properly Implemented as Determined during Site Inspections - FY04-05

Construction Activity	BMPs Required in SDIA SWMP*
Materials not properly managed or stored.	WM-1 Material Delivery and Storage
Solid waste not properly managed or stored.	WM-5 Solid Waste Management
Concrete waste not properly managed.	WM-8 Concrete Waste Management

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

COMPLIANCE AND ENFORCEMENT ACTIONS

The issues noted in Table 7-3, identified during site inspections, were generally resolved through verbal communication with the construction contract site supervisor. During the reporting period, the Environmental Affairs Department did not issue any written notices for stormwater violations at a construction site.

EDUCATION FOCUSED ON CONSTRUCTION ACTIVITIES

The Authority's efforts during FY04-05 to provide focused education to construction project managers, developers, and contractors regarding stormwater management concerns and construction activities are discussed in Chapter 9 Education.

REVISIONS TO THE SWMP

There are no revisions to the Construction Component of the SWMP.





8 Illicit Discharge Detection and Elimination Component

The illicit discharge detection and elimination (IDDE) program conducted by the Authority in accordance with the Municipal Permit is described in Chapter 7 of the SWMP. In short, the Authority's program incorporates the following elements to detect illegal discharges: a) routine visual inspections of the entire airport and, more specifically, the MS4; b) implementation of a dry weather monitoring program; and c) public reporting mechanisms. The program is designed to be adaptive and allow for: a) periodic assessment of the data and information collected; b) re-evaluation of areas of concern; and c) implementation of clean-up and/or enforcement efforts, as necessary. This chapter of the Annual Report discusses IDDE program activities conducted at SDIA during FY04-05.

SITE-WIDE AND MS4-SPECIFIC INSPECTION ACTIVITIES In order to ensure the health and safety of the more than 16 million members of the traveling public that pass through SDIA annually, the airport facilities are under constant visual and electronic surveillance by several different Authority Departments, including Airside Operations, Landside Operations, and Airport Security and Public Safety. As a major air-transportation facility, SDIA is under 24-hour surveillance due to the heightened security measures put in place in response to September 11, 2001. This overriding concern for



safe operation of the facilities and early detection of suspicious activity mean virtually every action is subject to visual observation and reporting, including any activity or incident that may be an environmental or stormwater management concern, such as a fuel spill during aircraft fueling operations or an overfilled trash can in the parking lot.

The constant surveillance at SDIA includes the routine daily inspections of the airport terminals, runways, and airside operations by the Airside Operations Supervisors. These inspections are one element of the IDDE program, since any environmental issues are both reported to the Environmental Affairs Department and captured in the SDIA daily log. The remaining elements of the IDDE program at SDIA are conducted by the Environmental Affairs Department.

The Environmental Affairs Department conducts monthly inspections of the entire facility and the above-ground portions of the MS4 during the wet season. These inspections are designed to identify unauthorized stormwater discharges and to ensure that BMPs are being implemented properly and operating as designed. The Environmental Affairs Department also conducts visual observations for authorized and/or unauthorized non-stormwater discharges on a quarter-annual basis.

Taken as a whole, the surveillance and inspection activities represent the site-wide and MS4-specific inspection element of the IDDE program at SDIA. The information in Table 8-1 below highlights the regular inspection activities conducted by the Environmental Affairs Department during the reporting period, without noting the constant surveillance activities conducted on a 24-hour year-round basis by other departments.



Table 8-1. IDDE MS4 Inspection and Monitoring Conducted during FY04-05

Date	Inspection Element
08/18/04	Dry Weather Monitoring
09/09/04	Quarterly authorized/unauthorized non-stormwater discharge monitoring
09/15/04	Dry Weather Monitoring
10/17/04	Monthly wet weather monitoring
10/27/04	Monthly wet weather monitoring - sample collected
11/07/04	Monthly wet weather monitoring
11/21/04	Monthly wet weather monitoring
12/08/04	Monthly wet weather monitoring
12/22/04	Quarterly authorized/unauthorized non-stormwater discharge monitoring
12/28/04	Monthly wet weather monitoring - sample collected
01/07/05	Monthly wet weather monitoring
02/09/05	Quarterly authorized/unauthorized non-stormwater discharge monitoring
02/10/04	Monthly wet weather monitoring
03/04/05	Monthly wet weather monitoring
04/04/05	Monthly wet weather monitoring
04/22/05	Monthly wet weather monitoring
05/16/05	Monthly wet weather monitoring
05/23/05	Quarterly authorized/unauthorized non-stormwater discharge monitoring

DRY WEATHER MONITORING PROGRAM

The Authority dry weather monitoring program utilizes monitoring, sample sample analysis, and data interpretation procedures consistent with those developed by the Copermittee Dry Weather Monitoring Workgroup to detect illicit discharges. The program features designated monitoring locations and frequencies, field screening/sampling procedures, data interpretation techniques, and follow-up investigation and reporting procedures.

On August 18, 2004, and September 15, 2004, qualitative visual observations were made at the 6 monitoring locations of the dry weather monitoring program. The field data Dry Weather Monitoring Reports for the sites monitored on these two dates are presented in Appendix A. As shown in the reports, there was no water or discharge of any kind at the 6 locations during either of these monitoring events. Nor did field observations at the time suggest any unauthorized discharges had recently occurred. The dates of the dry weather monitoring activities are included with the other monitoring and inspection activities noted in Table 8-1 above.

PUBLIC REPORTING - COMPLAINT HOTLINES

The Authority continues to exercise and promote the mechanisms described in Section 7.7 of the SDIA SWMP which are available to staff, tenants, and the general public for reporting complaints or concerns regarding unauthorized stormwater discharges. There are four primary mechanisms available for reporting complaints or concerns, namely: the Airside Operations Department 24-hour telephone line (619-400-2710); the Environmental Affairs Department page of the Authority webpage; the Project Clean Water regional hotline (888-846-0800) and webpage operated by the County of San Diego; and the THINKBLUE Hotline (888-844-6525) and webpage operated by the City of San Diego.

The Airside Operations Department 24-hour telephone number functions as a hotline for tenants and SDCRAA staff to report stormwater pollution concerns. This telephone number is promoted to tenants and staff by including the telephone number on the back of all required Airport Security ID badges. The general public is also redirected to this number anytime they pick up an airport white courtesy phone located throughout the airport terminals. Most of the unauthorized stormwater discharge issues that require notification or response of any kind are initially reported to the Airside Operations Department 24-hour telephone line. Each call is logged and directed to the appropriate department for immediate response. While the Environmental Affairs Department need not always be contacted directly for response actions, the Environmental Affairs Department monitors the log as part of the SWMP IDDE program.



Appendix B presents information on the 218 IDDE events reported to either the Authority's 24-hour telephone line or directly to the Environmental Affairs Department during the reporting period. The Environmental Affairs Department classified each incident into one of the 8 categories shown in Table 8-2. The most frequently reported type of incidents were trash or non-petroleum spills that occurred on the landside. It should be noted that "pest management issues" recorded in the IDDE log generally involve the appropriate application of pesticides, and not an illicit discharge. Tracking pesticide application events in the IDDE log is another mechanism used by the Authority to monitor pesticide use and to promote integrated pest management, thus limiting the quantities of pesticides and herbicides at SDIA. The nature and disposition of all 218 IDDE incidents noted in Table 8-2 are presented in Appendix B.

In addition to the Airside Operations Department 24-hour telephone line, the Authority webpage also provides another mechanism for staff, tenants, and the general public to contact the Environmental Affairs Department regarding stormwater concerns. The webpage provides background information on the SDIA SWMP, the IDDE program, and both telephone numbers and email addresses for the Environmental Affairs Department.

Table 8-2. Summary of IDDE Incidents by Category as Reported during FY04-05*

Incident Category	Number of Incidents
Trash or non-petroleum spill on the landside	81
Trash or non-petroleum spill on the airside	52
Petroleum spill on the airside	31
Pest management issue	24
Sewage issue	17
Unauthorized discharge	7
Petroleum spill on the landside	4
Construction project issue	2

^{* -} See Appendix B for detailed description of each incident.



The two regional hotline efforts of the Municipal Copermittees, namely, Project Clean Water and THINKLBLUE are designed to provide publicly reported illicit discharge information to the appropriate jurisdictions, such as the Authority. In turn, the Authority promotes both Project Clean Water and THINKBLUE at outreach and training events. The Authority also promotes the THINKBLUE public service announcements on television screens at the baggage claim areas in Terminal 2 West.

USED OIL AND TOXIC MATERIALS DISPOSAL

Section 7.8 of the SWMP describes the mechanisms used to facilitate the proper management and disposal of used oil and toxic materials. Like the Authority itself, airport tenants are required to dispose of materials through licensed handlers. The Authority provides information to help facilitate such disposal, when necessary. Table 8-3 lists the hazardous materials disposed of by the Authority during FY04-05.

Table 8-3. Hazardous Wastes Disposed of by the Authority during FY04-05

Description of Waste	Total Quantity Disposed
Waste Batteries, Filled with Alkali (Lantern Batteries)	150 pounds
Waste Batteries, Dry containing Potassium Hydroxide, Solid	55 pounds
Waste Flammable Liquid Corrosive (Methanol, Potassium Hydroxide)	5 pounds
Waste Corrosive Liquids (Sulfuric Acid)	5 gallons
Non RCRA Hazardous Waste, Solid (Soil and/or Debris)	3,166 pounds
Non RCRA Hazardous Waste, Solid (Oily Debris)	1,175 pounds
Non RCRA Hazardous Waste, Solid (Debris with Diesel)	450 pounds
Non RCRA Hazardous Waste, Liquid (Mixed Oils and/or Diesel and/or Water)	2,910 gallons
Non RCRA Hazardous Waste, Liquid (Antifreeze and Water)	1,926 gallons
Asbestos and Non-friable Waste	7 cubic yards
Universal Waste, (Fluorescent Lamps)	7 each



SANITARY SEWAGE - ISSUES AND RESPONSE

The Authority implements the controls identified in Section 7.9 of the SDIA SWMP which have been designed to limit infiltration into the stormwater conveyance system from the sanitary sewer system and to prevent and respond to sewage spills. As noted in Table 8-2 above and as detailed in Appendix B, there were 17 IDDE incidents related to sewage at SDIA during the reporting period. Nine (9) of these incidents involved the triturator which is part of the sewage disposal system used to discharge aircraft waste into the City of San Diego Metropolitan Waste Water Department (MWWD) sewer system. The triturator is housed in a covered and bermed building in order to ensure that no sewage is discharged outside the actual sewer connection point. Sewage is emptied from the aircraft into the mobile lavatory trucks and then into the sewer system at the triturator via a connection hose. Of the 9 IDDE incidents involving the triturator, 7 of them involved holes or tears in the connection hose. The 2 remaining incidents involving the triturator resulted from mechanical breakdowns at the device. None of the 9 IDDE incidents involving the triturator resulted in sewage discharge outside the containment berm, and proper corrective action was taken immediately each time.

Of the 8 IDDE incidents related to sewage that did not involve the triturator, 6 of these incidents were lavatory waste spills in the terminal gate areas during transfer of sewage from aircraft to lavatory waste trucks. Most of these incidents involved quantities of only a few gallons, and each was cleanup immediately. The two remaining IDDE incidents related to sewage involved blocked laterals. The first of these incidents occurred on August 15, 2004 at 8:35 a.m. and was repaired and cleaned up by the Authority Facility Maintenance Department. The second incident occurred on April 27, 2005 at 9:15 a.m. when the City of San Diego MWWD experienced a blockage down stream of the airport and sewage backed up momentarily in a construction trench on the airport property. The City corrected the problem and the Environmental Affairs Department determined that the trench could be backfilled safely under the supervision of spill response personnel. In short, each of the IDDE incidents related to sewage were corrected and/or cleaned up without impact to the stormwater conveyance system.

INVESTIGATION, FOLLOW-UP, AND ENFORCEMENT

Each of the IDDE incidents listed in Table 8-2 and described in Appendix B were resolved in the manner noted in the Appendix. Virtually all of the incidents noted in Table 8-2 and Appendix B were addressed immediately in the field at the time the incident was reported. Slightly more than 60% of the incidents listed in Table 8-2 were related to trash and non-petroleum spills on either the landside or the airside. Each of these issues was addressed without impacts to stormwater. Of the 31 petroleum spills on the airside and the 5 petroleum spills on the landside, all but three involved less than 5 gallons of petroleum. Each of these 36 petroleum spills was cleaned up immediately, including the 30 gallon spill on November 1, 2004, the 20 gallon spill on January 16, 2005, and the 10 gallon spill on April 1, 2005. As previously noted, the pest management issues actually involve the appropriate application of pesticides, and not an illicit discharge, with the tracking of pesticide application events used as a mechanism to promote integrated pest management. The details and disposition of the 17 sewage issues noted in Table 8-2 are discussed in the Sanitary Sewage - Issues and Response sub-section above. As shown in Appendix B, the 2 construction project issues captured in the IDDE log for FY04-05 were minor issues that were resolved.

The Authority IDDE program identified 7 incidents as unauthorized discharges during FY04-05, as noted in Table 8-2. Whenever an illicit discharge is detected by any of the Authority IDDE program elements, the Environmental Affairs Department documents the incident, requires corrective action, if necessary, and monitors the implementation of any required corrective actions. The Environmental Affairs Department contacted the responsible parties for each of these 7 incidents. Three (3) of the unauthorized discharges involved improper management of wash water, two involved trash, one involved fire sprinkler system water, and one involved sediment-laden runoff. In response to 4 of the unauthorized discharges, the Environmental Affairs Department verbally directed the responsible parties to cease the activity, implement proper BMPs, and cleanup any contaminants as necessary. The Environmental Affairs Department issued written Official Notices to the responsible parties for 3 of the unauthorized discharges, and directed cleanup and proper implementation of BMPs. Only the sediment-laden runoff incident of March 23, 2005, resulted in an impact to the MS4, and that sediment was later cleaned up at the direction of the Authority. None of the IDDE incidents that occurred during this reporting period required any additional follow-up or further enforcement actions.



REVISIONS TO THE SWMP

There are no revisions to the Illicit Discharge Detection and Elimination Component of the SWMP. However, it should be noted that information presented in Chapter 11 of this Annual Report indicates that future SWMP revisions will be necessary in response to a special project implemented during FY04-05. Those revisions will effect the Authority's stormwater management controls related to the dry weather monitoring element of the Illicit Discharge Detection and Elimination Component of the SWMP. The actual revisions will be presented in the FY05-06 Annual Report.

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9 Education Component

The overall goals of the education component of the SDIA SWMP are to educate the Authority staff, airport tenants, contractors, the traveling public, and our surrounding communities about: a) the potential impacts of polluted urban runoff on water quality; b) stormwater pollution prevention measures required for implementation at SDIA and the applicability of these measures elsewhere; and c) the existence of the SWMP itself, its contents and availability. 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 enhance water quality. Chapter 8 of the SWMP outlines the stormwater education program at SDIA. The information below describes the education activities conducted by the Authority during FY04-05.

EDUCATION PROGRAM DESCRIPTION AND ACTIVITIES

The Authority stormwater education program is designed to reach all of the target audiences required by the Municipal Permit, with one exception there are no specific efforts directed at the "residential community" per se since there is no residential land use or activity within the Authority's jurisdiction (as previously stated in this Annual Report). As such, the audiences addressed by the education component of the SWMP include:



Authority departments and personnel; construction site projects managers/developers/contractors; the airport industrial and commercial tenants; the general public and school children; and quasi-governmental agencies, such as the FAA.

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

The discussion of the Authority's Education Program in Chapter 8 of the SWMP provides detail on the education mechanisms and proposed training frequencies. The following tables summarize the education efforts conducted by the Authority during the reporting period. There are several instances where one education mechanism has been applied to several target audiences. For example, the Authority webpage, airport storm drain stenciling, and the airport recycling brochure were each developed to address all the target audiences. Tables 9-1 through 9-4 present information relative to the education efforts directed at the following composite audiences during FY04-05: a) the general public and school children; b) Authority staff; c) airport industrial, commercial, and quasi-governmental agency tenants; and d) construction project managers, developers, and contractors.

REVISIONS TO THE SWMP

There are no revisions to the Education Component of the SWMP.



Table 9-1. Education Activities for the General Public and School Children during FY04-05

Program Element	Description of Activities	Estimated Audience Size
Authority Webpage	Environmental Affairs webpage (www.san.org/environmental) includes information on the Authority's stormwater program.	19,250
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	100s of thousands
Posters/Banners/Signage in Terminals and Parking Lots	Fifth Annual Dare to Reuse Exhibition of Recycled Artwork display in Terminal 2, April 11 - May 22, 2005.	100s of thousands
Brochures	Copies of the San Diego International Airport Recycling Guide available to the general public, airport employees and tenants in airport terminals and at various outreach events.	Up to 2,500
Public Service Announcements (PSAs) in Terminals	Think Blue PSAs aired in the airport Terminal 2-West baggage claim area. Program continued in FY04-05.	100s of thousands
Media News Releases	October 11, 2004, news release announces the Airport Authority Storm Water Management Program received recognition from national and local organizations.	100s of thousands
	October 21, 2004, news release announcing the Airport Authority Storm Water Management Program received recognition from national and local organizations.	
	April 29, 2005, news release announces Airport Authority observes Earth Day / Earth Fair 2005 with numerous environmental initiatives.	
Collaborative Efforts	Continuing collaborative effort to support the WiLDCOAST "I Love San Diego Bay's Endangered Sea Turtles and Wildlife" bilingual campaign aimed at educating the public and school children about watershed and natural resource management using posters, booklets, stickers, postcards and pencils. Effort included display of local school kids endangered-species-related artwork on the Art Wall in Terminal 2 during August and September of 2004.	Not Applicable
	Continuing collaborative effort to support San Diego BayKeeper "Project Swell" campaign aimed at educating school children through water quality curricula.	
	Continuing collaborative effort to support Surfrider Foundation "Hold On To Your Butt" campaign aimed at educating the public and school children about cigarette butts as stormwater pollutant through educational brochures, t-shirts, bumper stickers and PSAs.	
Special Presentations	July 28, 2004, StormCon '04, Palm Springs, CA. Presentation by Authority Environmental Affairs Department staff regarding Airports and Stormwater Compliance.	100
	May 19, 2005, received the Director's Recycling Award from the City of San Diego Environmental Services Department at the San Diego EarthWorks' Very Important Planet public reception.	225

Table 9-2. Education Activities for Authority Employees during FY04-05

Program Element	Description of Activities	Estimated Audience Size*
Authority Webpage	Authority's Storm Water Management Plan remains posted on the intranet. January 31, 2005, revised intranet SWPPP.	Up to 300
	Environmental Affairs webpage (www.san.org/environmental) includes information on the Authority's stormwater program. January 31, 2005, revised internet SWPPP.	
	Recycling Guide remains posted on the intranet and internet.	
	March 4, 2005, the annual Industrial Activities and the Municipal Activities Reports were posted on the internet.	
	July 16, 2004, Pollution Prevention/Energy Savings Checklist posted on intranet.	
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	Up to 300
Posters/Banners/Signage in Terminals and Parking Lots	Fifth Annual Dare to Reuse Exhibition of Recycled Artwork display in Terminal 2, April 11 - May 22, 2005.	Up to 300
Brochures	Copies of the San Diego International Airport Recycling Guide available to the general public, airport employees and tenants in airport terminals and at various outreach events.	Up to 300
Public Service Announcements (PSAs) in Terminals	Think Blue PSAs aired in the airport Terminal 2-West baggage claim area. Program continued in FY04-05.	Up to 300
Media News Releases	October 11, 2004, news release announces the Airport Authority Storm Water Management Program received recognition from national and local organizations.	Up to 300
	October 21, 2004, news release announcing the Airport Authority Storm Water Management Program received recognition from national and local organizations.	
	April 29, 2005, news release announces Airport Authority observes Earth Day / Earth Fair 2005 with numerous environmental initiatives.	
Tenant Advisories	July 2, 2004, Tenant Advisory sent out regarding new energy conservation measures in terms of nightly escalator shutdowns.	Up to 300
	December 13, 2004, tenant advisory sent out regarding 2004 holiday pollution prevention tips.	
Annual Open House	April 22, 2005, provided outreach and training materials about the Authority's Storm Water Management Program at the Authority Annual Employee Open House.	Up to 300



Table 9-2. Education Activities for Authority Employees during FY04-05 (continued)

Program Element	Description of Activities	Estimated Audience Size*
Targeted Training/Presentations for Specific Employee Groups	April 27, 2005, training for Facilities Maintenance Department - Stormwater Pollution Prevention and Pesticide Application Practices.	41
	Mandatory Stormwater Pollution Prevention Awareness Training: May 4, 2005 (1 session) May 17, 2005 (2 sessions) May 5, 2005 (1 session) May 20, 2005 (2 sessions) May 10, 2005 (2 sessions) May 24, 2005 (2 sessions) May 13, 2005 (2 sessions) May 25, 2005 (2 sessions)	Up to 300
	May 24, 2005, provided outreach and training materials about the Authority's SWMP at the Airport Tenant and Employee Safety Fair.	Up to 300
	June 28-29, 2005, 3 Storm Water Training classes specific to the Facilities Maintenance Department.	41
Special Presentations	September 18, 2004, 20th Annual California Coastal Cleanup Day.	7
	September 30, 2004, held FAA14CFR Part 139 Airport Emergency Tabletop Training Exercise.	1
	April 9, 2005, I Love A Clean San Diego's 3rd Annual Creek to Bay Cleanup.	9
	May 15-18, 2005, gave San Diego environmental update at ACI-NA Environmental Affairs Committee Meeting.	2
Attendance at external professional training workshops	July 15, 2004, Project Clean Water - Clean Water Summit, entitled Navigating the Future: Clean Water Challenges Beyond 2004	2
	July 28, 2004, StormCon '04, Palm Springs, CA.	2
	December 3, 2004, BIA Stormwater Training for Construction, San Diego, CA.	1
	February 24, 2005, ISO 14001 Design, Implementation, and Auditing of Environmental Management Systems, San Diego, CA.	2
	April 11, 12, 13, 2005, ISO 14001 Design and Implementation of Environmental Management Systems, Phoenix, AZ.	1
	June 9, 2005, Municipal-Stormwater Inspector's Workshop, Encinitas, CA. Sponsored by San Diego County Copermittees.	1
	June 10, 2005, 8-hour HAZWOPER refresher training, El Cajon, CA.	4

st There are approximately 300 Authority Employees at any time during the reporting period.

Table 9-3. Education Activities for Airport Industrial, Commercial, and Quasi-Governmental Agency Tenants during FY04-05

Program Element	Description of Activities	Estimated Audience Size
Authority Webpage	Environmental Affairs webpage (www.san.org/environmental) includes information on the Authority's stormwater program.	19,250
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	100s
Posters/Banners/Signage in Terminals and Parking Lots	Fifth Annual Dare to Reuse Exhibition of Recycled Artwork display in Terminal 2, April 11 - May 22, 2005.	100s
Brochures	Copies of the San Diego International Airport Recycling Guide available to the general public, airport employees and tenants in airport terminals and at various outreach events.	Up to 2,500
Public Service Announcements (PSAs) in Terminals	Think Blue PSAs aired in the airport Terminal 2-West baggage claim area. Program continued in FY04-05.	100s
Media News Releases	October 11, 2004, news release announces the Airport Authority Storm Water Management Program received recognition from national and local organizations.	100s
	October 21, 2004, news release announcing the Airport Authority Storm Water Management Program received recognition from national and local organizations.	
	April 29, 2005, news release announces Airport Authority observes Earth Day / Earth Fair 2005 with numerous environmental initiatives.	
Tenant Advisories	July 2, 2004, Tenant Advisory sent out regarding new energy conservation measures in terms of nightly escalator shutdowns.	100s
	December 13, 2004, tenant advisory sent out regarding 2004 holiday pollution prevention tips.	100s
Tenant Safety Committee Meetings	Environmental Affairs Department presented stormwater management program updates at Tenant Safety Committee meetings: July 7, 2004, August 4, 2004, September 1, 2004 October 6, 2004 November 3, 2004 December 1, 2004 January 5, 2005 February 2, 2005 March 2, 2005 April 6, 2005 May 4, 2005 June 1, 2005	227



Table 9-3. Education Activities for Airport Industrial, Commercial, and Quasi-Governmental Agency Tenants during FY04-05 (continued)

Program Element	Description of Activities	Estimated Audience Size
Lindbergh Airport Managers Committee (LAMC) Meetings	Environmental Affairs Department presented specific stormwater management program updates to air-carrier station managers at these monthly LAMC meetings: January 19, 2005 February 16, 2005 May 11, 2005 May 18, 2005 June 15, 2005	127
Targeted Training/Presentations for Specific Tenant Groups	May 24, 2005, provided outreach and training materials about the Authority's SWMP at the Airport Tenant and Employee Safety Fair.	850

Table 9-4. Education Activities for Airport Construction Project Managers, Developers, and Contractors during FY04-05

Program Element	Description of Activities	Estimated Audience Size
Authority Webpage	Environmental Affairs webpage (www.san.org/environmental) includes information on the Authority's stormwater program.	19,250
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	100s
Posters/Banners/Signage in Terminals and Parking Lots	Fifth Annual Dare to Reuse Exhibition of Recycled Artwork display in Terminal 2, April 11 - May 22, 2005.	100s
Brochures	Copies of the San Diego International Airport Recycling Guide available to the general public, airport employees and tenants in airport terminals and at various outreach events.	Up to 2,500
Public Service Announcements (PSAs) in Terminals	Think Blue PSAs aired in the airport Terminal 2-West baggage claim area. Program continued in FY04-05.	100s
Direct Contact through Project Meetings and Inspections	Environmental Affairs Department staff attendance at Project Kick-off and Pre-construction meetings: 9 meetings.	93
	Environmental Affairs Department staff attendance at regularly scheduled Project Progress meetings: 143 meetings.	1837
	Environmental Affairs Department follow-up meetings to site inspections and tailgate meetings. Typically, one-on-one with construction contract site supervisor: 152 meetings.	152

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10 Public Participation Component

The Authority has established two main goals for the public participation element of the SDIA SWMP. The first goal is to develop mechanisms to facilitate public participation in the implementation of the SWMP. The second is to then gain through those mechanisms 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 9 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 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 FY04-05 are described here.

PUBLIC PARTICIPATION OPPORTUNITIES FOR TENANTS AND STAFF

In addition to daily interactions between the tenants and Authority staff, several mechanism were used during the reporting period to provide airport tenants and staff the opportunity to participate in the implementation and ongoing development of the Authority's SWMP. These mechanisms included: a) regular meetings of the San Diego County Regional Airport Authority Board; b) monthly meetings of the Lindbergh Airport Managers Committee; c) monthly meetings of the Tenant Safety Committee; d) the 24-hour telephone line; e) the Authority's webpage; and f) outreach events. The use of these 6 public participation mechanisms for tenants and Authority staff during the reporting period are summarized here.

a) San Diego County Regional Airport Authority Board Meetings:

The Airport Authority Board is committed to ensuring that SDIA operates in a manner that complies with all federal, state and local environmental laws. Tenants and Authority staff are encouraged to become involved and help to continually improve both the SWMP and its implementation. Tenants and staff are encouraged to speak directly to the Board during public meetings. During FY04-05, the Board held a combined total of 68 general and subcommittee meetings.

b) Lindbergh Airport Managers Committee:

Tenants and Authority staff meet monthly to discuss and improve the operational aspects of SDIA. During these meetings, tenants and staff are encouraged to become involved in the SWMP, take ownership of the SWMP, and help ensure SWMP implementation. The meetings allow for frank exchange of information and opinions regarding stormwater management concerns at SDIA. There were 12 meetings of the Lindbergh Airport Managers during the reporting period. The Environmental Affairs Department presented updates on specific stormwater management issues at 5 of these 12 meetings.



c) Tenant Safety Committee:

The Tenant Safety Committee is another opportunity to encourage participation of tenants and Authority staff to take ownership of the SWMP and to help ensure effective implementation of the plan. During these monthly committee meetings stormwater management concerns are presented by the Environmental Affairs Department and discussed with tenants and staff. At the same time, tenants and staff are welcome to submit comments on the SWMP and its implementation during the meetings. The Committee held 12 meetings during FY04-05.

d) 24-hour Telephone Line/Public Hotline:

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

e) Authority Webpage:

The Authority webpage features several pages on the environmental issues at SDIA (www.san.org/environmental), including stormwater management. The webpage, accessible by airport tenants and Authority staff, presents the SDIA SWMP in its entirety, along with contact information for the Environmental Affairs Department. The webpage provides another opportunity for tenants and staff to review and comment on the SWMP and the manner in which the SWMP and the BMPs described therein are implemented at SDIA. The environmental page of the Authority webpage had 19,250 hits during FY04-05.

f) Outreach Events for Airport Tenants and Authority Staff:

Outreach events allow the Environment Affairs Department and airport tenants and Authority staff to exchange information, ideas, and opinions about stormwater management issues in general and specific to the airport. Outreach events have both an education component and a public participation component. Such events promote public participation and further environmental stewardship by tenants and staff. Outreach events are an important element of public participation and help keep communication open between the Authority, its tenants, and its staff. During FY04-05, the Authority conducted or participated in two outreach events that allowed the Environmental Affairs Department to share concerns about proper stormwater management at SDIA with tenants and staff. On April 22, 2005, the Environmental Affairs Department provided outreach and training materials about the SWMP to Authority staff at the Annual Employee Open House. On May 24, 2005, the Environmental Affairs Department provided outreach and training materials about the SWMP to both tenants and staff at the Airport Tenant and Employee Safety Fair. The Authority also promoted two local watershed cleanup events during the reporting period. The two events which drew participation by authority staff and their families included: the 20th Annual California Coastal Cleanup Day on September 18, 2004; and I Love A Clean San Diego's 3rd Annual Creek to Bay Cleanup event on April 9, 2005.

PUBLIC PARTICIPATION OPPORTUNITIES 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 included: a) regular meetings of the San Diego County Regional Airport Authority Board; b) regular meetings of the San Diego Municipal Permit Copermittees; c) the Authority's webpage; d) the Project Clean Water webpage; e) the Authority's 24-hour telephone line; f) the Copermittee's regional hotline telephone numbers; and g) outreach events. The use of these public participation mechanisms during the reporting period is summarized below.



a) San Diego County Regional Airport Authority Board Meetings:

As stated above, the Airport Authority Board is committed to ensuring that SDIA operates in a manner that complies with all environmental laws. The public is encouraged to review and comment on the SDIA SWMP and to thereby help to continually improve both the plan and its implementation. The general public is encouraged to speak directly to the Board during public meetings. During FY04-05, the Board held a combined total of 68 general and subcommittee meetings.

b) San Diego Municipal Permit Copermittee Meetings:

The San Diego Municipal Permit Copermittee meet regularly to discuss various aspects of the stormwater management programs being implemented throughout the county in accordance with the Municipal Permit. In addition to the regular meetings of the Copermittee Management Committee, the Copermittees have established a number of subcommittees and workgroups. All the meetings of the Committee, the subcommittees, and the workgroups are open to the general public. These meetings provide numerous opportunities for public participation in stormwater management activities both throughout the region and at SDIA. Attendees include a wide variety of experts, including representatives of federal, state and local agencies, industry representatives, environmental groups, consulting firms, product vendors, and academic and research institutions, as well as the general public. Combined, the Copermittees held more than 60 general, subcommittee, and workgroup meetings during FY04-05.

c) Authority Webpage:

As stated above, the Authority webpage features several pages on the environmental issues at SDIA (www.san.org/environmental), including stormwater management. The webpage is accessible by the general public and presents the SDIA SWMP in its entirety. The webpage provides contact information for the Environmental Affairs Department, allowing the general public another opportunity to review and comment on the SWMP and the BMPs described therein. Again, the environmental page of the Authority webpage had 19,250 hits during FY04-05

d) Project Clean Water Webpage:

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

e) Authority's 24-hour Telephone Line/Public Hotline:

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

f) Copermittees' Public Hotlines:

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



g) Outreach Events for the General Public:

Similar to the discussion of outreach events above, 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 specific to the airport. Such events promote public participation and further environmental stewardship by the general public. During FY04-05, the Authority continued to collaborate with three local environmental groups that shared concern for proper stormwater management at SDIA and protection of San Diego Bay, the receiving water for runoff from the airport. The Authority has collaborated with the San Diego BayKeeper to help support the "Project Swell" campaign aimed at engendering environmental stewardship in local school children through education using water-quality-specific curricula. In addition, the Authority has collaborated with WiLDCOAST to support their "I Love San Diego Bay's Endangered Sea Turtles and Wildlife" bilingual campaign aimed at educating the public and school children about watershed and natural resource management using posters, booklets, stickers, postcards and pencils. The WiLDCOAST collaboration also led to a two-month long display of endangered-species-related artwork created by local school children on the Children's Art Wall in Terminal 2. The Authority is also supporting the Surfrider Foundation's "Hold On To Your Butt" campaign aimed at educating the public and children about cigarette butts as a stormwater pollutant through educational brochures, t-shirts, bumper stickers, and public service announcements. All three of these efforts have implemented during FY04-05. Finally, as a member of the San Diego Bay Watershed Copermittees, the Authority also helped to sponsor one of the local cleanup sites of the I Love A Clean San Diego's 3rd Annual Creek to Bay Cleanup event on April 9, 2005.

REVISIONS TO THE SWMP There are no revisions to the Public Participation portion of the SWMP.

Storm Water Management Plan - Municipal Stormwater Permit





11 Special Investigations

In January of 2005, the Authority initiated a special project that had been in the planning and design phase since the inception of the Authority in 2003. Entitled the "Storm Drainage System BMP Project (CIP #3105A)," the scope of work features 10 tasks that are expected to take up to 12 months to complete. The Storm Drainage System BMP Project is designed to: increase understanding of the site hydrology, the hydraulics of the MS4, and the pollutant sources on the airport site; evaluate historic stormwater sampling data and recommend improvements to the SDIA wet- and dry-weather stormwater sampling programs; evaluate the appropriateness and adequacy of the BMPs required by the Authority SWMP to address those sources; and provide recommendations for additional BMPs and for overall improvements to the SDIA stormwater management program and the SDIA SWMP document. The scope of the project is present here, along with a discussion of those portions of the project that were completed during FY04-05. There were no other special investigations underway at SDIA during the 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.

STORM DRAINAGE SYSTEM BMP PROJECT

After response to a Request for Qualifications, MACTEC Engineering and Consulting, Incorporated was contracted to assist the Authority in conducting the Storm Draining System BMP Project. The parties negotiated a scope of work that was divided into ten tasks, namely:

Task 1 - Data Gathering and Review

Task 2 - Hydrology Assessment

Task 3 - Hydraulic Analysis

Task 4 - Tidal Surge Study

Task 5 - BMP Document Review

Task 6 - Site Audit

Task 7 - Stormwater Sampling Plan

Task 8 - Catastrophic Fuel Release Evaluation

Task 9 - Chemical Emergency Response Evaluation

Task 10 - BMP Recommendations

The scope of each task is briefly discussed here along with the status of each at the end of the FY04-05 reporting period.

a) Data Gathering and Review:

MACTEC gathered and reviewed information related to the topography and the MS4 both at and in the vicinity of the airport, including maps, as-built drawings, closed-circuit television (CCTV) logs, and maintenance records. They collected information on physical conditions at the airport, as well as historic rainfall. A gap analysis identified additional information required to complete the project. This task was essentially completed during FY04-05.

b) Hydrology Assessment:

The topographic information and computer software were used to identify drainage basins and to develop a model of the airport that predicted the direction of surface flow. The model identified areas where flooding might occur and areas that might provide stormwater retention capacity for potential BMPs at the airport. Once the drainage area boundaries were identified, the discharge from each drainage area was calculated utilizing established procedures outlined in the San Diego County Hydrology Manual.



Using historical rainfall intensity data, the rate of flow into the MS4 was calculated for each drainage area. The flow rate was used to assess the capacity of the drainage system and will be used to determine the flow through or storage volume of any structural BMPs that might be recommended in Task 10. In April of 2005, MACTEC submitted the Final Hydrology Report.

c) Hydraulic Analysis:

After completing the Hydrology Report, MACTEC initiated a hydraulic assessment of the drainage systems that calculated peak flow rates for the drainage system for 2, 5, 10-year, and 85th percentile storm events and compared these peak flow rates to the calculated capacity of the drainage system. Using the Storm Water Management Model (SWMM) to simulate the airport's drainage system, MACTEC modeled dynamic routing of storm water flows through the storm drain system, and simulated free-surface flow, pressure flow or surcharge, backwater and flow reversals, weir and orifice flow, pumping facilities, storage facilities such as retention basins, and flow through treatment systems. The model was also used to simulate tidal flow into the drainage system and the impact of tidal flow on the drainage system capacity. Based on the specified storm event frequencies, the airport MS4 will be evaluated to identify deficiencies in the drainage system, if any, due to undersized pipes, inadequate slope, unfavorable inlet conditions, and inadequate flow through. They will evaluate the system for the 2-year, 5-year, and 10-year storm events during worst case (high tide) conditions. The baseline model results will be used as a guide to develop recommendations for improving the desired storm drain system to meet the design capacity. MACTEC will evaluate the 85th percentile storm event to identify deficiencies in the drainage system with respect to inadequate flow through in BMP treatment systems and to analyze the effects of proposed water quality BMPs on the performance of the drainage system under high tide conditions. They will modify the baseline to assess the effects of a proposed BMPs or combinations of proposed BMPs on discharge water quality, possible treatment options, and proposed changes for the improvement of drainage system capacity. The Hydraulic Assessment Report will summarize this effort and provide recommendations for improvements to the storm drainage system based on priority, costs and associated timelines. By the end of FY04-05, the analysis was not complete.

d) Tidal Surge Study:

Using relevant site data and the SWMM computer program, the effects of downstream tidal condition on the drainage system will be simulated. This effort is designed to evaluate sediment transport and deposition in the drainage system in response to fluctuating tidal conditions, and to evaluate to need for mitigation measures, if any. This task relies on the outcome of the MS4 hydraulic assessment and will be incorporated into the Hydraulic Assessment Report. As such, this task had not been completed at of the end of FY04-05.

e) BMP Document Review:

In preparation for the remaining project tasks, MACTEC reviewed the SDIA SWMP, the Annual Reports submitted by the Authority in compliance with the General Industrial Storm Water Permit, and the Authority Hazardous Materials Business Plans, Spill Prevention Control and Countermeasure Plan, and any other available plans relevant to actual or potential pollutant sources at the airport. This task was essentially completed during FY04-05.

f) Site Audit:

An audit of the site was performed to identify, inventory, and evaluate existing and possible future potential pollutant sources associated with airport facilities and/or activities. MACTEC also identified, inventoried, and evaluated existing BMPs and treatment facilities for each potential pollutant source identified. The implementation status and effectiveness of each BMP was assessed. The Final Site Audit Report summarizes the results of the audit and includes location information for existing and potential pollutant sources and existing BMPs. The report also discussed the nature and extent of any data gaps MACTEC identified. The Final Site Audit Report was submitted in June of 2005. Information from the Site Audit Report is used in chapter 12 of this report to begin an evaluation the effectiveness of the Authority's stormwater management program.



g) Stormwater Sampling Plan:

The Storm Drainage System BMP Project includes the development of a Stormwater Sampling Plan that will address the stormwater runoff sampling requirements of the General Industrial Storm Water Permit. In preparing a Stormwater Sampling Plan, MACTEC evaluated the quality of the existing historic stormwater sampling data set and provided a recommendation on whether existing data can provide a sufficient baseline for evaluating long-term program effectiveness or whether and/or how new data should be collected in the future. The Stormwater Sampling Plan details the number of samples that should be collected during a monitoring period to produce adequate statistical power to demonstrate long-term program effectiveness. Development of the Stormwater Sampling Plan included consideration of the variability in annual precipitation patterns at the airport on the assessment of long-term program effectiveness. MACTEC submitted a draft Stormwater Sampling Plan in May of 2005.

h) Catastrophic Fuel Release Evaluation:

An inventory of existing sources of potential fuel spills/releases and of existing response resources and procedures will be developed. Spill/release scenarios related to fuel transfer facilities, bulk storage facilities, and fuel transfer equipment will then be used to identifying deficiencies in response resources and procedures. The scenarios will address potential spill volumes, spill causes, locations, possible chain reactions, spill pathways and likelihood of traveling off-site, and the potential to impact receiving waters and/or sensitive environments. MACTEC will identify response deficiencies and evaluate whether response resources and procedures are adequate to prevent potential spills/releases from entering the storm drainage system, receiving waters, and/or sensitive environments.

MACTEC will then provide recommendations for additional (and/or modified) resources and/or procedures in a Catastrophic Fuel Release Evaluation Report. At the end of FY04-05, this task had not yet begun.

i) Chemical Emergency Response Evaluation:

The status of the Authority compliance with Federal, State, and local statutory and regulatory chemical emergency response planning and training requirements will be evaluated. MACTEC will also evaluate the possibility of developing an integrated/unified chemical emergency response plan that could fulfill all statutory and regulatory requirements, and thereby minimize documentation and facilitate training. They will use the National Response Team's Integrated Contingency Plan Guidance (Federal Register/Vol 61, No. 109/June 5, 1996) as a model for evaluating the feasibility of developing such a plan. Although this task was initiated in April of 2005, the evaluation was still in draft form at the end of FY04-05.

j) BMP Recommendations:

A significant part of the Storm Drainage System BMP Project will be MACTEC's recommendations for modified or additional BMPs at the airport that meet regulatory requirements for best available treatment (BAT)/best conventional treatment (BCT) under the General Industrial Storm Water Permit. The recommendations for source control BMPs, treatment control BMPs, and drainage or structure modification or additions will be based on consideration of historic site information, the Site Hydrology Report, the Site Hydraulics Assessment Report, the Site Audit Report, and professional judgment. MACTEC is tasked with providing recommendations for BMP improvements, process improvements, and capital improvements. The recommendations will be prioritized, and will include costs and projected implementation timelines. As FY04-05 ended, MACTEC had not yet begun to draft the BMP Recommendations Report.

SUMMARY

Representing the lone special investigation/project initiated by the Authority during FY04-05, the Storm Drainage System BMP Project is a year-long effort to evaluate existing stormwater management practices, to revise certain functional components, and to make recommendations for improvement of the Authority's stormwater management program.





12 Assessment of Program Effectiveness

The Authority constantly evaluates the effectiveness of the SDIA stormwater management program in both the short- and long-term. The Authority shares the concern of local, state, and national stormwater management practitioners regarding the means and methods used to assess the effectiveness of any stormwater management program. The San Diego Municipal Copermittees continue to develop criteria that allows for an assessment of the effectiveness of stormwater management efforts implemented locally in accordance with the Municipal Permit. The following assessment of the Authority's stormwater management program has been conducted in general conformance with the Copermittee guidance document prepared in FY02-03 and entitled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" (Framework). The Framework is designed to allow for assessment of: a) SDIA 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 SDIA stormwater management program during FY04-05 and an assessment of the program in terms of the Framework. As a logical extension of the assessment, this chapter also identifies any observed water quality improvement or degradation.

NARRATIVE ASSESSMENT OF PROGRAM COMPONENTS

Chapters 2 through 10 of this report outlined the Authority's implementation of each program component during FY04-05, and noted proposed revisions to the SDIA SWMP, if any. 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 SDIA SWMP is generally effective and in compliance with the Municipal Permit.

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. As such, these components are generally well defined and properly implemented. The Municipal Component has been expanded to include implementation of stormwater management practices related to roads and parking lots, but all other aspects of the program have been in place since the 1990's. The Municipal, Industrial, and Commercial Components are essentially the strength of the SWMP. Except for the recommendations made at the end of this chapter, there are no other revisions currently proposed for these components. It should be noted, however, that Chapter 3 of this Annual Report identified changes to the inventory of industrial operations (with one tenant being deleted and two new tenants being added).

The Land Use Planning Component of the SWMP has focused on the continual update of the Airport Master Plan and the implementation of the SDIA SUSMP process. As noted in Chapter 6 of this Annual Report, the Master Plan continued to be developed during FY04-05. The SUSMP process was not applicable to any development projects during FY04-05. The Land Use Planning Component of the SWMP remains effective and no revisions are proposed for this component.

With the Environmental Affairs Department taking an active role in pre-construction project meetings and weekly project progress meetings with the construction contractors and relevant SDCRAA staff, along with the continued inspection of all construction activities at a frequency greater than required by the Municipal Permit, the Construction Component of the SWMP is considered to be effective and no program revisions are proposed.



As discussed in Chapter 8 of this Annual Report, illicit discharges are generally being reported and effectively resolved. Chapter 8 reported that the dry weather monitoring sample locations will change in response to a revised SDIA Stormwater Sampling Plan resulting from the special project described in Chapter 11 of this report. No other revisions to the Illicit Detection and Elimination Component of the SDIA SWMP are considered necessary.

The Education Component of the SDIA SWMP is well designed and should be effective in changing public knowledge about stormwater issues and concerns both at the airport and throughout the San Diego Bay watershed. As noted in Charter 9 of this Annual Report, there was a substantial amount of program implementation conducted during FY04-05. Nonetheless, the strengths and weaknesses of this component cannot yet be fully assessed since the component has been implemented for less than two years. Efforts are underway to better assess the effectiveness of this program component, with the some preliminary assessments made in the next section of this chapter.

Chapter 10 of this Annual Report reports that there are several monthly meetings in which the Environmental Affairs Department takes part, representing significant opportunities for public participation. In addition, the other public participation mechanisms discussed therein help to supplement the efforts made by Environmental Affairs Department. In short, the Public Participation Component remains an effective element of the SDIA SWMP.

Finally, Chapter 13 of this Annual Report demonstrates that the Authority has sufficient financial resources to implement the SDIA SWMP. The fiscal analysis presents therein includes the expenditures for FY04-05, the budget for FY05-06, the source of the funds, and a description of the use of these funds. Financial resources for implementation of the SWMP are allocated into administration, education, O&M, and capital expenditures components. There are no revisions proposed to the Fiscal Analysis Component of the SDIA SWMP.

ASSESSMENT OF THE SDIA SWMP PROGRAM USING THE FRAMEWORK

The Authority is using "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" (Framework) to evaluate the effectiveness of the SDIA stormwater management program. The Framework presents a strategy that builds on a foundation of basic program activity assessments and moves towards a water-quality based assessment to evaluate the overall effectiveness of the program. The Framework uses direct and indirect measurements of program effectiveness, employs methods to estimate pollutant loads, and incorporates receiving water quality monitoring. The Framework presents a six-tier hierarchy of assessment elements that can be used independently or in combination to evaluate effectiveness. The six levels of assessment are listed below and the application of these elements follows:

- 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 recognizes the importance of continual improvement of the SWMP through evaluation of program planning and program effectiveness. The Authority has adopted the Framework planning and implementation processes which include pollutant source characterization, selection of appropriate BMPs, targeting the outcomes of BMP implementation, and identifying adequate measures and indicators to evaluate program effectiveness.

During the reporting period, the Authority initiated a Storm Drainage System BMP Project (see further description in Chapter 11 of this Annual Report) to evaluate and guide changes to the Authority's overall stormwater management program. One portion of the project, a site audit, was completed during the reporting period and establishes a baseline effectiveness assessment. The site audit: (1) reviewed the water quality information (discharge and receiving waters); (2) reviewed and analyzed pollutant source characteristics; (3) evaluated BMPs required for



implementation by the SWMP; (4) inspected all operations SDIA; (5) evaluated the effectiveness of BMP implementation; and (6) recorded locations of relevant pollutant sources and significant activities. The report detailing the results of the site audit was not completed until June of 2005. As such, the Authority was not able to implement recommended SWMP changes during FY04-05. It is expected that the site audit will be used by the Authority to revise SWMP BMP requirements as appropriate, update inspection procedures and forms, and update the stormwater monitoring programs. Any program changes resulting from the site audit report and/or the Storm Drainage System BMP Project, as a whole, will be discussed in the annual report for FY05-06.

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 program assessment strategy hierarchy. Table 12-1 presents the activity-based requirements of the Permit and the Authority's implementation of these requirements during FY04-05. Confirmation and tabulation of activity implementation and/or completion were used to measure compliance at this level of the assessment hierarchy. As shown in Table 12-1, the Authority has met all the activity-based requirements of the Municipal Permit. Tracking this information will allow the Authority to assess consistent and incremental program improvements.

Level 2 - Changes in Knowledge/Awareness

The most immediate and basic outcome of many urban runoff management program activities is a change in the knowledge, awareness, or attitudes of target audiences. Such changes are most often targeted through outreach or training programs. A major goal of the Authority's SWMP education and public participation efforts is to instill knowledge and awareness about urban runoff management issues in staff, tenants, and the general public.

Table 12-1. Assessment of Activity-based Permit Requirements

Permit Section	Activity	Identified	Completed
F.1 Land Use	Number of projects subject to SUSMP requirements	0	0
F.2 Construction	Number of high priority construction sites subject to inspection	0	0
	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 facilities subject to inspection:	22	22
	Quantity of debris and material removed from the MS4 (in tons)	>1	>1
	Quantity of debris and material captured by street sweeping (in tons)	8	8
F.3.b Industrial	Number of high priority industrial operations subject to inspection	36	36
	Number of enforcement actions taken	8	8
	Number of operations referred to RWQCB for enforcement of State General Industrial Storm Water Permit	0	0
F.3.c Commercial	Number of high priority commercial operations subject to inspection	1	1
	Number of medium/low priority commercial operations subject to inspection	14	14
	Number of enforcement actions taken	0	0
F.4 Education	Number of stormwater related educational materials/brochures	Not applicable	2500
	Number of stormwater education mechanisms for the general public	Not applicable	8
	Number of stormwater training mechanisms for staff	Not applicable	11
	Number of storm water training mechanisms for tenants	Not applicable	10
	Number of stormwater training mechanisms for construction project managers, developers, and contractors	Not applicable	6
E5. IDDE	Number of dry weather monitoring locations	6	6
	Number of IDDE events recorded by hotlines and other reporting methods	Not applicable	218
	Number of enforcement actions taken	7	7
F.6 Public Participation	Number of types of participation mechanisms for staff and tenants	Not applicable	6
	Number of types of participation mechanisms for the general public	Not applicable	7



For FY04-05, the Authority has three means of assessing changes in knowledge and awareness: (1) the IDDE hotline reporting information (Appendix B); (2) the number of hits to the Authority's environmental webpage; and 3) a survey of 868 staff and tenants. As discussed in Chapter 8, the IDDE hotline records information on potential unauthorized ranging from trash and debris to spills of hazardous materials. It is expected that increased public awareness about the potential impacts of urban runoff will result in an increase in the number of incidents recorded in the 24-hour IDDE log. In fact, there were 218 IDDE incidents reported during FY04-05 in comparison to the 167 incidents reported in FY 03-04. This increase is expected to reach a plateau and then start to diminish as the increased awareness also has an effect on the behavior in favor of pollution prevention.

The Authority's environmental webpage provides staff, tenants and the general public access to information regarding stormwater management efforts at SDIA, including the SWMP. Making basic urban runoff information available should increase public of stormwater management concerns. The environmental webpage had a total of 19,249 hits during the reporting period. This represents an average of approximately 370 hits per week which is an increase over the approximately 120 hits per week during FY03-04. The Authority will continue to track the number of hits to the environmental webpage in future annual reports.

During FY04-05, the Authority also assessed changes in knowledge and awareness using a survey of 120 staff and 748 tenants. The survey of 868 total individuals was conducted on May 24, 2005. The results of the survey are stratified by the two groups - staff and tenant. In general, the Authority staff answered the questions with a higher rate of accuracy. The tenants did not score as well. This suggests that the Authority's current education and outreach efforts may not be adequate in reaching the tenants. The survey questions and a summary of the survey results are presented in Table 12-2.

Table 12-2. FY04-05 Awareness Survey Summary

uestion	Authority Staff	Tenants
Number of individuals surveyed	120	748
1) Do you know what a watershed is?		
Yes	85%	63%
No	15%	37%
2) How much litter do you see around the airport?		
A lot	11%	18%
Some	35%	40%
Not very much	54%	42%
3) Have you ever heard of Best Management Practices (BMPs), which are used to prevent pollution from entering the storm drain system?		
Yes	85%	50%
No	15%	50%
4) Do you know that there is a Pet Relief Area at the airport, where pet owners can allow their pets to take a restroom break and the waste can be properly disposed?		
Yes	89%	77%
No	11%	23%
5) Stormwater pollution prevention is?		
A really good idea that we should support	18%	37%
The law	72%	55%
Both	10%	8%
6) At the airport, what number do you call to report overfilled trash cans, curbside coffee or soda spills, or to report illegal dumping into the storm drains?		
X2710 (correct response)	57%	46%
Others (incorrect response)	43%	54%



Level 3 - Behavioral Changes and BMP Implementation

A primary objective of the Authority's stormwater management program is to affect significant and lasting changes in the behavior of target audiences. Ideally, behavioral changes are expressed in terms of consistent BMP implementation. The Framework describes the quantification of BMP implementation as a necessary component of a successful effectiveness assessment strategy.

As previously discussed, the Authority performed a site audit during FY04-05. The site audit identified potential pollutant sources and assessed the level of SWMP-required BMP implementation by tenants and by the Authority itself. The results of the audit will be used to identify the training needs of both Authority staff and tenants in order to improve their awareness of BMPs, and in turn, increase the frequency and adequacy of BMP implementation. The audit establishes a solid baseline for assessing changes in behavior and BMP implementation in future reporting periods.

The site audit provides an assessment of BMP implementation activities, as well as an accounting of the spatial distribution of implementation activities. This information may be used to determine if priority problem areas are being adequately addressed. In regards to a Water Quality Assessment as envisioned by the Framework, the site audit begins to identify and characterize the pollutants of concern that impact storm water quality at the airport. The site audit will allow for incremental program refinement and revision of program priorities. Designed to be repeatable, the site audit is one tool in attempting to establish causal relationships between program implementation activities and changes to storm water quality.

The site audit began with a review of the SDIA SWMP and the required BMPs listed therein. As a result of this review, 2 additional BMP categories (from the CASQA BMP Handbooks www.casqa.org) were added to the 19 BMP categories listed in the SWMP. These 21 general "BMP categories" were then subdivided into 136 separate BMPs that make up each BMP category. The Authority and tenants were audited using the 136 individual

BMPs and each applicable BMP was evaluated for rate of proper implementation through out the facility. BMP implementation rates were classified as: fully implemented, partially implemented, or not implemented.

The site audit found that the BMPs with the highest implementation rates were generally associated with preventative maintenance, such as inspecting equipment/aircraft/vehicles for leaks. In contrast, the BMPs with the lowest implementation rates were those associated with designating, covering and berming areas associated with material/waste storage, material loading/unloading, and aircraft/equipment/vehicle maintenance and fueling.

The site audit identified deficiencies in BMP implementation and provided a list of recommended changes for the Authority's stormwater management program. For example, using data regarding the percentage of entities fully implementing the required BMPs, the Authority can prioritize the BMPs that need to be emphasized through education, inspections and enforcement. In fact, the Authority was prompted by the results of the site audit to provide targeted-training during FY04-05 to the Authority Facility Maintenance Department staff. The Authority is currently reviewing its industrial and commercial education and outreach efforts to identify means of achieving improved BMP implementation rates. As these efforts progress, it is anticipated that future findings will reflect increased BMP implementation rates by all staff and tenants.

The site audit provides the Authority with a better understanding of pollutant sources and associated activities, as well as a baseline on the level of adequate BMP implementation for each of these activities. The findings of the audit can be used to revise the SWMP and to achieve increased awareness, changes in behavior and BMP implementation rates, and to develop estimated load reductions. The Authority intends to perform future inspections using the same criteria established by the site audit to allow for an annual review and comparisons of findings. The baseline BMP implementation information will be used to demonstrate whether the Authority's program is effective at obtaining a higher rate of proper BMP implementation in the future.



Level 4 - Load Reductions

The primary goal of BMP implementation is to reduce the loading of pollutants to stormwater discharges and, in turn, result in improvements to receiving water quality. A load reduction estimation exercise can be used to prioritize stormwater management activities. Estimation of load reductions is a key to the Authority's assessment process. By working to establish Framework Level 4 outcomes for lower level activities, the Authority hopes understand the relationship of these activities to water quality improvement. Because these exercises are both difficult and speculative, and often require data and information not readily available, this year's assessment includes no load reduction estimates. In future years, the Authority's understanding of the many assumptions that must be made to address existing uncertainties, and the variables that affect any given measure, will improve with future study.

Through the site audit and the evaluation of BMP implementation, the Authority has gathered significant amounts of data related to developing load reduction estimates. Yet, implementation rates alone do not fully describe a facility's likelihood of polluting storm water runoff. Other factors need to be considered, such as rainfall amounts and frequencies, the complexity and size of a particular operation, the nature of the specific activities being performed, and the drainage characteristics of the operational areas. The site audit developed a method to weigh an operation's risk of polluting storm water runoff according to a combination of those factors. This information was used to develop an estimated potential pollutant loading for operational areas at the airport. The information provided in the site audit lays the groundwork for development of load reduction estimates, but does not complete the process. In FY05-06, the Authority seeks to complete the process and utilize the potential pollutant loading information and BMP implementation rates to develop load reductions estimates. The Authority intends to estimate load reduction in next year's annual report.

Level 5 - Discharge Quality

In many respects, changes in discharge quality should be the direct result of successful program implementation. Establishing relationships between discharge quality and specific program components, however, is beyond the scope of this year's assessment. Nonetheless, the Authority has compiled a 10-year history of wet weather sampling data and identified the pollutants of concern at SDIA. The results of the data evaluation are presented in Table 12-3. The table presents the median concentration of each pollutant of concern and comparison of this concentration to a benchmark value (based on the California Toxic Rule, the USEPA Multi-sector General Permit, and USEPA Recommended Ambient Water Quality Criteria. Table 12-3 also presents the number of analyses conducted for each pollutant, the number of exceedances of the benchmark value, and the resulting frequency of exceedance. The pollutants of concern presented in the table are listed in order from highest to lowest exceedance frequency. Note that the median concentrations of copper and zinc measured historically at SDIA exceeded the benchmark values more than 50% of the time.

As discussed in Chapter 11, one element of Authority's Storm Drainage System BMP Project is the development of a sampling plan that will allow for a statistically valid assessment of the Authority's ability to improve stormwater discharge quality. Implementation of the sampling plan will also allow the Authority to discuss changes in discharge water quality in future annual reports.

Level 6 - Changes in Receiving Water Quality

The ultimate objective of the Authority's stormwater management program is protecting the water quality of the water bodies receiving discharges from the Authority's MS4. That receiving water body is San Diego Bay. The Authority has not conducted any receiving water quality monitoring independent of the Copermittees' Receiving Water Monitoring Program. As with Framework Level 5 outcomes, the establishment of relationships between receiving water quality and specific program components is beyond the scope of this year's assessment.



Table 12-3. Stormwater Discharge Pollutants of Concern*

Pollutant of Concern	Median Concentration	Benchmark	Number of Analyses	Number of Exceedances	Exceedance Frequency (%)
Total Copper (mg/L)	0.0604	0.0058	32	28	88
Dissolved Copper (mg/L)	0.0317	0.0048	30	25	83
Total Zinc (mg/L)	0.123	0.095	16	9	56
Total Aluminum (mg/L)	0.599	0.750	16	7	44
Total Iron (mg/L)	0.863	1	16	6	38
BOD (mg/L)	17	30	30	7	23
COD (mg/L)	87	120	32	9	28
TSS (mg/L)	40	100	63	11	17
Oil & Grease (mg/L)	5.3	15	59	7	12
Specific Conductance (umhos/cm)	180	900	63	7	11
Total Lead (mg/L)	ND	0.0816	62	6	10
Glycols (mg/L)	ND	100	33	2	6
pH (pH units)	7.29	6.0 - 9.0	63	3	5

^{*} Median concentrations based on 10-year history of sample data at SDIA. Final Site Audit Report, June 2005, MACTEC

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 are currently on the 2002 CWA Section 303(d) list of water quality limited segments for: 1) bacteria, and 2) degraded benthic community and sediment toxicity.

In response the 303(d) listing for high concentrations of indicator bacteria along the G Street area shoreline of San Diego Bay and for sediment impairment at the Downtown Anchorage (the nearshore bayfront between Grape and Laurel Streets), the RWQCB began to investigate the establishment of a total maximum daily load (TMDL) for these issues. The Authority is tracking these TMDL processes as the information become available and, to the extent feasible, will incorporate the information into the annual evaluation of the airport's stormwater runoff water quality. The TMDL for indicator bacteria-impaired shorelines in San Diego Bay is the second of a two-part effort by the RWQCB to develop TMDLs for 38 bacteria-impaired waterbodies in the San Diego Region. Work on second part of this project has not yet begun.

In June of 2005, the RWQCB released a Final Report 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," prepared by Brian Anderson, John Hunt, Bryn Phillips, Marine Pollution Studies Laboratory - Granite Canyon, University of California, Davis, CA. The report stated that "Downtown Anchorage sediments were contaminated by chlordanes and PCBs. ... Evidence ... suggests toxicity to amphipods ... due to organic chemicals. ... Likely sources of contaminants in the Downtown Anchorage area are a large storm drain and numerous smaller storm drains near station DAC04. ... These authors also suggested runoff inputs from the adjacent San Diego International Airport as a possible source of contamination in this area." At this time, the Authority has yet to evaluate this report as a measure of the effectiveness of the Authority's stormwater management program in a manner consistent with Level 6 of the Framework. The contained evaluation and assessment of this TMDL information will be discussed in future annual reports.



INTEGRATED EFFECTIVENESS ASSESSMENT

Based on the results of current program implementation and the findings of the FY04-05 effectiveness assessment above, the management measures currently being implemented are generally effective. In response to the anticipated outcomes from the Storm Drainage System BMP Project (see description in Chapter 11), the Authority intends to revise the SDIA SWMP and make changes to BMP requirements, the stormwater monitoring program, the education and outreach efforts, and the inspection and enforcement activities. These changes and subsequent evaluations of Framework Level 1 through Level 5 assessments will be reported in future annual reports. Framework Level 6 (changes to receiving water quality) assessment efforts will likely expand beyond the current collaborative efforts of regional monitoring, and begin to investigate potential problems that have been suggested by others.

The Authority has begun to assemble the key factors for assessment and continual improvement of its stormwater management program. The elements assembled thus far include:

Baseline compliance with permit requirements
Baseline awareness of program requirements
Pollutant source characterization - activities, pollutant types, required BMPs
Baseline levels of behavior and BMP implementation
Load reduction estimates (based on activities, pollutant types, rainfall, etc.)
Spatial and temporal monitoring data

The Authority has the methods in place to assess program effectiveness in terms of Levels 1 through 5 of the Framework. As more information is collected, the Authority will be able to link program implementation directly to the discharge quality. The Authority currently has geo-spatial information available to make a connection between a sampling point and the tributary source(s). The Authority can identify the pollutants, required BMPs, and BMPs implementation rates at those sources. With this knowledge, the Authority will be able to estimate the load reductions from BMP implementation and confirm those estimates through monitoring results. As BMP implementation rates increase, it is expected that the pollutant

loadings will decrease. In this way, the Authority works prevent or eliminate impacts to the water quality of San Diego Bay.

Finally, while the Authority continues to apply the assessment Framework developed by the Copermittees, it is important to note that the Copermittees as a group continue to evaluate and refine the methodology described therein. In fact, as FY04-05 ended, the Copermittees had just initiated the first regional "Long-term Effectiveness Assessment" of the implementation of all the Copermittee stormwater management programs over the 5-year life of the Municipal Permit. This joint regional effort will likely lead to suggested program changes region-wide. The Authority has not yet evaluated the implications, if any, of this regional assessment on the Authority's current stormwater management program. The evaluation of this regional effort on the Authority's current stormwater management program and the means of assessing the effectiveness of the program will be undertaken in FY05-06.

MANAGEMENT MEASURES PROVEN TO BE INEFFECTIVE

The majority of the management measures currently being implemented by the Authority have proven to be effective. One of the assessment tools used to assess the effectiveness of the education and outreach efforts of the Authority (namely, the survey presented in Table 12-2) suggests that the Authority's current education and outreach efforts may not be adequate in reaching the tenants. It would be premature to say that the education efforts are ineffective. The survey data suggests that the education and outreach efforts developed for the tenants may need to be expanded and/or more frequently employed.

The Municipal Permit emphasizes an iterative processes that should be used to improve both BMPs and stormwater management measures as a whole. As such, the Authority will continue to refine the Framework methodology in order to identify and enhance effective stormwater management measures and to discontinue those that prove ineffective.



PROPOSED PROGRAM CHANGES

As noted several times throughout this Annual Report, the Authority initiated a Storm Drainage System BMP Project during FY04-05 that is designed to evaluate and guide changes to the Authority's overall stormwater management program. The project consists of 10 separate tasks. Although the bulk of the project remained unfinished at the end of FY04-05, it is expected that the project outputs will be used to revise SWMP BMP requirements as appropriate, update inspection procedures and forms, update the stormwater monitoring programs, and lead to other program improvements. Any program changes resulting from the Storm Drainage System BMP Project, as a whole, will be discussed in the annual report for FY05-06.

WATER QUALITY IMPROVEMENT OR DEGRADATION

The assessment of the 10-year history of stormwater discharge quality data suggests that stormwater at SDIA contains elevated concentrations of copper and zinc. The assessment of discharge water quality is taken from the Storm Drainage System BMP Project discussed throughout this report. One outcome of the project will be a revised Stormwater Sampling Plan that will lead to continued evaluation and validation of discharge water quality at SDIA using trend analysis and other statistical methods.

Although the Authority has yet to review and evaluate recent information regarding the water quality of San Diego Bay in the vicinity of the airport, others suggest that the airport may be a source of polluted runoff into the bay. The RWQCB released a June 2005 Final Report 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," prepared by Brian Anderson, John Hunt, Bryn Phillips, Marine Pollution Studies Laboratory - Granite Canyon, University of California, Davis, CA., which states that the "authors also suggested runoff inputs from the adjacent San Diego International Airport as a possible source of contamination in this area" (namely, the Downtown Anchorage). The Authority will study this issue further in light of these remarks.

REVISIONS TO THE SWMP

At this time, the Authority does not propose to revise the SWMP in a manner that would incorporate the Framework assessment methodology directly. The Authority will continue to refine and implement the Framework methodology, along with the other Copermittees, with the goal to incorporate various aspects of the Framework into the SWMP where applicable.





13 Fiscal Analysis Component

The Municipal Permit requires the Authority to demonstrate sufficient financial resources to implement the SDIA SWMP. The fiscal analysis presented here includes the expenditures for FY04-05, the budget for FY05-06, the source of the funds, a description of the use of these funds and any legal restrictions on their use.

STORM WATER MANAGEMENT PROGRAM ELEMENTS

The bulk of expenditures related to the implementation of the SWMP pass through the Environmental Affairs Department and the Facilities Maintenance Department. The Environmental Affairs Department is responsible for administrative functions within the Storm Water Management Program, including budget management and planning. The Environmental Affairs Department staff carries out the administrative and educational activities for the program, including: a) budgetary management and planning; b) enforcement and inspection; c) monitoring and reporting; d) interagency coordination and Copermittee involvement; e) assistance to other groups outside the department; f) internal and external training, workshops, and public events; and g) helping to secure the materials and equipment necessary to perform required tasks.

The Facilities Maintenance Department is responsible for the operation and maintenance (O&M) aspects of the program, including: a) inspecting, clearing, and repairing the MS4; b) maintenance of facilities and grounds; c) securing the materials, equipment, and vehicles necessary to perform required tasks; and d) managing the Authority's wastes.

FISCAL-YEAR 2004-2005 EXPENDITURES

Financial resources for implementation of the SWMP are allocated into administration, education, O&M, and capital expenditures components. The annual costs for the activities under each of these components falls into one of the following expense categories: personnel, non-personnel, or Capital Improvement Program (CIP).

The total expenditures for implementation of the SWMP in FY04-05 was \$1,718,585. The expenses for FY04-05 are shown in Table 13-1 according to expense category. A total of \$963,675 was expended on staff time for the Environmental Affairs and Facilities Maintenance Departments to carry out the program. Staff time for the Environmental Affairs Department equated to \$268,450 and the staff time for the Facilities Maintenance Department equates to an allocation of \$695,225.

Non-personnel expenses represent permit fees and contracted services necessary to implement and maintain all the program activities listed in Table 13-1, including professional services, site and infrastructure cleaning and maintenance, training, and education and public outreach efforts. Total expenditures for Non-Personnel items during FY04-05 were \$696,060.

In FY04-05, the Authority allocated funds to one CIP project related to the stormwater management program. This CIP project, (CIP Project #3105A) "Storm Drainage System BMP Project," is described in Chapter 11 of this Annual Report. Total expenditures on this project during FY04-05 were \$58,850.



Table 13-1. Storm Water Management Program Expenditures for FY04-05

Description	Costs	
A. Personnel Expenses		
1. Environmental Affairs Department	\$268,450	
2. Facilities Maintenance Department	\$695,225	
Subtotal	\$963,675	
B. Non-Personnel Expenses		
1. NPDES Permit Fees	\$830	
2. Professional Services		
a. Legal	\$0	
b. Consulting	\$27,555	
3. Routine Maintenance and Contingency	\$53,570	
4. Ramp Cleaning/Runway Rubber Removal	\$64,090	
5. Landscape Maintenance	\$324,000	
6. MS4 Cleaning	\$47,215	
7. Parking Lot and Street Sweeping	\$105,315	
8. Hazardous Waste Disposal	\$33,250	
9. Equipment Purchases	\$4,235	
10. Education, Training, and Public Outreach	\$36,000	
Subtotal	\$696,060	
C. Capital Improvement Program Expenses		
1. Storm Drainage System BMP Project (CIP #3105A)	\$58,850	
Subtotal	\$58,850	
GRAND TOTAL	\$1,718,585	

Storm Water Management Plan - Municipal Stormwater Permit

FISCAL-YEAR 2005-2006 BUDGET

Table 13-2 presents the SWMP implementation budget for FY05-06, which is \$3,112,430. As seen in Table 12-2, a total of \$992,600 in FY05-06 has been allocated for the combined staff time of the Environmental Affairs Department and the Facilities Maintenance Department.

A total of \$1,878,830 has been allocated for Non-Personnel expenses in FY05-06, including professional services, site and infrastructure cleaning and maintenance, training, and education and public outreach efforts.

The remaining budget for CIP Project #3105A, "Storm Drainage System BMP Project," in FY05-06 is \$241,000.

REVISIONS TO THE SWMP

There are no revisions to the Fiscal Analysis Component of the SWMP.



Table 13-2. Storm Water Management Program Budget for FY05-06

Description	Budget
A. Personnel Expenses	
1. Environmental Affairs Department	\$276,500
2. Facilities Maintenance Department	\$716,100
Subtotal	\$992,600
B. Non-Personnel Expenses	
1. NPDES Permit Fees	\$830
2. Professional Services	
a. Legal	\$10,000
b. Consulting	\$250,000
3. Routine Maintenance and Contingency	\$100,000
4. Ramp Cleaning/Runway Rubber Removal	\$598,000
5. Landscape Maintenance	\$330,000
6. MS4 Cleaning	\$75,000
7. Parking Lot and Street Sweeping	\$365,000
8. Hazardous Waste Disposal	\$50,000
9. Equipment Purchases	\$50,000
10. Education, Training, and Public Outreach	\$50,000
Subtotal	\$1,878,830
C. Capital Improvement Program Expenses	
1. Storm Drainage System BMP Project (CIP #3105A)	\$241,000
Subtotal	\$241,000
GRAND TOTAL	\$3,112,430

Storm Water Management Plan - Municipal Stormwater Permit





14 Conclusions and Recommendations

The FY04-05 Annul Report summarizes the Authority's efforts to manage stormwater at SDIA in compliance with the San Diego Municipal Permit. Since the Authority was only recently named as a Copermittee to the Municipal Permit in August of 2003, the previously submitted FY03-04 Annual Report was the first report to compile and assess the Authority's compliance efforts. The FY03-04 Annual Report provided a baseline from which to gauge the effectiveness of the Authority's efforts and from which to measure improvements. Based upon both the FY03-04 and FY04-05 Annual Reports, the Authority believes the stormwater management program at SDIA is adequately planned, executed, reviewed, and funded, and fulfills the requirements of the Municipal Permit. Information to support this conclusion is presented here.

This chapter presents broad-based conclusions about the Authority's stormwater management program that fall into 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 SDIA SWMP. Also highlighted herein are the Authority's recommendations for continual process improvements that may further enhance stormwater pollution prevention and control measures at SDIA.

CONCLUSIONS

1. Overall Program Compliance Status

Chapter 12 details an assessment of the Authority's stormwater management program using the Framework developed by the Copermittees. Information throughout this report, and in particular Chapter 12 (Assessment of Program Effectiveness), supports a determination that the Authority's stormwater management efforts are in general compliance with the Municipal Permit.

2. Effective Stormwater Management Program Components

Based on the results of current program implementation and the findings of the FY04-05 effectiveness assessment in Chapter 12, the management measures currently being implemented are generally effective. In response to the anticipated outcomes from the Storm Drainage System BMP Project (see Chapter 11), the Authority intends to revise the SDIA SWMP and make changes to BMP requirements, the stormwater monitoring program, the education and outreach efforts, and the inspection and enforcement activities.

3. Program Elements Identified for Improvement

Again, the majority of the management measures currently being implemented by the Authority have proven to be effective. One of the assessment tools used to assess the effectiveness of the education and outreach efforts of the Authority (namely, the survey presented in Table 12-2) suggests that the Authority's current education and outreach efforts may not be adequate in reaching the tenants. It would be premature to say that the education efforts are ineffective. The survey data suggests that the education and outreach efforts developed for the tenants may need to be expanded and/or more frequently employed.



4. Revisions to the SDIA SWMP

Revisions to any components of the SDIA SWMP were noted at the close of each chapter in this Annual Report. Only chapters 2, 3, 4, and 8, which discussed the Municipal, Industrial, Commercial, and IDDE Components, respectively, made any reference to proposed changes or modifications to the SWMP. Each of these chapters closed with a statement that the anticipated outcomes from the Storm Drainage System BMP Project will likely indicate the need for future SWMP revisions. The actual revisions will be presented in the FY05-06 Annual Report. Chapter 3 also stated that the inventory of industrial operations has changed with one tenant being deleted and two new tenants being added, although the SDIA SWMP has yet to be updated.

RECOMMENDATIONS

Aside from the general recommendation to continue effective and cost-efficient implementation of existing stormwater management efforts, there are two significant recommendations highlighted previously in this report, namely:

- 1. Improve education and outreach efforts for the tenants; and
- 2. Improve implementation rates for BMPs required in the SWMP.

1. Improve Education and Outreach Efforts for the Tenants

The Authority understands that educated tenants make for more efficient partners in preventing stormwater pollution at the airport and elsewhere. The Authority has concluded that the education and outreach efforts currently developed for the tenants may need to be expanded and/or more frequently employed. The Authority intends to review the current education and outreach efforts and improve delivery of the education and/or identify additional cost-effective and efficient outreach and training mechanisms.

2. Improve implementation rates for BMPs required in the SWMP

Again, believing that educated staff and tenants will implement the appropriate BMPs properly, the Authority seeks ways of improving the implementation of required BMPs. As previously discussed, the Authority performed a site audit during FY04-05 which assessed the level of BMP implementation by tenants and by the Authority itself. The site audit found that the BMPs with the lowest implementation rates were those associated with designating, covering and berming areas associated with material/waste storage, material loading/unloading, and aircraft/equipment/vehicle maintenance and fueling. The site audit identified deficiencies in BMP implementation and provided a list of recommended changes for the Authority's stormwater management program. The Authority is currently reviewing its industrial and commercial education and outreach efforts to identify means of achieving improved BMP implementation rates. Necessary improvements will be incorporated into the stormwater management program.

CLOSING

The FY04-05 Annual Report clearly demonstrates that the stormwater management program at SDIA is adequately planned, executed, reviewed, and funded and 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. Potential stormwater impacts are one characteristic of the airport's "environmental footprint" that the Authority aims to prevent or minimize.





Appendix A

FY04-05 Dry Weather

Storm Drain Monitoring

Data Sheets

Storm Water Management Plan -	Municipal Stormwater Per	mit	



	\triangleright	Routine Investigation	n	☐ IC/ID Follow-Up For					
GENERA	L SITE DESCRIPT	ΓΙΟΝ	(NAD	83 decimal degrees to 5th j	olace)				
Site ID	1		Latitude	32.43927	Wa	Hydrologic Un	nit		
Location	Area B, Jim's Air		Longitude	117.10734	Watershed	Hydrologic Ar	ea		
Date	8/18/2004		TB Page		hed	Hydrologic Subarea (Option	anal)		
Time	8:42 am		Observer	RG, MG		charge Area tional)			
Land Use (Check one		□ Residential □ Co	ommercial 🗆 l	ndustrial Agricu	ltural	□ Parks	□ Open	ı	
	(Secondary) greater than 10%)	□ Residential □ Co	ommercial 🗆 l	ndustrial Agricu	ltural	□ Parks	□ Open	l	
Conveyan (Check one	ce	☐ Manhole 🖂 C	atch Basin	Outlet Channel	te	□ NaturalCreek	□ Earth	en Channel	
ATMOSP	HERIC CONDITION	ONS							
Weather Tide Last Rain Rainfall	□ Sunny □ N/A ☑ > 72 hours ☑ None	□ Partly ⊠Cloudy	overcast		g	Tide Height:_	ft.		
	CHARACTERIST		0.1						
Odor			lattan Essa	Chaminal	□ C		□ O4h au		
Color Clarity Floatables Deposits	□ None □	Yellow ☐ E ☐ S Frash ☐ E	Rotten Eggs Brown Blightly Cloudy Bubbles/Foam Fine Particulates	□ Chemical□ White□ Opaque□ Sheen□ Stains		•	☐ Other ☐ Other ☐ Other ☐ Other ☐ Other ☐ Other		
Vegetation Biology	⊠None □]	Insects $\square A$	Normal Algae	☐ Excessive ☐ Snails/Fish		ussels/Barnacles	☐ Other☐ Other☐		
Flow Obse			idal						
	of Overland Flow?	ach the Receiving Wa ☐ Yes ☐ No No Photo #		☐ Yes ☐ No off ☐ Other:	□ N/A				
	ning Samples Colle		No	NO N		D 4 DO		1	
Water Ter pH (pH units		NH3-N (mg/L) TURB (NTU)		NO3-N (mg/L) COND (mS/cm)		React PO ₄	(mg/L)		
	Lab Samples Colle		⊠ No	COT(D (ms/cm)		<u> </u>			
	TIMATION WOR								
	Creek or Box Cul		ing a Bottle or I	Znown Volumo		Flor	ving Pipe		
Width	<u> </u>	t Volume	ing a Dutile of I	mL		Diameter Flow	ang ripe	ft	
Depth		Time to F	ill i	sec		Depth		ft	
Velocity	f	it/sec Flow		gpm		Velocity		ft/sec	
Flow	٤	gpm				Flow		gpm	
COMMEN	TS:								

	\triangleright	Routine Investigation	☐ IC/ID Follow-Up For					
GENERA	L SITE DESCRIPT	ΓΙΟΝ	(NAD	83 decimal degrees to 5th	place)			
Site ID	2		Latitude	32.43788	Wa	Hydrologic Un	nit	
Location	Area C, Least Terr	n Area	Longitude	117.10768	Watershed	Hydrologic Ar	ea	
Date	8/18/2004		TB Page		hed	Hydrologic Subarea (Option	onel)	
Time	8:38 am		Observer	RG, MG		charge Area otional)	onar)	
Land Use (Check one		□ Residential □ Co	ommercial 🗆 l	ndustrial Agricu	ltural	□ Parks	□ Open	l
	(Secondary) greater than 10%)	□ Residential □ Co	ommercial 🗆 l	ndustrial Agricu	ltural	□ Parks	□ Open	l
Conveyan (Check one	ce	□ Manhole 🔲 C	atch Basin G	Outlet Channel	ete	□ Natural Creek	□ Earth	en Channel
ATMOSD	HERIC CONDITION	ONS						
Weather Tide Last Rain Rainfall	□ Sunny □ N/A ☑ > 72 hours ☑ None	□ Partly ⊠Cloudy	overcast		ıg	Tide Height:_	ft.	
	CHARACTERIST							
Odor Color Clarity Floatables Deposits Vegetation Biology Flow Observation	None	Musty Yellow Sediment/Gravel Sediment/Gravel Simited Sinsects No Ponded Such the Receiving Wa		☐ Chemical ☐ White ☐ Opaque ☐ Sheen ☐ Stains ☐ Excessive ☐ Snails/Fish ☐ Yes ☐ No Off ☐ Other:	□ Gr	cal Matter ly Deposits ussels/Barnacles	Other Other Other Other Other Other Other	
Photo Tak	en □ Yes 🗵	No Photo #						
Field Screen Water Ten pH (pH units		cted? ☐ Yes ☑ NH3-N (mg/L) TURB (NTU)	No	NO3-N (mg/L) COND (mS/cm)		React PO	(mg/L)	
Analytical	Lab Samples Colle	ected? □ Yes	⊠ No					
FLOW ESTIMATION WORKSHEETS								
	g Creek or Box Cul		ing a Bottle or I				ving Pipe	
Width		Volume	211	mL		Diameter		ft
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COMMEN'			1					

		Routine Investigation	☐ IC/ID Follow-Up For					
GENERAL	L SITE DESCRIP	ΓΙΟΝ	(NAD	33 decimal degrees to 5th pl	ace)		,	
Site ID	3		Latitude	32.43947	Wa	Hydrologic Un	it	
Location	Area E, T1 East -	Airside	Longitude	117.11727	Watershed	Hydrologic Ar	ea	
Date	8/18/2004		TB Page			Hydrologic Subarea (Optio	onal)	
Time	9:23 am		Observer	RG, MG	Discl (Opti	narge Area onal)		
Land Use (Check one		□ Residential □ Con	mmercial 🗆 I	ndustrial Agricult	ural	□ Parks	□ Open	
	(Secondary) greater than 10%)	☐ Residential ☐ Cor	nmercial 🗆 I	ndustrial Agricult	ural	□ Parks	□ Open	
Conveyand (Check one	ce	□ Manhole ⊠Ca	tch Basin 🗆 (Outlet Channel	e	☐ Natural Creek	□ Earth	en Channel
ATMOSP	HERIC CONDITION	ONS						
Weather Tide Last Rain Rainfall	□ Sunny □ N/A ☑ > 72 hours ☑ None	□ Partly ⊠Ov	rercast \Box For coming \Box H			Tide Height:	ft.	
RUNOFF	— CHARACTERIST							
	None	Yellow □ Br □ Sli □ Rr Trash □ Bu Sediment/Gravel □ Final Properties	ightly Cloudy ubbles/Foam ne Particulates ormal gae dal er?		□ Oily	•	Other Other Other Other Other Other Other	
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pH (pH units		<u> </u>		(ms/cm)		L		<u> </u>
	Lab Samples Colle		⊠ No					
FLOW ES	TIMATION WOR	RKSHEETS						
	Creek or Box Cul		ng a Bottle or I	Known Volume			ving Pipe	
Width		Volume	1	mL		piameter		ft
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COMMEN] [l				

		Routine Investigation	☐ IC/ID Follow-Up For					
GENERAL	L SITE DESCRIP	ΓΙΟΝ	(NAD	83 decimal degrees to 5th pl	ace)		,	
Site ID	4		Latitude	32.43992	Wa	Hydrologic Un	it	
Location	Area E, Between	Γ1 and T2	Longitude	117.12003	Watershed	Hydrologic Ar	ea	
Date	8/18/2004		TB Page		hed	Hydrologic Subarea (Option	onal)	
Time	9:18 am		Observer	RG, MG		harge Area		
Land Use (Check one		□ Residential □ Con	mmercial 🗆 I	ndustrial Agricult	ural	□ Parks	□ Open	
	(Secondary) greater than 10%)	□ Residential □ Con	mmercial 🗆 I	ndustrial Agricult	ural	□ Parks	□ Open	
Conveyand (Check one	ce	□ Manhole ⊠Ca	tch Basin	Outlet Channel	e	□ Natural Creek	□ Earth	en Channel
ATMOSP	HERIC CONDITION	ONS						
Weather Tide Last Rain Rainfall	□ Sunny □ N/A ☑ > 72 hours ☑ None	□ Partly ⊠Ov	vercast			Tide Height:_	ft.	
	— CHARACTERIST							
Odor Color Clarity Floatables Deposits Vegetation Biology Flow Obse	□ None □ Yes □ Clear □ None □ None □ S □ None □ I □ None □ I	Yellow □ Br □ Sl Γrash Sediment/Gravel □ Fi Limited □ No Insects □ Al ☑ No □ Ponded □ Ti	dal	☐ Chemical ☐ White ☐ Opaque ☐ Sheen ☐ Stains ☐ Excessive ☐ Snails/Fish	□ Oily	al Matter Deposits ssels/Barnacles	☐ Other	
		ach the Receiving Wate			N/A	L		
Photo Tak		□ Yes □ No □ No Photo # ected? □ Yes ⊠ N		off □ Other:				
Water Ter	np (°C)	NH3-N (mg/L)		NO3-N (mg/L)		React PO ₄	(mg/L)	
pH (pH units)	TURB (NTU)		COND (mS/cm)				
Analytical	Lab Samples Colle	ected?	⊠ No					
FLOW ES	TIMATION WOR	RKSHEETS						
	Creek or Box Cul		ng a Bottle or I	Known Volume	_		ving Pipe	-
Width		ft Volume		mL		iameter		ft
Depth		Time to Fi	11	sec		Pepth		ft
Velocity		ft/sec Flow		gpm	_	elocity		ft/sec
Flow		gpm	<u> </u>			low		gpm
COMMEN	ΓS:							

		Routine Investigation	☐ IC/ID Follow-Up For					
GENERAL	L SITE DESCRIP	ΓΙΟΝ	(NAD	83 decimal degrees to 5th p	lace)		,	
Site ID	5		Latitude	32.44080	Wa	Hydrologic Un	iit	
Location	Area A, North Rai	mp	Longitude	117.11141	Watershed	Hydrologic Ar	ea	
Date	8/18/2004		TB Page		hed	Hydrologic Subarea (Option	onal)	
Time	9:55 am		Observer	RG, MG		charge Area tional)		
Land Use (Check one		□ Residential □ Con	mmercial 🗆 I	ndustrial Agricul	tural	□ Parks	□ Open	
	(Secondary) greater than 10%)	□ Residential □ Con	mmercial 🗆 I	ndustrial Agricul	tural	□ Parks	□ Open	
Conveyand (Check one	ce	□ Manhole ⊠Ca	tch Basin 🗆 (Outlet Channel	te	□ NaturalCreek	□ Earth	en Channel
ATMOSP	HERIC CONDITION	ONS						
Weather Tide Last Rain Rainfall	□ Sunny □ N/A ☑ > 72 hours ☑ None	□ Partly ⊠Ov	vercast		j 2	Tide Height:_	ft.	
	CHARACTERIST							
Odor Color Clarity Floatables Deposits Vegetation Biology Flow Obse Does the st	□ None □ Yes □ Clear □ None □ None □ S □ None □ I □ None □ I	Yellow □ Br □ Sl: Trash □ Bu Sediment/Gravel □ Fi	dal	☐ Chemical ☐ White ☐ Opaque ☐ Sheen ☐ Stains ☐ Excessive ☐ Snails/Fish	□ Oil	eal Matter y Deposits assels/Barnacles	Other Other Other Other Other Other Other	
Evidence o	of Overland Flow?		Irrigation Run	off Other:				
Photo Tak		No Photo #						
	ning Samples Colle	ected? Yes N		NO. N		Doc 4 DO		
Water Ter pH (pH units		NH3-N (mg/L) TURB (NTU)		NO3-N (mg/L) COND (mS/cm)		React PO ₄	(mg/L)	
	Lab Samples Colle	ected?	⊠ No					
FLOW ES	TIMATION WOR	RKSHEETS						
	g Creek or Box Cul		ng a Bottle or I	Known Volume			ving Pipe	
Width		t Volume		mL	_	Diameter		ft
Depth		Time to File	11	sec	_	Depth		ft
Velocity Flow		ft/sec Flow		gpm		Velocity Flow		ft/sec gpm
COMMEN	1		L			· · ·		

		Routine Investigation	☐ IC/ID Follow-Up For					
GENERA	L SITE DESCRIPT	ΓΙΟΝ	(NAD	83 decimal degrees to 5th J	olace)			
Site ID	6		Latitude	32.44101	Wa	Hydrologic Un	nit	
Location	Area E/F, NTC		Longitude	117.12270	Watershed	Hydrologic Ar	ea	
Date	8/18/2004		TB Page		hed	Hydrologic Subarea (Option	onal)	
Time	9:11 am		Observer	RG, MG		charge Area tional)		
Land Use (Check one		□ Residential □ Co	mmercial 🗆 I	Industrial Agricul	tural	□ Parks	□ Open	
	(Secondary) greater than 10%)	□ Residential □ Co	mmercial 🗆 I	Industrial Agricul	tural	□ Parks	□ Open	
Conveyand (Check one	ce	□ Manhole ⊠Ca	atch Basin	Outlet Channel	te	□ Natural Creek	□ Earth	en Channel
ATMOSP	HERIC CONDITION	ONS						
Weather Tide Last Rain Rainfall	□ Sunny □ N/A ☑ > 72 hours ☑ None	□ Partly ⊠O	vercast		g	Tide Height:_	ft.	
	_		7.1					
	CHARACTERIST			= c 1	- a		= 0.1	
Odor Color Clarity Floatables Deposits	☐ None ☐ `` ☐ Clear ☐ None ☐ `` ☐ None ☐ ``	Yellow \square B \square S: Trash \square B Sediment/Gravel \square F	otten Eggs rown ightly Cloudy ubbles/Foam ne Particulates	□ Chemical□ White□ Opaque□ Sheen□ Stains	□ Gr	wage ay cal Matter ly Deposits	☐ Other ☐ Other ☐ Other ☐ Other ☐ Other ☐ Other	
Vegetation Biology	⊠None □]	Insects □ A	ormal lgae	☐ Excessive ☐ Snails/Fish	□ M ι	ussels/Barnacles	☐ Other☐ Other☐	
	torm drain flow res	☑No □ Ponded □ T ach the Receiving Wat □ Yes □ No □ No Photo #	er?	Yes No No off Other:	N/	A	-	
	ning Samples Colle		lo					I
Water Ter pH (pH units		NH3-N (mg/L) TURB (NTU)		NO3-N (mg/L) COND (mS/cm)		React PO ₄	(mg/L)	
	Lab Samples Coll	<u> </u>	⊠ No	COT(D (ms/cm)				
	TIMATION WOR							
	Creek or Box Cul		ng a Rattle on I	Known Volume		Flan	ving Pipe	
Width	<u> </u>	ft Volume	a Dottie of I	mL		Diameter Flow	ving ripe	ft
Depth		ft Time to Fi	11	sec		Depth		ft
Velocity		ft/sec Flow		gpm		Velocity		ft/sec
Flow		gpm				Flow		gpm
COMMEN'	TS:							

		Routine Investigation	☐ IC/ID Follow-Up For				
GENERAL	L SITE DESCRIPT	ΓΙΟΝ	(NAD	83 decimal degrees to 5t	h place)	1	T
Site ID	1		Latitude	32.43927	Wa	Hydrologic Ur	nit
Location	Area B, Jim's Air		Longitude	117.10734	Watershed	Hydrologic Ar	ea
Date	9/15/04		TB Page		hed	Hydrologic Subarea (Option	onal)
Time	2:25 pm		Observer	RG, MG		charge Area tional)	
Land Use (Check one		□ Residential □ Co	mmercial 🗆 1	ndustrial Agric	cultural	□ Parks	□ Open
	(Secondary) greater than 10%)	□ Residential □ Co	mmercial 🗆 l	Industrial Agric	cultural	□ Parks	□ Open
Conveyand (Check one		□ Manhole \(\sum \Cap\)C	atch Basin 🗆 0	Outlet Conc Channe		□ Natural Creek	☐ Earthen Channel
ATMOSP	HERIC CONDITION	ONS					
Weather	Sunny	□ Partly □ Ov	ercast \Box F	og			
Tide		Cloudy	coming 🗆 H		ing	Tide Height:	ft.
Last Rain	\boxtimes > 72 hours	\square < 72 hours					
Rainfall	None	□<0.1" □>0	0.1"				
	CHARACTERIST						
Odor Color		•	otten Eggs rown	☐ Chemical☐ White		wage	☐ Other
Clarity	□ None □ □		rown lightly Cloudy	□ Write □ Opaque	□ Gr	ay	□ Other
Floatables			ubbles/Foam	□ Sheen	□ Fe	cal Matter	□ Other
Deposits	□ None □ S	Sediment/Gravel	ne Particulates	☐ Stains	□ Oi	ly Deposits	□ Other
Vegetation			ormal	☐ Excessive			□ Other
Biology	⊠None □]	Insects \Box A	lgae	☐ Snails/Fish		ussels/Barnacles	□ Other
Flow Ob	oserved □Yes	\square No \square Ponded \square	Tidal				
Does the	e storm drain flow	reach the Receiving W	ater?	□ Yes □ No	\Box N	I/A	
Evidenc	e of Overland Flov	v? □ Yes □ No	☐ Irrigation R	unoff Other: _			
Photo T	aken 🖂 Yes	□ No Photo #JIN	1091504				
Field Corner	ning Samples Colle	cted? □ Yes 🔀 ì	Jo				
Water Ter		NH3-N (mg/L)	NO	NO3-N (mg/L)		React PO	ı (mg/L)
pH (pH units	•	TURB (NTU)		COND (mS/cm)		11000010	(mg/2)
Analytical	Lab Samples Colle	ected?	⊠ No				
FLOW ES	TIMATION WOR	KSHEETS					
Flowing	g Creek or Box Cul	vert Filli	ng a Bottle or 1	Known Volume		Flox	wing Pipe
Width	ſ	t Volume		mL		Diameter	ft
Depth		Time to F	11	sec		Depth	ft
Velocity	+	it/sec Flow		gpm		Velocity	ft/sec
Flow	{	gpm				Flow	gpm
COMMEN	TS: Concrete i	inlet located across fro	om ABX				

Revised 4/20/2004

		Routine Investigation	☐ IC/ID Follow-Up For				
GENERA	L SITE DESCRIPT	ΓΙΟΝ	(NAD	83 decimal degrees to 5th	place)	1	1
Site ID	2		Latitude	32.43788	Wa	Hydrologic Un	nit
Location	Area C, Least Terr	n Area	Longitude	117.10768	Watershed	Hydrologic Ar	ea
Date	9/15/04		TB Page		ned	Hydrologic Subarea (Option	onal)
Time	2:15 pm		Observer	RG, MG		charge Area	onar)
				-, -	(Op	tional)	
Land Use (Check one		□ Residential □ Con	mmercial 🗆 I	ndustrial Agricu	ltural	□ Parks	□ Open
	(Secondary) greater than 10%)	□ Residential □ Con	mmercial 🗆 I	ndustrial Agricu	ltural	□ Parks	□ Open
Conveyand (Check one		□ Manhole ⊠Ca	tch Basin 🗆 (Outlet Channel	te	□ NaturalCreek	☐ Earthen Channel
ATMOSP	HERIC CONDITION	ONS					
		□ Partly					
Weather	Sunny	Cloudy	ercast \Box Fo	_			
Tide Last Rain	\square N/A \bowtie > 72 hours	✓ Low □ Inc□ < 72 hours	oming \square H	igh □ Outgoin	g	Tide Height:_	ft.
Rainfall	None	$\square < 72$ flours $\square < 0.1$ " $\square > 0$.1"				
RUNOFF	CHARACTERIST	TICS					
Odor	□ None □ I	Musty □ Ro	otten Eggs	☐ Chemical	□ Se	wage	□ Other
Color		•	rown	□ White	□ Gr	•	□ Other
Clarity	\Box Clear		ightly Cloudy	\square Opaque			□ Other
Floatables			ıbbles/Foam	□ Sheen		cal Matter	□ Other
Deposits Vegetation			ne Particulates	□ Stains	□ Oi	ly Deposits	Other
Biology			ormal Igae	☐ Excessive☐ Snails/Fish	☐ Mussels/Barnacles		☐ Other ☐ Other
Flow Obse		☑No □ Ponded □ Ti	C				
Does the s	torm drain flow rea	ach the Receiving Wate	er?	Yes □ No	□ N/A	L	
Evidence of	of Overland Flow?		Irrigation Run	off Other:			_
Photo		No Photo # CLT091					
Taken							
Field Screen	ning Samples Colle	ected? Yes N					
Water Ter	np (°C)	NH3-N (mg/L)		NO3-N (mg/L)		React PO ₄	(mg/L)
pH (pH units	3)	TURB (NTU)		COND (mS/cm)			
Analytical	Lab Samples Colle	ected?	⊠ No				
FLOW ES	TIMATION WOR	RKSHEETS					
	g Creek or Box Cul		ng a Bottle or I	Known Volume			ving Pipe
Width		Volume	11	mL		Diameter	ft
Depth Velocity		Time to Fi	11	sec	_	Depth Velocity	ft ft/sec
Flow	+	gpm		gpm		Flow	gpm
11011						- 10 11	σr

Revised 4/20/2004

COMMENTS:

		Routine Investigation	☐ IC/ID Follow-Up For					
GENERA	L SITE DESCRIP	ΓΙΟΝ	(NAD	33 decimal degrees to 5th p	lace)			
Site ID	3		Latitude	32.43947	Wa	Hydrologic Un	nit	
Location	Area E, T1 East -	Airside	Longitude	117.11727	Watershed	Hydrologic Ar	ea	
Date	9/15/04		TB Page		hed	Hydrologic Subarea (Option	onal)	
Time	3:00 pm		Observer	RG, MG		charge Area tional)		
Land Use (Check one		□ Residential □ Con	mmercial 🗆 I	ndustrial Agricult	tural	□ Parks	□ Open	ı
	(Secondary) greater than 10%)	□ Residential □ Con	mmercial 🗆 I	ndustrial Agricult	tural	□ Parks	□ Open	ı
Conveyand (Check one		□ Manhole ⊠Ca	tch Basin 🗆 (Outlet Channel	e	□ NaturalCreek	□ Earth	en Channel
ATMOSP	HERIC CONDITI	ONS						
Weather Tide	⊠ Sunny □ N/A	☐ Partly Cloudy ☐ Low ☐ Inc	ercast		5	Tide Height:_	ft.	
Last Rain Rainfall	$\boxtimes > 72 \text{ hours}$ $\boxtimes \text{ None}$	\square < 72 hours \square < 0.1" \square > 0	1"					
	CHARACTERIST		.1					
Odor			otten Eggs	☐ Chemical	□ Se	vaga	☐ Other	
Color		Yellow \square Br		□ White		•	□ Other	
Clarity	□ Clear		ightly Cloudy	☐ Opaque		·· J	☐ Other	
Floatables	\square None \square	Trash □ Bu	ibbles/Foam	□ Sheen	□ Fee	cal Matter	\square Other	
Deposits			ne Particulates	☐ Stains	□ Oil	y Deposits	☐ Other	
Vegetation			ormal	☐ Excessive	- > 4	1.75	□ Other	
Biology		Insects □ Al		☐ Snails/Fish	⊔ Mu	issels/Barnacles	□ Other	
Flow Obse		No □ Ponded □ Ti						
		ach the Receiving Wate			□ N/A			
Evidence of	of Overland Flow?	\square Yes \square No \square	Irrigation Run	off Other:			-	
Photo Tak	ten 🛛 Yes 🗆	No Photo # T1_0915	04					
Eigld Comes	uina Camplea Calla	ected? Yes N	· -					
Water Ter	ning Samples Colle	$\frac{\text{ected?} \Box \text{ Yes} \boxtimes \text{ N}}{ \text{NH3-N}_{(mg/L)} }$	0	NO3-N (mg/L)		React PO ₄	(mg/L)	
pH (pH units	•	TURB (NTU)		COND (mS/cm)		React 1 04	(IIIg/L)	
Analytical	Lab Samples Coll	ected?	⊠ No					
FLOW ES	TIMATION WOR	RKSHEETS						
	g Creek or Box Cul	lvert Fillin	ig a Bottle or I	Known Volume	_	Flov	ving Pipe	
Width		ft Volume		mL		Diameter		ft
Depth		ft Time to File	1	sec		Depth		ft
Velocity		ft/sec Flow		gpm		Velocity		ft/sec
Flow		gpm				Flow		gpm
COMMEN'	TS:							

		Routine Investigation	☐ IC/ID Follow-Up For					
GENERA	L SITE DESCRIP	ΓΙΟΝ	(NAD	33 decimal degrees to 5th p	lace)			
Site ID	4		Latitude	32.43992	Wa	Hydrologic Un	nit	
Location	Area E, Between	Γ1 and T2	Longitude	117.12003	Watershed	Hydrologic Ar	ea	
Date	9/15/04		TB Page		hed	Hydrologic Subarea (Option	omal)	
Time	2:56 pm		Observer	RG, MG		charge Area tional)		
Land Use (Check one		□ Residential □ Co	mmercial 🗆 I	ndustrial Agricul		□ Parks	□ Open	ı
Land Use	(Secondary) greater than 10%)	□ Residential □ Co	mmercial 🗆 I	ndustrial Agricul	tural	□ Parks	□ Open	ı
Conveyand (Check one	ce	□ Manhole ⊠Ca	atch Basin	Outlet Channel	e	□ Natural Creek	□ Earth	en Channel
ATMOSP	HERIC CONDITI	ONS						
Weather Tide Last Rain Rainfall	Sunny □ N/A □ > 72 hours □ None	☐ Partly ☐ Ov	ercast	_	7	Tide Height:_	ft.	
RUNOFF	— CHARACTERIST							
Odor Color Clarity Floatables Deposits Vegetation Biology Flow Obse	□ None □ I □ None □ Y □ Clear □ None □ None □ S □ None □ I □ None □ I □ None □ I	Musty R Yellow B SI Trash B Sediment/Gravel Fi	C	☐ Chemical ☐ White ☐ Opaque ☐ Sheen ☐ Stains ☐ Excessive ☐ Snails/Fish	□ Oil	•	Other Other Other Other Other Other Other	
	of Overland Flow?	ach the Receiving Wat ☐ Yes ☐ No ☐ No Photo # T1T2	☐ Irrigation Run		N/.	A		
Water Ter		NH3-N (mg/L)	No	NO3-N (mg/L)		React PO ₄	(mg/L)	
pH (pH units	3)	TURB (NTU)		COND (mS/cm)				
Analytical	Lab Samples Colle	ected? □ Yes	⊠ No					
FLOW ES	TIMATION WOR	RKSHEETS						
Flowing	g Creek or Box Cul	lvert Filli	ng a Bottle or I	Known Volume		Flov	ving Pipe	
Width		ft Volume		mL		Diameter		ft
Depth		ft Time to Fi	11	sec		Depth		ft
Velocity	l l	ft/sec Flow		gpm		Velocity		ft/sec
Flow		gpm				Flow		gpm
COMMEN'	TS:							

	⊠Routine Inv	restigation	☐ IC/ID Follow-U	p For			
GENERA	L SITE DESCRIPTION	(NAD	83 decimal degrees to 5th pla	nce)			
Site ID	5	Latitude	32.44080	₩ Hydrologic Unit	nit		
Location	Area A, North Ramp	Longitude	117.11141	Hydrologic And Hydrologic And Hydrologic	rea		
Date	9/15/04	TB Page		E Hydrologic Subarea (Opti	ional)		
Time	2:32 pm	Observer	RG, MG	Discharge Area	ionar)		
		Observer	KG, MG	(Optional)			
Land Use (Check one	e only)	al Commercial I	ndustrial Agricultu	ıral 🗆 Parks	□ Open		
	(Secondary) greater than 10%) ☐ Residenti	al □ Commercial □ I	ndustrial Agricultu	ıral 🗆 Parks	□ Open		
Conveyand (Check one	ce	⊠Catch Basin □ (Outlet Channel	□ Natural Creek	☐ Earthen Channel		
ATMOSP	HERIC CONDITIONS						
Weather Tide Last Rain Rainfall	Sunny □ Partly Clo □ N/A ⊠ Low □ > 72 hours □ < 72 hour ☑ None □ < 0.1"		☐ Fog ☐ High ☐ Outgoing	Tide Height:_	ft.		
RUNOFF	CHARACTERISTICS						
Odor Color Clarity Floatables Deposits Vegetation Biology Flow Obse	□ None □ Sediment/Grave None □ Limited □ None □ Insects □ Insects	□ Normal □ Algae	□ White□ Opaque□ Sheen□ Stains□ Excessive	 □ Sewage □ Gray □ Fecal Matter □ Oily Deposits □ Mussels/Barnacles 	☐ Other		
	torm drain flow reach the Recei		Yes □ No □	⊠ N/A			
	of Overland Flow?	☐ No ☐ Irrigation Run		Other:			
Photo Tak	en Yes 🗆 No Photo	# WTHRSTN_091504, RSTNII_091504					
Water Ter pH (pH units	Field Screening Samples Collected? ☐ Yes ☒ No Water Temp (°C) NH3-N (mg/L) NO3-N (mg/L) React PO4 (mg/L) pH (pH units) TURB (NTU) COND (mS/cm)						
FLOW ES	TIMATION WORKSHEETS				_		
Flowing	g Creek or Box Culvert	Filling a Bottle or I	Known Volume	Flo	wing Pipe		
Width	ft	Volume	mL	Diameter	ft		
Depth		Time to Fill	sec	Depth	ft ft/see		
Velocity Flow	ft/sec gpm	Flow	gpm	Velocity Flow	ft/sec gpm		
11011	or			110,,,	er		

COMMENTS: Storm drain located directly across from the weather station.

		Routine Investigation		☐ IC/ID Fo	ollow-Up F	or	
GENERA	L SITE DESCRIP	TION	(NAD	83 decimal degrees	s to 5th place)	T	T
Site ID	6		Latitude	32.44101	*	Hydrologic Ur	nit
Location	Area E/F, NTC		Longitude	117.12270	Watershed	Hydrologic Ar	·ea
Date	9/15/2004		TB Page		Tea	Hydrologic Subarea (Optio	onal)
Time	2:43 pm		Observer	RG, MG		ischarge Area	onar)
Time	2.43 pm		Observer	KO, MO	((Optional)	
Land Use (Check one		□ Residential □ Co	mmercial 🗆 I	ndustrial 🗆 A	Agricultura	□ Parks	□ Open
(Optional,	(Secondary) greater than 10%)	□ Residential □ Co	mmercial 🗆 I		Agricultura		□ Open
Conveyand (Check one		☐ Manhole ☐ Cat	ch Basin 🗆 C	hitlat —	Concrete annel	□ Natural Creek	☐ Earthen Channel
ATMOSP	HERIC CONDITION	ONS					
Weather	Sunny	□ Partly	ercast \Box Fo	o.g			
Tide		Cloudy	oming \Box H	_	utgoing	Tide Height:_	ft
Last Rain	$ \times \times $ > 72 hours	\square < 72 hours	onning 🗆 11	igii 🗆 O	utgomg	Tide Height	1t.
Rainfall	None	$\square < 0.1$ " $\square > 0$.1"				
RUNOFF	CHARACTERIST	TICS					
Odor		•	otten Eggs	☐ Chemical		Sewage	□ Other
Color			rown	□ White		Gray	□ Other
Clarity Floatables			ightly Cloudy	☐ Opaque		Zanal Mattan	□ Other
Deposits			ubbles/Foam ne Particulates	☐ Sheen☐ Stains		Fecal Matter Dily Deposits	□ Other□ Other
Vegetation			ormal	☐ Excessive		ony Deposits	□ Other
Biology		Insects \Box A		□ Snails/Fis		Mussels/Barnacles	□ Other
Flow Obse	erved 🗆 Yes 💆	No □ Ponded □ Ti	dal				
Does the s	torm drain flow re	ach the Receiving Wate	er?	Yes 🗆	No 🛛	N/A	
Evidence o	of Overland Flow?	□ Yes □ No □	Irrigation Run	off Other:			-
Photo Tak	en 🛛 Yes 🗆	No Photo # NTC091	504				
Field Server	ning Samples Colle	ected? □ Yes 🔀 N	Io.				
Water Ter		NH3-N (mg/L)		NO3-N (mg/L)		React PO	(mg/L)
pH (pH units	•	TURB (NTU)		COND (mS/cm)	,		
Analytical	Analytical Lab Samples Collected? ☐ Yes ☐ No						
FLOW ES	TIMATION WOR	RKSHEETS					
	Creek or Box Cul		ng a Bottle or I	Known Volum	e		ving Pipe
Width		ft Volume		mL		Diameter	ft
Depth		ft Time to Fi	Ш	sec		Depth	ft ft/see
Velocity Flow		ft/sec Flow gpm		gpn	1	Velocity Flow	ft/sec
TTOW		5P'''				1 10 W	gpm
COMMEN	ΓS: Ask maintenar	nce to clean up trash in	the channel				



Appendix B

FY04-05 Illicit Discharge

Detection and Elimination

Report Log

Storm Water Management Plan -	Municipal Stormwater Per	mit	



Log of IDDE Reports to SDIA 24-hour Telephone Line for Fiscal Year 2004-2005					
Date	Time	Subject/Topic	Log Entry Synopsis		
7/1/2004	3:52 PM	Trash- Spill/Landside	ATO reports a cleanup is needed at the T2 crosswalk. Notified SPC.		
7/1/2004	4:34 PM	Wildlife/IPM	MX reports bee contractor has been called regarding the swarm at P30. 17:44 MX reports contractor has removed bees. Some may remain for a day before they move on.		
7/2/2004	3:47 PM	Petroleum- Spill/Landside	Paging reports a transmission spill in front of T1 bag claim. Notified MX.		
/4/2004	3:39 PM	Sewage	WN called to report hose detached in the triturator area. Notified MX.		
7/5/2004	7:15 PM	Trash- Spill/Landside	ATOs requested cleanup of trash at T1 parking pavillion. Notified SPC.		
7/7/2004	12:30 PM	Trash- Spill/Landside	, ATO called to report a clean-up curbside in front of baggage claim, Terminal 2. Notified SPC.		
7/15/2004	2:42 PM	Petroleum- Spill/Airside	with ASI called to report a 4 gallon fuel spill at gate 38 which is contained not impacting storm drains and is being cleaned up with absorbent.		
7/16/2004	7:15 AM	Petroleum- Spill/Landside	Airport Pager called to report a car leaking gasoline in front of American Airlines curbside. They are waiting for a tow truck but need "kitty litter" for the gasoline. Notified In MX		
7/16/2004	10:30 AM	Petroleum- Spill/Airside	Fuel Spill at gate 38, 8 gallons, no storm drains involved. HPD advised. ASIG swept up the fuel spill with absorbent.		
7/18/2004	9:15 PM	Sewage	Rampers called to report water hose at triturator is disconnected. Notified MX. 21:35 RTS		
7/18/2004	9:20 PM	Petroleum- Spill/Airside	Fuel spill reported at Gate 17; Z-2 responded; fuel spill was less than 1 gal happened while disconnecting fueling hose; fueler who caused spill did not report or clean up. Contacted ASIG Spvsr, for clean-up. Trace amt in slit trench drain at G 17		
7/19/2004	12:35 AM	Sewage	Supervisor 1 reports the leak at the triturator will be repaired on Monday. 15:14 plumber reports hot work completed at triturator.		
//19/2004	4:38 PM	Trash- Spill/Airside	Requested , UA Ops to have lids closed on UA dumpsters at gates 12 & 13 IAW airport rules and regs.		
7/20/2004	1:58 PM	Trash- Spill/Landside	ATO Evaro reports there is a coolant spill curbside T1 near Guillermo. Notified MX-1		
7/22/2004	2:49 PM	Wildlife/IPM	at the AS ticket counter reports lots of bugs. Notified in MX to requests mids to spray.		
7/22/2004	10:00 PM	Petroleum- Spill/Airside	AA tug suffered a hydraulic fluid leak on Twy C, abeam N-6. Tug moved to area north of N-6 and will be repaired Friday morning. Hydraulic fluid cleaned up by AA personnel; no storm drains affected by spill.		
7/24/2004	10:45 AM	Trash- Spill/Airside	Contacted Western Pacific for 1 trash compactor not operating in the Automatic mode near P-27. 15:00 observed Pacific Waste on site at the recycle compactor conducting repairs.		
7/24/2004	12:30 PM	Sewage	Advised Maint 1 that from NW reports that the hose at the triturator is broke (no spill).		
//25/2004	9:57 AM	Trash- Spill/Landside	ATO lead reports the trash cans are overflowing curbside AS and there is trash along the curb. Advised /SPC.		
7/25/2004	7:27 PM	Trash- Spill/Landside	ATOs report trash service is needed curbside UA. Notified SPC.		
7/28/2004	10:30 AM	Sewage	/Maintenance called to report that there is a lav spill between gates 12 and 14. Notified Zebra 2.		
7/30/2004	7:45 AM	Trash- Spill/Landside	ATO called to report a clean up curbside by America West check-in. Notified /SPC.		
7/30/2004	8:25 PM	Petroleum- Spill/Landside	Zebra 2 reports gate 12 UA aircraft has hot brakes and a hydraulic leak. ARFF is being dispatched as a precaution. ARFF remained on site until the leak had stopped and fluid was cleaned up.		
7/31/2004	9:32 AM	Trash- Spill/Airside	/US reports the dumpster is full. Contact Pacific Waste and was advised that they are on site. Advised Zebra 2.		
7/31/2004	11:21 AM	Trash- Spill/Landside	ATO reports there is broken glass curb side T1 near the Red Bus stop. Notified SPC.		

	L	og of IDDE Repo	orts to SDIA 24-hour Telephone Line for Fiscal Year 2004-2005
Date	Time	Subject/Topic	Log Entry Synopsis
8/2/2004	7:51 AM	Trash- Spill/Landside	ATO reports there is broken glass curbside T2E near the Red Bus Stop. Notified /SPC.
8/2/2004	3:39 PM	Trash- Spill/Landside	ATOs report broken glass in the road at T2 bag claim. Notified MX.
8/5/2004	9:00 AM	Wildlife/IPM	Conducted weed spray operations on the North side of the airport from the approach end of runway 9 to "C" overflow.
8/6/2004	6:50 AM	Trash- Spill/Landside	Lindbergh Parking personnel called to report that the sprinklers are still on in the Terminal 1 parking lot and the area is flooding. Notified in Maintenance.
8/6/2004	2:08 PM	Trash- Spill/Airside	SPC reports compactor full near CT. Notified Zebra 2. Pacific Waste is sending
8/7/2004	11:19 AM	Petroleum- Spill/Airside	Fuel spill approx 5 gal. ASIG cleaning up area with absorbent HPD advised. E-mail to
8/9/2004	11:45 PM	Sewage	HPD Officer reports a piece of equipment from the triturator is strewn across the roadway. Maintenance personnel responded, and filed a property damage report with HPD. 5:45 WN ramp supervisor advised was the driver
8/10/2004	2:05 PM	Trash- Spill/Airside	Contacted, T1 SPC coach. Trash cans on AOA at gate 2 overfilled and need to be emptied.
8/10/2004	2:08 PM	Trash- Spill/Airside	Contacted U.A. UA Ops and requested lids on UA dumpsters at gates 12 & 13 be closed IAW airport rules and regs.
3/10/2004	6:30 PM	Trash- Spill/Landside	ATO Lead reports there is broken glass curbside the CT. Notified SPC.
3/13/2004	7:45 AM	Trash- Spill/Landside	from Southwest called requesting the trash cans by their skycaps be emptied. Notified SPC HC
8/13/2004	9:15 PM	Petroleum- Spill/Airside	Ops received a report of a hydraulic fluid leak at the Host trash compactor. Hydraulic fluid had leaked into the slip trench at the Host loading dock but had not reached the storm drain. MX placed absorbent on the fluid.
8/14/2004	7:50 AM	Trash- Spill/Landside	ATO Lead reports the trash cans are overflowing on the T1 transportation island. Notified SPC.
8/14/2004	1:15 PM	Trash- Spill/Airside	SWA reporting a slow water leak in the baggage make-up area T1E (flowing onto the ramp area outside). Duty plumber enroute to make repairs. Flow is to the exterior of the building and does not affect the checkpoint gate or ticket counter areas.
8/14/2004	2:16 PM	Trash- Spill/Landside	ATO called in second request to have trash service at shuttle island T2. Notified SPC.
8/15/2004	8:35 AM	Sewage	WN reports there is water flowing from the wall ramp side near their Tpoint. The water smells as though it is from the sewer. Contacted MX-1. 11:00 Plumber on call fixed plugged urinal line.
8/15/2004	9:47 PM	Trash- Spill/Landside	ATO Supervisor reports broken glass at T1 bus stop. Notified SPC.
8/16/2004	8:48 AM	Petroleum- Spill/Airside	/Envr. Reports the trash compactor that was leaking hydraulic fluid on Friday still has a small leak. Contacted Pacific Waste technician will arrive no later than noon. Advised
3/16/2004	10:52 AM	Trash- Spill/Landside	/LPI reports there is standing water, curbside, the transportation island for the CT. Notified SPC
3/17/2004	3:40 PM	Trash- Spill/Landside	ATO reports there is broken glass near UA skycap podium. Notified
3/18/2004	7:45 AM	Trash- Spill/Landside	Paging ATO called to report a broken wine bottle between Northwest and American curbside. Notified SPC.
3/18/2004	8:55 PM	Trash- Spill/Airside	MX advised that someone put a chair into the trash compactor and that the chair is now wedged against the compactor ram; compactor is still working. Pacific Waste has been notified and will have some one out tonight or tomorrow morning.
3/22/2004	10:15 AM	Trash- Spill/Landside	ATO, called to report that the trash is over-flowing next to the United skycaps. Notified SPC
8/22/2004	3:16 PM	Trash- Spill/Landside	ATOs report curbside cleanup at T2 outside carousel #1 needed. Notified SPC
8/24/2004	10:45 AM	Petroleum- Spill/Airside	in the SOC called to report a transmission fluid spill at the P-18 gate. Notified in Maintenance

		og of IDDE Repo	orts to SDIA 24-hour Telephone Line for Fiscal Year 2004-2005
Date	Time	Subject/Topic	Log Entry Synopsis
8/25/2004	5:12 PM	Petroleum- Spill/Airside	Fuel spill reported at gate 16. 17:13 - Arrived at gate 16, observed 4-5 gallons from left wing vent, AS#511 (MD-80, Language). ASIG on scene and containing spill. ASIG truck #4940 fueling aircraft. Ocean Blue at slit trench to clean fuel spill.
8/29/2004	10:46 AM	Trash- Spill/Landside	ATO reports there is broken glass in the street curbside baggage claim 6, 7, 8 is T2. Notified SPC.
8/30/2004	7:24 AM	Petroleum- Spill/Airside	/SPC reports the main trash compactor is leaking oil. Contacted /Pacific Waste. A technician will be out within an hour and a half. Notified Zebra units.
9/2/2004	8:25 AM	Trash- Spill/Landside	ATO called to report a broken bottle in front of the baggage claim area, curbside, Commuter Terminal. Notified SPC.
9/5/2004	8:18 PM	Trash- Spill/Landside	Paging reports broken bottle at WN curbside check in. Notified SPC.
9/8/2004	10:30 AM	Unauthorized Discharge	Complaint referral from Port of San Diego Recreation and Environmental Services Department regarding Airport Employee Shuttle Buses being washed in parking lot on Harbor Island with no wash water recovery. Complaint investigated by EAD, leading to conversations with Director of Landside Operations and Shuttle Bus managers regarding the requirement to capture and properly dispose of all washwater or use offsite washing facilities.
9/20/2004	6:52 AM	Trash- Spill/Airside	/SPC reports the trash compactors are full. Contacted /Pacific Waste and was advised they will be out within the next 45 minutes. Zebra units and SPC advised.
9/20/2004	12:24 PM	Trash- Spill/Landside	ATO reports there is a lot of trash blowing around near the sky bridge in T1. Left message for SPC.
9/22/2004	10:15 AM	Wildlife/IPM	Agricultural Pest Control has installed to feral animal traps behind the NSEI trailer along the fence line. Several cats have been observed in the area
9/22/2004	5:41PM	Trash- Spill/Landside	Vehicle fire reported curbside, WN, HPD responding, SDFD en route. 1748 - SDFD on scene. Fire extinguished. DR04-6741.
9/25/2004	11:43 AM	Trash- Spill/Landside	ATO reports there is broken glass curbside T2, FIS area. Notified SPC.
9/27/2004	11:06 AM	Trash- Spill/Landside	/HPD reports that someone has vomited curbside AA. Notified /SPC.
10/6/2004	8:35 AM	Wildlife/IPM	Coordinated weed removal in the ovals adjacent to TD.
10/7/2004	8:00 AM	Wildlife/IPM	Coordinated weed removal operations in ovals O-3-S and O-2-S.
10/9/2004	8:53 AM	Trash- Spill/Landside	reports there is vomit curb side the CT. Notified SPC
10/10/2004	4:26 PM	Trash- Spill/Landside	with WN reports a broken bottle at their sky cap podium. Notified SPC.
10/10/2004	7:17 PM	Trash- Spill/Landside	with WN reports cleanup needed curbside WN near sky caps. Notified SPC.
10/13/2004	10:25 AM	Petroleum- Spill/Airside	Zebra 2 requested Pacific Waste be contacted regarding hydraulic leak at Terminal 1 compactor. Notified Pacific Waste dispatcher. Awaiting a call back. Also requested a pull on the T2 compactor of tomorrow.
10/13/2004	12:15 PM	Petroleum- Spill/Airside	Fuel Spill at gate 5. ASIG overfilled the right wing on WN 737 Approximately 2 gallons spilled. ASIG/WN conducted an immediate cleanup of the site. No drains affected.
10/14/2004	11:50 AM	Sewage	from Northwest called to advise that the hose needs repair at the Triturator. Radioed Maintenance 1.
10/17/2004	12:01 PM	Trash- Spill/Landside	ATO Lead reports there are newspapers flying around the curb in T2W near CO. Notified Section (SPC.
10/19/2004	8:10 AM	Trash- Spill/Airside	/TSA at checkpoint 3 called to request a clean-up on the ramp just as you walk outside. Notified //SPC.
10/19/2004	3:40 PM	Wildlife/IPM	Until 1550, escorted, Agricultural Pest Control to remove skunk from trap by NSEI trailer.
10/20/2004	2:00 PM	Trash- Spill/Airside	/SPC reports the T1 trash compactor is full. Contacted /Pacific Waste who advised the compactor was emptied around 0900 this morning. 15:23 Zebra 3 checked the compactor and advised it is stuffed, but is operating. Contacted /Pac Waste

Date	Time	Subject/Topic	Log Entry Synopsis
10/20/2004	3:46 PM	Trash- Spill/Landside	ATO reports someone has emptied the ash trays on the sidewalk of the CT. Notified SPC.
10/20/2004	4:58 PM	Petroleum- Spill/Airside	/GAT reports there is a strong smell of gas outside their office under gate 38. Notified MX-1. 17:09 MX-1 advised gas overflowed while someone was refueling a truck. Advised
10/20/2004	7:40 PM	Trash- Spill/Landside	/AS reports there is broken glass near the US curbside check-in area. Notified /SPC.
10/23/2004	2:37 PM	Wildlife/IPM	with NSEI reports the trap behind the office trailer has captured a skunk. Notified Zebra 3 who contacted pest control contractor
10/30/2004	6:27 AM	Trash- Spill/Airside	VSPC reports the trash compactor for T2 is OTS. Contacted Waste. He advised a service person will be out in an hour and a half. Advised Zebra 2.
10/30/2004	7:26 PM	Trash- Spill/Landside	ATO Supervisor reports T2 courtesy taxi island needs trash service.Notified SPC.
11/1/2004	12:10 PM	Petroleum- Spill/Airside	Fuel Spill. Gate 23 // AA MD80. 30 Gal fuel caused by a check valve malfunction. Negative storm drain impact. Area clean-up conducted by AA personnel.
11/3/2004	7:45 AM	Trash- Spill/Airside	Removed numerous empty soda cans from the runway and safety area abeam B8 intxn.
11/14/2004	8:47 AM	Trash- Spill/Airside	from Pacific Waste advised that they have exchanged the compactor in T1 for one that is operating and have taken the compactor in T2 to be emptied. He will replace the one in T2. Advised Zebra units.
11/14/2004	9:10 PM	Petroleum- Spill/Airside	Discovered oil leak from rear of JimsAir re-fueling truck No. 63288 parked on JimsAir line; advised PM manager to investigate and soak up oil; no drains affected.
11/17/2004	1:59 PM	Sewage	UA reported a lav truck spill rampside at gate 18. Contacted , Ocean Blue to request clean up. Verified with , UA no gate use until 1700.
11/17/2004	3:34 PM	Trash- Spill/Landside	ATO's report there is broken glass curb side T2 baggage claim 1, 2, & 3. Notified
11/20/2004	7:26 AM	Trash- Spill/Landside	ATO Lead reports the trash cans are overflowing and the area needs to be cleaned for the hold lot. Notified MX-1. 07:49 Ref. 0726 entry: MX-1 advised the trash cans are empty and LPI is responsible for the clean-up. Contacted with LPI.
11/21/2004	7:39 AM	Construction/ Maintenance	WN reports the fence for the construction has fallen over near gate 10. Constructionit is blocking access to baggage claim. Notified MX-1. 0747 - MX-1 advised they have fixed the fence. 8:52 WN called reports there is still a lot of debris in area.
11/21/2004	1:55 PM	Construction/ Maintenance	Fence at Lot 8 between the construction area and parking area is blown over. Notified MX. 14:41 - MX reports it is a contractor fix. Notified DLO. He will have Facilities contact contractor.
11/22/2004	7:05 PM	Petroleum- Spill/Airside	Fuel Spill at the north cargo ramp. Approximately 5 gal spilled by ASIG due to a bad fueling valve while refueling a CAT B727. ASIG contained and cleaned up the spill with the assistance of Maintenance.
11/23/2004	8:04 PM	Trash- Spill/Landside	ATO reports there is dry dog food curb side T2 near DL. DL check-in. Notified /SPC.
11/29/2004	3:00 PM	Petroleum- Spill/Airside	Fuel spill reported at gate 23. 15:06 - Arrived at gate 23, estimated 5 GL of Jet fuel leaked out of L wing vent, AA MD-80 ARFF on scene at 1508. AA crew containing and cleaning spill. 16:19 from EA dept. Asked Zebra 2 to call her back.
12/1/2004	1:00 PM	Unauthorized Discharge	Rinse water from servicing of Port-o-let in the Cell Phone Waiting Lot observed on parking lot service. Service truck from "Spanky's Portable Service (760-731-5252) observed leaving Lot. EAD contacted Spanky's.
12/10/2004	9:45 AM	Trash- Spill/Landside	, ATO Supervisor, called requesting maintenance bring some absorbent to the road in front of the Commuter Terminal. A Red Bus and Advantage Rent Car Van had a collision and the Red Bus is leaking coolant. Notified in MX.
12/13/2004	8:15 AM	Trash- Spill/Landside	from Paging called to report a clean-up curbside in front of carousel 8, Terminal 2. Notified SPC
12/13/2004	1:53 PM	Petroleum- Spill/Airside	ASIG advised of a 2-3 gal fuel spill at Gate 16- Alaska; Z-2 advised and en route to investigate. 13:55 3-4 gallon fuel spill from R wing vent, AS MD-80, ASIG in process of cleaning rome. Storm drains not impacted.
12/14/2004	1:00 PM	Unauthorized Discharge	process of cleaning ramp. Storm drains not impacted. TSA employee reported that during the early morning (pre-dawn) hours he had observed the wash water from the sidewalk powerwashing going down the storm drain. EAD contacted SPC.
12/14/2004	2:35 PM	Trash- Spill/Airside	Request UA Ops to have dumpster lids at gates 12 & 13 closed IAW airport rules and regs

	L	og of IDDE Repo	orts to SDIA 24-hour Telephone Line for Fiscal Year 2004-2005
Date	Time	Subject/Topic	Log Entry Synopsis
2/17/2004	8:23 PM	Trash- Spill/Landside	MX reports T1 parking lot trash service is needed. Notified SPC.
2/17/2004	9:02 PM	Trash- Spill/Landside	with US reports there is a blood spill curbside AS. Notified SPC
2/20/2004	8:59 AM	Unauthorized Discharge	from the SOC reports the Pac Waste spilt some very bad smelling liquid in near the GS1 guard shack. Contacted MX. EAD contacted Waste Management.
2/20/2004	11:35 AM	Wildlife/IPM	approved to unlock the gate directly west of T2W to allow access of Maintenance personnel to enter the area and spray weeds. Maintenance providing security access control to that gate while spraying being conducted
2/21/2004	10:20 PM	Trash- Spill/Landside	Recyclable trash compactor at the Host loading dock is not working. Message left for Pacific Waste.
2/22/2004	6:35 AM	Trash- Spill/Landside	, Maintenance, called to report that the "cardboard" trash compactor is not working on the Host loading dock in T2W. Had Zebra 2 check it around 1000 and he stated the mechanic was on-site.
12/23/2004	2:29 PM	Trash- Spill/Landside	ATO reports broken sprinkler head T2W at second bus stop. Notified MX.
12/23/2004	2:38 PM	Trash- Spill/Airside	Request for Maintenance to clean up kitty litter in front of the dutch flats located at T2W.
2/30/2004	11:45 AM	Trash- Spill/Airside	Z-2 reported the trash compactor near gate 23 is not working. Pacific Waste is sending out a repairman. ETA unknown.
/2/2005	10:43 AM	Trash- Spill/Airside	/SPC reports the trash compactor is OTS in T1. Contacted with Pacific Waste1230: Zebra 2 spoke to and was advised there is a technician en route.
/3/2005	3:22 PM	Trash- Spill/Airside	with WN reports trash dumpster is overflowing. Zebra 2 reports Pacific Waste is returning with their trash receptacle. 15:24 Contacted, Pac waste to check status and requested they expedite return of compactor.
1/4/2005	8:05 AM	Trash- Spill/Landside	ATO called to report broken glass curbside, Southwest Airlines. Notified /SPC.
1/4/2005	2:06 PM	Trash- Spill/Landside	ATO reports there is broken glass curbside T1 under the sky bridge. Notified
/10/2005	1:20 AM	Trash- Spill/Airside	Terminal 1 trash compactor is not working; voice message left for Pacific Waste regarding compactor.
1/11/2005	3:04 PM	Trash- Spill/Airside	WN reports the trash compactor is not working properly near T1. Notified MX and Zebra 2. 15:16 Contacted Pac Waste and was advised the compactor was emptied yesterday. Advised Zebra 2.
/14/2005	7:40 AM	Trash- Spill/Landside	Paging ATO called to report that the trash cans at the Terminal 2 transportation island are overflowing. Requested SPC send someone to empty them.
/14/2005	4:08 PM	Trash- Spill/Landside	reports cleanup needed behind trash cans located west of the bag claim doors curbside CT. Notified SPC.
/14/2005	5:17 PM	Trash- Spill/Landside	reports trash service needed in the cell phone lot. Notified SPC.
/15/2005	4:10 PM	Petroleum- Spill/Airside	Observed Jimsair mobile re-fueler No. 63288 on the truck parking line leaking a minimal amount of oil or hydraulic fluid from below cab; Ntfd Jimsair employee to check and apply absorbent material; no storm drains affected
/16/2005	6:55 PM	Petroleum- Spill/Airside	During the airfield security check a fuel spill was spotted at Cargo #1 from a FedEx A300 (clean-up in progress by ASIG and; FedEx approx 20 gal spilled on the ramp, clean up with quicksorb. No drains affected.
1/17/2005	2:12 PM	Trash- Spill/Landside	with T1 Travelers Aid reports a cleanup needed at the bus stop beneath sky bridge. Notified SPC.
/17/2005	2:58 PM	Trash- Spill/Landside	Travelers Aid T1 reports trashcan is on fire. HPD came on scene as we were on the phone.
/17/2005	9:50 PM	Sewage	Lav spill by ATS on Aloha 737 () at Gate 22; ATS HAZMAT cleaning up with absorbent material; no spillage in drains.
/19/2005	8:15 AM	Unauthorized Discharge	Management truck had spilt leachate at thte guard shack gate area. Spill was cleaned up. Similar incident occurred on 12/20/04. EAD contacted Waste Management.

Log of IDDE Reports to SDIA 24-hour Telephone Line for Fiscal Year 2004-2005					
Date	Time	Subject/Topic	Log Entry Synopsis		
1/20/2005	10:00 AM	Trash- Spill/Airside	Coordinated with maintenance for FOD pickup along the MCRD property line.		
1/22/2005	6:21 AM	Petroleum- Spill/Airside	ASIG reported a fuel spill at gate 35. Spill contained and cleaned up by ASIG. No storm drains affected. Spill caused by leak in fuel hose; spill estimated to less than 4 gals. Info sent to in Environmental Affairs.		
1/24/2005	1:47 PM	Trash- Spill/Landside	in Badging called to report lots of broken glass at sidewalk east of Winship Ln. Called MX and left word on voice mail.		
1/27/2005	3:48 PM	Trash- Spill/Landside	ATO reports white Pontiac curbside T1 baggage is leaking a large quantity of fluid. Notified MX.		
1/28/2005	2:00 PM	Sewage	Tower advised of a small lav truck spill at gate 28. 3 gallons from a NW lav truck spilled and cleaned up. Environmental was advised.		
1/30/2005	9:45 AM	Trash- Spill/Airside	Discovered HP radiator spill that was in the process of cleanup at Gate 34. The conveyor belt was taken out of service and kitty litter was utilized for the cleanup.		
2/2/2005	11:45 AM	Trash- Spill/Airside	HPD advised of a water pipe break under gate 22 area. MX on scene. & advised.		
2/6/2005	9:09 AM	Petroleum- Spill/Airside	WN reports that there is a fuel spill at Gate 7. Notified Zebra 2. ASIG was fueling the WNB737 when the right main began to overfill and discharged approx 2-3 gals. On the ramp. Absorb-n-Dry was used to clean up spill. ASIG and WN employees cleaned.		
2/9/2005	1:45 PM	Trash- Spill/Landside	reported a City bus had an engine fire in front of the Commuter Terminal. HPD and SDFD aware. Zebra 3 enroute.		
2/11/2005	7:15 AM	Petroleum- Spill/Airside	at AA ops called in reference to 50-60 gals fuel spill at gate 25. HPD and advised. Fuel spill was the result of AA overfilling a 737 A/C. Capt. called to advise he is sending Rescue 2 to the fuel spill.		
2/13/2005	12:57 PM	Trash- Spill/Landside	ATO reports there is broken glass curbside WN baggage claim. Notified /SPC.		
2/21/2005	11:34 AM	Trash- Spill/Landside	/SPC reports the trash compactor is full in T2W near the HOST loading dock. Contacted Pacific Waste and they will try to send someone out to service it. Advised Zebra units.		
2/21/2005	2:36 PM	Trash- Spill/Airside	Contacted , UA ops and advised UA dumpster at gate 12 has broken lids. Directed lids to be repaired or replaced to correct.		
2/23/2005	11:15 AM	Trash- Spill/Landside	Received a call from the Paging Office that the trash was over-flowing curbside between Alaska and United. Notified SPC.		
2/23/2005	6:50 PM	Trash- Spill/Airside	Zebra 2 reports the area around the trash compactor needs to be cleaned. Contacted SPC.		
2/24/2005	10:30 AM	Wildlife/IPM	Provided escort for weed spray operations in the Least Tern ovals.		
2/24/2005	4:18 PM	Petroleum- Spill/Airside	ASIG fuel truck spilled approx 1-2 gals. At the concrete protective barrier for LD-2. Fuel spilled into the overfill drain located in the center of the lane. No storm drains affected.		
2/25/2005	7:30 AM	Petroluem Spill/Airside	Hydraulic leak from K-loader at Capital Cargo operations. ASIG conducting cleanup. No storm drains impacted.		
2/25/2005	8:30 AM	Wildlife/IPM	Conducted weed spraying operations near Teledyne Ryan Twy.		
2/25/2005	12:05 PM	Trash- Spill/Landside	reported a broken sprinkler on the walkway between Air Lane and Terminal 1. Notified in Maintenance.		
2/25/2005	3:00 PM	Wildlife/IPM	Completed weed spraying operations at the 27 localizer area. The west end of 27.		
2/26/2005	7:36 AM	Trash- Spill/Airside	/SPC reports the recyclable compactor is full in T2W. Contacted Pac Waste and was advised they will handle the compactor.		
2/27/2005	9:30 PM	Sewage	Lav spill at Gate 13; UA A-320. Ramp agent stated upline station did not properly secure lav handle. Lav spilled on ramp when attempting to secure hose; spill cleaned up with quicksorb; slight amount in storm drains, e-mail to Environmental. EAD contacted Ocean Blue for assessment and cleanup.		
2/28/2005	9:40 AM	Trash- Spill/Airside	/SPC called to report a broken waterpipe ramp side under gate 38 near the elevator. Notified in MX but they were unable to find anything.		
3/2/2005	7:25 AM	Trash- Spill/Landside	ATO called to report broken glass curbside at Delta. Notified SPC.		

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Date	Time	Subject/Topic	Log Entry Synopsis
3/2/2005	9:00 AM	Wildlife/IPM	Conducted weed spray operations in the following areas: ovals 0-9-S, 0-10-S and the area immediately west of B and B8, ARFF, north ramp, D overflow and the area adjacent to the VSR02 gate.
3/3/2005	8:58 AM	Trash- Spill/Landside	ATO Lead reports there is a dry coffee spill curbside the CT. Notified SPC.
3/3/2005	3:30 PM	Trash- Spill/Airside	Advised T1 Host supervisor trash trucks on AOA by gate 5 need to be covered IAW airport rules and regs. Host will move trucks inside and contact Host about getting lids or covers for trash trucks.
3/5/2005	8:05 PM	Sewage	WN reports the water re-fill hose at the triturator is broken; advised MNX-1; MNX affected temp repairs until Monday.
3/7/2005	7:54 AM	Trash- Spill/Landside	ATO reports there is a yogurt spill curbside WN check-in. Notified /SPC.
3/7/2005	3:08 PM	Trash- Spill/Airside	AA employee reports there is a water line spraying its contents below gate 31. Notified MX/
3/9/2005	1:00 PM	Wildlife/IPM	Until 14:00 assisted in escorting Maintenance into ovals for weedcutting.
3/10/2005	10:15 AM	Wildlife/IPM	Escorted weed cutters into ovals at B-2 South of Runway 27.
3/10/2005	1:00 PM	Wildlife/IPM	Until 14:00 escorted weed removal team into the oval at B-2 and Twy Delta.
3/11/2005	7:17 AM	Wildlife/IPM	Until 10:30 escorted Maintenance into ovals adjacent to Teledyne Ryan Twy to work on Least Tern fencing and weed removal.
3/13/2005	8:44 PM	Trash- Spill/Airside	with HP operations reports trash compactor OTS. Notified Zebra 2.
3/16/2005	1:00 PM	Wildlife/IPM	Until 13:40 escort maintenance personnel for weed spraying S edge of O-1-S, B-1 side of blast fence, CG Twy and VSR side of O-3-S. Also escort maintenance to repair fencing in O-2-S.
3/17/2005	8:00 AM	Trash- Spill/Airside	Tower reports FOD on the runway. Removed the broken pieces of a white plastic step stool.
3/17/2005	9:30 AM	Wildlife/IPM	Escorted maintenance in the Least Tern ovals to prepare them for the upcoming season. Also conducted weed spray operations in O-2-S, O-3-S and north of the perimeter road adjacent to the flormer TDY property.
3/18/2005	12:00 PM	Trash- Spill/Landside	Requested MX clean up used absorbent in NTC parking lot.
3/21/2005	5:05 AM	Trash- Spill/Airside	/SPC reported that T2E trash compactor is not operating; Waste Management notified and will send a mechanic.
3/22/2005	11:45	Unauthorized Discharge	Contractors working of Delta Airlines at Delta Cargo Facility on Air Lane Road were discharging fire sprinkler system water from the building to the sanitary sewer when several gallons of water were accidentally released to the surface along the north side of the building. All water wash captured and no storm drains were impacted. EAD sent notice to Delta.
3/22/2005	1:36 PM	Trash- Spill/Airside	Trash compactor area east of T1 in nead of clean up. Contacted SPC.
3/23/2005	12:05 PM	Trash- Spill/Landside	HPD requested the trash cans curbside in front of Terminal 1 be emptied. Notified SPC.
3/23/2005	3:00 PM	Unauthorized Discharge	Contractors investigating former GD property removed BMP from inlet structure and allowed discharge of sediment laden water to enter storm drain system. EAD sent notice to Contractor. Sediment later pumped from catch basin.
3/25/2005	3:41 PM	Trash- Spill/Airside	Leaking pipe located at gate 23 is discharging water into nearby stormdrain. Email notification sent to MX.
3/27/2005	8:09 PM	Trash- Spill/Landside	at WN requested trash service at curbside T1. Notified SPC.
3/28/2005	6:46 PM	Trash- Spill/Landside	ATOs request cleanup curbside T2 bag claim close to carousels 6, 7, 8. Notified SPC
3/29/2005	6:50 AM	Trash- Spill/Airside	Radiator spill at gate #33. HP cleaned up the leak by 0710 hrs with kitty litter.
4/1/2005	5:59 PM	Petroleum- Spill/Airside	Fuel spill at gate 23. Approximately 10 gallons of jet fuel vented out of an AA MD-80 while being fueled. AA personnel immediately cleaned up the spill. No fuel entered the storm drain system. Email sent to Environmental Dept.

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Date	Time	Subject/Topic	Log Entry Synopsis
4/3/2005	2:20 PM	Petroleum- Spill/Airside	Responded to a 10-15 gal fuel spill at gate 34. Spill caused by a faulty reading on the right wing fuel gauge indicator. Upon arrival the spill had been contained, and the clean-up nearly completed. No fuel entered any part of the storm drain system.
4/15/2005	2:16 PM	Trash- Spill/Airside	Hazardous waste left out during vehicle maintenance in America West gate area. Email notifiction to clean up sent to
4/18/2005	1:07 PM	Trash- Spill/Airside	, Mgr. IAS called to inquire whose dumpster (WW01999) is overflowing on Jimsair cargo ramp. Contacted Waste Mgt and requested they contact // Jimsair to inspect and remove dumpster until account name is determined. Advised
4/18/2005	6:10 PM	Sewage	AA personnel report hose broken at triturator. Notified Plumber 2.
4/21/2005	10:30 AM	Wildlife/IPM	On approval conducted weed spray operations in oval O-3-S.
4/22/2005	6:35 AM	Trash- Spill/Landside	called to advise that the trash cans need to be emptied in the cell phone lot. Notified LPI
4/22/2005	8:15 AM	Trash- Spill/Landside	ATO called to advise that the trash cans on the Terminal 1 transportation plaza need to be emptied. Notified SPC.
4/22/2005	3:25 PM	Trash- Spill/Landside	MX called to request trash service in T1 parking pavilion. Notified SPC.
4/22/2005	4:00 PM	Trash- Spill/Landside	ATO Supervisor received request from CSR to empty trash a taxi shuttle island. Notified SPC.
4/22/2005	4:44 PM	Trash- Spill/Airside	Trash found in stormdrain channel located nearest to the NTC property fenceline. Notified MX.
4/23/2005	9:25 AM	Trash- Spill/Airside	US Airways advised that the T1 trash compactor is not working; confirmed by MX. Pacific Waste notified of problem. 10:00 Pacific Waste on site to check trash compactor. 10:15 Ref: 0925 entry the trash compactor is back in service.
4/24/2005	5:17 PM	Trash- Spill/Landside	ATO reports broken glass curbside T2 HP check in. Notified SPC.
4/27/2005	9:15 AM	Sewage	Maint advised that there was a sewer spill/ overflow near gate 23. This backed up pipe has spilled approx 50 gal. into a trench used at the construction area. Ocean Blue advised. City of SD MWWD backup determined to be cause.
4/27/2005	1:29 PM	Trash- Spill/Airside	M-4 reported regular trash compactor OTS, re-sets unsuccessful. Contacted Pac Waste to request repair
4/27/2005	9:55 PM	Trash- Spill/Landside	Notified by Mx that the Host loading dock trash compactor needs to have the micro switch repaired. Message left for Waste Management.
4/29/2005	6:25 PM	Trash- Spill/Airside	Requested //Am West clean up spill pallettes.
4/30/2005	4:46 PM	Sewage	with ATS reports loose hose at triturator. Notified MX.
5/1/2005	5:33 PM	Trash- Spill/Landside	ATO reports broken glass outside T2 bag claim carousels 6, 7 & 8. Notified SPC. 17:58 Second request for entry at 17:33. Notified SPC again.
5/1/2005	8:20 PM	Trash- Spill/Landside	HPD reports spill curbside T2 bag claim. Notified SPC.
5/1/2005	8:20 PM	Trash- Spill/Landside	LPI Supervisor requests trash service at T1 taxi island. Notified SPC.
5/4/2005	1:58 PM	Petroleum Spill/Airside	Authority tour shuttle/tug parked near remote fueling islands experienced oil leak. Absorbent materials still on site. Notified MX to cleanup absorbent material.
5/4/2005	3:40 PM	Trash- Spill/Airside	P-36 opened for trash removal between fences.
5/11/2005	12:00 PM	Wildlife/IPM	Weed spraying was conducted near the Coast Guard gate & the departure end of Rwy 27.
5/14/2005	10:23 AM	Trash- Spill/Airside	Zebra 2 requested Pacific Waste be notified that the trash compactor is OTS in T2E. Notified with Pacific Waste.
5/18/2005	8:30 AM	Trash- Spill/Landside	from paging called to report broken glass curbside at Terminal 1. Notified /SPC.
5/18/2005	3:53 PM	Trash- Spill/Airside	Trash and debris at regular trash compactors needs cleanup. Notified SPC.

	Log of IDDE Reports to SDIA 24-hour Telephone Line for Fiscal Year 2004-2005					
Date	Time	Subject/Topic	Log Entry Synopsis			
5/20/2005	10:00 AM	Trash- Spill/Airside	Opened P-38 for Maint to clean area.			
5/20/2005	2:58 PM	Petroleum- Spill/Landside	ATOs report white Chevy on Winship near cargo has a broken gas tank. Notified MX for cleanup.			
5/20/2005	6:24 PM	Trash- Spill/Landside	ATO reports vehicle at T1 first bus stop has a radiator leak. Notified MX for cleanup.			
5/27/2005	2:44 PM	Petroleum- Spill/Landside	ATO reports oil spill CT at City bus stop. Notified MX. 15:21 Cleanup complete.			
5/30/2005	9:00 AM	Sewage	Requested UA clean-up a "blue water" leak from a lav truck parked between gate 11 and 12. No impact on the storm drains or slit trench in that area.			
5/31/2005	3:16 PM	Petroleum Spill/Airside	/Jimsair reported diesel fuel spill less than 1 gallon resulting from overtopping refueler truck. Spill cleaned up. No storm drains impacted.			
6/2/2005	7:45 AM	Trash- Spill/Landside	called to report a Smarte Carte in front of the CTI at the parking lot with a car battery in it. Notified in Maintenance to have it picked up.			
6/7/2005	7:20 AM	Trash- Spill/Airside	Notified at Pacific Waste that the compactor at Terminal 1 is full. They will pick that one up first this morning.			
6/7/2005	5:41 PM	Trash- Spill/Airside	TSA reports a ice chest full of fish has spilt ramp side under DL baggage claim. Notified SPC.			
6/9/2005	8:00 AM	Wildlife/IPM	Maintenance sprayed weeds from P-18 to airfield generator.			
6/9/2005	9:25 AM	Trash- Spill/Landside	Delta Ops, called to report that the recycle bin for Terminal 2 was full and trash is being placed on the side of the container. Notified Pacific Waste			
6/11/2005	12:00 PM	Wildlife/IPM	Contacted Maint-1 in reference to a swarm of bee's at gate 37and 38. 16:06 MX reports GAT disturbed bees. – 16:18 Exterminator enroute. 16:55 Exterminator on site. – 17:29 Bees removed			
6/23/2005	10:30 AM	Trash- Spill/Airside	/SPC called to report that the compactor is not working in T-2, by Aeromexico. Notified Pacific Waste. 15:05 Zebra 2 reports compactor RTS.			
6/23/2005	1:00 PM	Trash- Spill/Landside	SOC called to report that there is broken glass in the roadway in front of T-1 under the sky bridge. Notified In Maintenance.			
6/23/2005	3:47 PM	Trash- Spill/Airside	Request for Maintenance removal of busted rock bags in front of Soltek trailer located at T2W.			
6/24/2005	3:41 PM	Trash- Spill/Landside	ATO reports trash blowing around at T1 curbside bag claim area. Notified SPC.			
6/26/2005	12:40 PM	Trash- Spill/Airside	Received a call from at DL in reference to ATS trash left at the GATE 38 area and a leaking lav cart. 12:45 Met with ATS personnel cart removed / lav spill cleaned up and trash bags removed to the dumpster.			
6/28/2005	9:15 AM	Wildlife/IPM	Issued work order for Zebra 2 for weed spraying along the fence line between the ARFF station and the west end of the airport			
6/28/2005	9:20 AM	Trash- Spill/Airside	from Delta Ops. reported the compactor T2 by gate 21 is full. Notified Allied Waste. Dispatcher checked and advised the driver should be here within the hour.			
6/29/2005	8:51 PM	Petroleum- Spill/Airside	Skywest reported a fuel spill on the CT ramp. Approximately 1 gallon of auto gas was spilt during refueling of Skywest truck. Fuel was cleaned up immediately and no storm drains were contaminated.			