

San Diego County Regional Airport Authority

Fiscal-Year 2005-2006 Municipal Stormwater Permit Annual Report

January 2007



## Statement of Certification for the 2005-2006 San Diego County Regional A irport A uthority 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 23, 2007

Signature:

Printed Name:

Paul Manasjan

Title:

Director, Environmental Affairs Department



#### SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY

#### INTER-OFFICE COMMUNICATION

Date:

June 27, 2003

To:

Thella F. Bowens President/CEO

From:

**Ted Sexton** 

Vice President, Operations

Subject:

Authorization to Sign National Pollutant Discharge Elimination System

(NPDES) Documents

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

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

Thella F. Bowens President/CEO

San Diego County Regional Airport Authority

Cc: Paul Manasjan, Director, Environmental Affairs

Zane Gresham, Morris & Foerster





30 May 03
Date



## Acknowledgements

The San Diego County Regional Airport Authority fiscal-year 2005-2006 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, the Airport Planning Department, and the Human Resources 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 given 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



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## Executive Summary

The San Diego County Regional Airport Authority (Authority) submits the fiscal-year 2005-2006 (FY05-06) 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 FY05-06 Annual Report describes all the stormwater management activities conducted by the Authority between July 1, 2005 and June 30, 2006 to ensure compliance with the Municipal Permit.

The Authority has owned and operated the San Diego International Airport (SDIA) since January 1, 2003. The SDIA is located on approximately 660 acres adjacent to San Diego Bay, north of downtown San Diego, in San Diego County. The entire jurisdictional area of the Authority, namely, 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 Authority 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 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 a waste reduction and recycling program and the development of an effective outreach program to educate all potential users of the single-stream recycling element. The Authority has established an integrated pest management (IPM) program designed to minimize the amount of pesticides and herbicides used to maintain the buildings and grounds at SDIA.

Forty (40) airport tenants, and the Authority itself, conduct activities that are subject to the Industrial Component of the Municipal Permit. These 41 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 14 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 the preparation of an implementation plan for the SDIA Airport Master Plan and initiated the environmental review processes in accordance with the California Environmental Quality Act (CEQA). Also during this period, the Authority SUSMP process was undertaken on 1 development project.



During the reporting period, there were 8 construction projects at SDIA and the Environmental Affairs Department conducted regular site inspections of each project. One (1) formal enforcement action was initiated and all issues were resolved.

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 257 IDDE incidents recorded, 8 of which involved sewage, and 14 of which were identified as unauthorized discharges. All of the sewage incidents were cleaned up without impacting the MS4. The 14 unauthorized discharge events resulted in 13 verbal notices to cleanup the incident, and 1 written notice to cleanup. All incidents were cleaned up without impact to the MS4.

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, brochures, public service announcements, news releases, meetings, and focused training sessions. The FY04-05 Annual Report suggested that the education and outreach efforts developed for the tenants may need to be expanded and/or more frequently employed. The FY05-06 Annual Report documents those expanded efforts and their effectiveness.

The Authority's stormwater management public participation program is primarily directed at airport tenants and Authority staff, but also includes the general public. Public participation opportunities during this reporting period included: regular meetings of the San Diego County Regional Airport Authority Board, regular meetings of the Lindbergh Airport Managers Committee, 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, entitled the "Storm Drainage System BMP Project," which was initiated in January of 2005 and completed in March of 2006. The Storm Drainage System BMP Project was 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 SWMP to address those sources; and provide recommendations for additional BMPs and for overall improvements to the Authority's stormwater management program.

Using a guidance document entitled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs," the Authority presents an assessment of each component of the stormwater management program implemented during FY05-06. Based on the results of current program implementation and the findings of the effectiveness assessment, the majority of the management measures currently being implemented by the Authority have proven to be effective. Taken as a whole, the Authority's program is in compliance with the Municipal Permit.

This report presents an accounting of the Authority's stormwater management program expenditures for FY05-06, and the budget for FY06-07. Costs are categorized by Personnel, Non-personnel, and the Capital Improvement Program.

The FY05-06 Annual Report documents the Authority's compliance with the Municipal Permit. The majority of the management measures implemented by the Authority have proven to be effective. The Authority will take steps to improve the implementation of required BMPs by both staff and tenants. During FY06-07, the Authority will also revise program elements and the Storm Water Management Plan itself in response to the output from the recently completed Storm Drainage System BMP Project and the anticipated adoption of a new Municipal Permit in late 2006 or early 2007. The FY05-06 Annual Report clearly demonstrates that the stormwater management program at SDIA is adequately planned, executed, reviewed, and funded. The program generally fulfills the requirements of the Municipal Permit.



Annual Report for Fiscal Year 2004-2005

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## 1 Introduction

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

This report describes the stormwater management activities of the Authority during the period of July 1, 2005 to June 30, 2006 - the fiscal year 2005-2006 (FY05-06). The Authority submits this FY05-06 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 Cities of San Diego County, and the San Diego Unified Port District as amended (the 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, and the Real Estate Management Department. These departments are responsible for the implementation of the Storm Water Management Plan (SWMP) for SDIA. Staff from these departments are integral to eliminating and reducing pollutants in stormwater runoff and to ensuring the Authority's compliance with the NPDES permits applicable at SDIA, including the Municipal Permit.

## ORGANIZATION OF THE FY05-06 ANNUAL REPORT

The FY05-06 Annual Report presents a compilation of the Authority's stormwater management efforts for each component of the Municipal Permit in the same order as previous Annual Reports, specifically:

**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 The Authority became the owner and operator of SDIA on January 1, 2003. With approximately 300 employees, the Authority uses an annual budget of approximately \$100 million to manage SDIA - a regional asset responsible for contributing some \$4.5 billion annually to the local economy.



SDIA is located on approximately 660 acres adjacent to San Diego Bay and just north of downtown San Diego in San Diego County.

Approximately 85-90% of the airport property is covered by impervious surfaces. Airport operations include two main airline terminals, a commuter terminal, a fixed base operation facility, one main runway area, taxiways, and ancillary support facilities which include a remote fueling facility, air cargo, ground support, a closed landfill site, an airplane wash-rack, overnight airplane parking areas, and the Airport Rescue and Fire Fighting (ARFF) Facility.

The climate at SDIA is generally mild with an average temperature of 71°F and extremes ranging from the high 40's during the winter to the low 80's during the summer. The majority of the 12 inch-average-annual rain falls during the period from October to April.

SDIA lies within the Pueblo San Diego (908.00) hydrologic unit of the San Diego Basin Plan and within the San Diego Bay Watershed of the Municipal Permit. 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.

In regards to the Municipal Permit, there are 3 notable characteristics of the Authority: 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 Authority is required to maintain compliance with two NPDES Stormwater Permits in operating the SDIA. The Authority has prepared a single document, the SDIA SWMP, to fulfill the requirements of these two permits, specifically:

 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);

The Municipal Permit specifies the waste discharge requirements for discharges of urban runoff from the MS4s of the jurisdictions named. The Authority was added to the list of jurisdictions by Permit addendum on August 13, 2003. The Municipal Permit outlines the responsibilities of the jurisdictions (referred to as the Copermittees) to implement stormwater management programs, best management practices (BMPs), and monitoring programs. The permit requires that these efforts be outlined in a Jurisdictional Urban Runoff Management Program (JURMP) Document. The 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, specific industrial facilities (dischargers), of which SDIA is one, 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 (SDIA SWMP) While not a necessity to review the FY04-05 Annual Report, we present the general structure of the SDIA SWMP here, since the SWMP has been prepared as a single document to meet the requirements of the two NPDES Stormwater Permits listed above. The SDIA SWMP presents information in a manner that facilitates understanding by Authority staff and SDIA tenants. The format of the SWMP is generally based on a standardized format for JURMP Documents that was developed and agreed upon by the Copermittees. There are notable differences, however, most apparent in Chapters 2, 3, and 6 of the SWMP.

The significant difference between the SWMP and a JURMP Document becomes apparent in Chapter 2 of the SWMP, entitled "Description of Facility and Pollutant Sources." Chapter 2 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 further distinguishes the differences between the SWMP and a JURMP Document. Entitled "Operational Storm Water Management Practices," Chapter 3 outlines the BMPs that are required for implementation at the SDIA by the Authority and its tenants during day-to-day operations. The Chapter addresses the Existing Development BMP implementation requirements. The requirements for identification of pollution prevention and the maintenance of the MS4 are also addressed in Chapter 3 [Municipal Permit Requirements F.3.a-d. and H.1.a(2-5)].

Chapter 6 addresses the inspection and enforcement requirements of the Municipal Permit for all Existing Development, except construction [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 (municipal and industrial) and tenant (industrial and commercial) areas and activities. Chapter 6 details the mechanisms in place to enforce the implementation of BMPs and other storm water requirements at SDIA.

## ANNUAL REPORT HIGHLIGHTS

The addition of Universal Waste management to the Authority's pollution prevention efforts is highlighted in the discussion of the Municipal Component in Chapter 2. Changes to the inventories for both the Industrial and Commercial Components are discussed in Chapters 3 and 4, respectively. Chapter 3 also highlights an increase in the enforcement of BMP requirements for industrial operations.

Chapter 6 highlights recent developments towards adopting the Airport Master Plan and the application of SUSMP requirements to one development project. Enforcement of BMP requirements at 1 of 8 construction projects is detailed in Chapter 7. The report also shows an increase in the amount of IDDE information being reported and captured in Chapter 8. The ever-expanding education and outreach efforts of the Authority are noted in Chapter 9.

Chapter 11 (Special Investigations) details the completion of the "Storm Drainage System BMP Project," which was first highlighted in the FY04-05 Annual Report. Project outputs should lead to several stormwater management program improvements, such as updates/revisions to the BMPs currently required by the SDIA SWMP, updates to inspection procedures and forms, and updates to stormwater monitoring programs. Future changes in the Authority stormwater management program, resulting from consideration of the outputs from the Storm Drainage System BMP Project, are expected to be combined with a re-evaluation of other program elements in light of the adoption of a new Municipal Permit currently scheduled to occur in January of 2007.

Finally, the Assessment of Program Effectiveness (Chapter 12) continues to evolve as more data and information are gathered over the three years of program implementation, allowing for a more complete evaluation of the program and more robust conclusions and recommendations for improvement.





## 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 FY05-06 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	Item or Description
Roads	High	4 miles
Parking Lots	High	12 lots
		7,725 total parking spaces
		74 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.

The Authority continues its pollution prevention efforts with its 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 distributed 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 7.5% of the solid wastes generated at SDIA were recycled during the reporting period (that is, 367 tons of material were recycled out of the 4,912 tons of waste generated).

In order to further its efforts as an environmental steward, the Airport Authority provided education about Universal Waste to its employees and tenants in February 2006 in the form of a Tenant Advisory (TA). The TA reviewed the California "Universal Waste Rule" and gave examples of Universal Waste. Accordingly, the Airport Authority initiated a Universal Waste collection program for Authority employees during this fiscal year. Containers are provided in designated areas where Authority employees may dispose of alkali or rechargable batteries, cell phone batteries, and electronic devices. The universal waste is collected and properly disposed/recycled.

The Authority continues to provide the Service Animal and Pet Relief Area for passenger and service animals. Located between Terminal 1 and Terminal 2, the area provides 475 square feet of space for animals to have a water or restroom break while waiting for departure or upon arrival. 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. Approximately 1,825 pet waste bags were dispensed at the Service Animal and Pet Relief Area in FY05-06.

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 of the toner cartridges purchased are recycled cartridges, all of the cleaning and maintenance supplies (such as gloves and dust masks) are 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 tenants also have access to 2 recyclables compactors and several front load recyclables 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 to be 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.
Universal Waste Collection Program	Initiation of a Universal Waste collection program that provides containers for the collection of alkali and rechargable batteries, cell phone batteries, and electronic devices.



MAINTENANCE OF MS4 AND MUNICIPAL FACILITIES The Authority conducts MS4 and municipal facility maintenance activities on a year-round basis. 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 FY05-06

Type of Activity	Manpower Metric*	Materials Metric*
Street Sweeping - Landside	780 hours	3.3 tons
Ramp/Apron Sweeping and Scrubbing - Airside, as needed	624 hours	4,500 gallons of wastewater
Runway Rubber Removal - Airside, as needed	210 hours	28,500 gallons of wastewater
MS4 Cleaning, as needed	270 hours	11.2 tons
Landscape Maintenance	2,240 hours	1,120 cubic yards
Pesticide/Herbicide Application, as needed	51 hours	42.75 gallons
Solid Waste disposal	Not Applicable	4,545 tons
Recyclable Waste recovery	Not Applicable	367 tons

<sup>\*</sup> 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 its inventory of pesticides, herbicides, and fertilizers. A total of 42.75 gallons of pesticides and/or herbicides were applied at SDIA during FY05-06.

## SUMMARY OF INSPECTIONS

The Environmental Affairs Department inspected municipal operations during FY05-06. The inspections conducted 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 site-specific inspections of the closed NTC Landfill portion of SDIA on a quarterly basis.

The annual comprehensive stormwater site inspection found that overall, the BMPs required for municipal operations, as listed in the SWMP, were adequate and properly implemented. Facility operations were found to be clean and orderly. No unauthorized discharges or other concerns were identified.

Table 2-4. Municipal Activity Site Inspections Conducted During FY05-06

Date	Inspection Element
08/12/05	Quarterly Site Inspection
09/16/05	Site-specific Inspection of Closed Landfill
12/12/05	Site-specific Inspection of Closed Landfill
12/29/05	Quarterly Site Inspection
03/10/06	Quarterly Site Inspection
03/27/06	Site-specific Inspection of Closed Landfill
05/17/06 06/01/06 06/02/06	Annual Comprehensive Site Inspection
06/26/06	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 FY05-06.

#### REVISIONS TO THE SWMP

The SWMP was last revised in January of 2005. Assessment of the stormwater management controls being implemented for municipal activities does not suggest the need for any further revisions (see Chapter 12 of this report). The Annual Report for FY04-05 previously suggested that the Authority expected to use the output from the Storm Drainage System BMP Project (see Chapter 11 of this report) to possibly revise SWMP BMP requirements as appropriate and possibly update inspection procedures and forms. However, in anticipation of the adoption of a new Municipal Permit (first released by the RWQCB as a Tentative Order No. R9-2006-0011 on March 14, 2006), the Authority elected to suspend any efforts to revise the SWMP in order to simultaneously incorporate changes that might be required by a new Permit. As such, there are currently no proposed changes to the Authority's stormwater management controls for municipal activities.

Storm Water Management Plan - Municipal Stormwater Permit





# 3 Industrial Component of Existing Development

This chapter presents the Authority's stormwater management activities during FY05-06 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)

Forty (40) of the 56 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 41 entities at the SDIA that are considered subject to the Industrial Component of the Municipal Permit. These 41 entities are considered high priority threats to water quality by Municipal Permit definition. These 41 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 ATS, American Airlines, JimsAir Aviation Services, 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
	Atlantic Southeast Airlines, Inc. fka Delta Connection
	Continental Airlines
	Delta Air Lines
	Frontier Airlines
	Hawaiian Airlines
	Jazz Air (Air Canada)
	Jetblue Airways
	Mesa Airlines, Inc. fka America West Express
	Midwest Airlines
	Northwest Airlines
	Skywest Airlines
	Southwest Airlines
	Sun Country
	United Airlines
	USAirway



Table 3.1 Industrial Operations at SDIA (continued)

Type of Activity	Tenant Name
Cargo Carrier	ABX Air, Incorporated dba Airborne Express
	Ameriflight
	Astar Air Cargo, Inc. fka DHL Airways Inc.
	BAX Global (ATI)
	Federal Express
	Kitty Hawk Aircargo, Inc.
	United Parcel Service Company
	West Air Inc.
Fixed Base Operation	Jimsair Aviation Services
Aircraft Fueler	Aircraft Services International Group, Incorporated
	American Airlines
	Jimsair Aviation Services
Fuel Vendor	Allied Aviation Services
	Jimsair Aviation Services
Aircraft Ground	ATS
Handling Services	GAT
	Integrated Airline Services
	Swift Air Service
	Swiss Port
Food Services - Major	HMS Host Corporation
Aircraft and Ground	American Airlines
Service Equipment Maintenance	ATS
	ExecAir
	United Airlines
Jetway Maintenance Service	Elite Line Services Inc. fka Extreme Line Services, Inc.
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 to their operations, including the generally applicable site-wide BMPs and pollution prevention measures. The 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) a 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 SDIA 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 FY05-06.

Overall, inspections of the industrial operations at the airport indicated that the majority of BMPs are fully to partially implemented. The inspections found 14 separate industrial operations not fully implementing the relevant industrial BMPs required. One instance of non-stormwater discharge from washing activities from one operation was observed during the annual comprehensive site inspection. In each instance, BMPs were compared with those required 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 implemented during the time of inspection. Good housekeeping and material storage BMPs needed the most improvement.



Table 3-2. Industrial Activity Site Inspections Conducted During FY05-06

Date	Inspection Element
07/11/05	Quarterly FAA 139.321(b) Fuel/Fueler Inspection
08/12/05	Quarterly Site Inspection
10/08/05	Quarterly FAA 139.321(b) Fuel/Fueler Inspection
12/29/05	Quarterly Site Inspection
01/10/06	Quarterly FAA 139.321(b) Fuel/Fueler Inspection
03/10/06	Quarterly Site Inspection
04/03/06	Quarterly FAA 139.321(b) Fuel/Fueler Inspection
05/17/06	Annual Comprehensive Site Inspection
06/01/06	
06/02/06	

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

Fourteen industrial operations were issued a written notice in response to issues identified during the annual comprehensive site inspection. Each notice detailed the concerns regarding BMP implementation identified by the Environmental Affairs Department during the inspection, requested corrective action and written response 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 Site Inspections and Dates of Resolution

Operation	Compliance Issue(s)	Type & Date of Notice	Date of Resolution
ABX Air, Incorporated	Used absorbent left on ground surface.  Improper storage of materials and waste.	Written - 06/09/06	06/28/06
American Eagle	Leaking equipment.  Trash and debris accumulation in operations area.	Written - 06/09/06	06/28/06
American Airlines	Leaking equipment.	Written - 06/09/06	06/23/06
Airport Service International Group	Used absorbent left on ground surface.	Written - 06/09/06	06/28/06
Continental Airlines	Used absorbent left on ground surface.	Written - 06/09/06	06/15/06
Delta Airlines	Improper storage of material.  Trash and debris accumulation in operations area.	Written - 06/06/06	06/13/06
Executive Air Maintenance, Inc.	Improper storage of material and waste. Used absorbent left on ground surface.	Written - 06/09/06	06/12/06
Federal Express	Improper storage of material and waste.	Written - 06/06/06	06/28/06
HMS Host	Spills and stains in operations area.  Trash and debris accumulation in operations area.	Written - 06/09/06	06/14/06
Jimsair Aviation Services	Uncontrolled washing activities.  Leaking equipment.	Written - 06/09/06	06/29/06



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

Operation	Compliance Issue(s)	Type & Date of Notice	Date of Resolution
Kitty Hawk Cargo	Used absorbent left on ground surface.  Leaking equipment.	Written - 06/09/06	06/28/06
Swiss Port	Improper storage of materials and waste. Untreated oily stains. Used absorbent left on ground surface.	Written - 06/09/06	06/14/06
United Airlines, Incorporated	Used absorbent left on ground surface. Untreated oily stains. Hazardous materials stored improperly.	Written - 06/09/06	06/21/06
UPS	Hazardous material stored improperly. Untreated spills and stains.	Written - 06/09/06	06/12/06

STORMWATER
MONITORING RELATED
TO INDUSTRIAL
ACTIVITIES

Wet-weather stormwater runoff monitoring is one component of the SDIA SWMP designed to comply with the General Industrial Stormwater Permit. The Authority completed a special project during the fiscal year 2005-2006 which included an evaluation of the existing the storm water sampling plan (see Chapter 11 of this report). In the previous sampling plan, SDIA was divided into 6 general discharge areas based on similar land use and operations. A new sampling plan has been developed to identify pollutants of concern and provide statistical power to future analysis of pollutant loads. Finalized in November 2005, the plan was completed in time to allow for full implementation during the 2005-2006 wet season. The new sampling plan divides the airport into fourteen drainage basins. Ten sites within those 14 basins have been chosen to represent the areas of industrial activity at the airport.

The ten sample site identifiers and a brief description of each location are:

C-B01-1: Grated inlet inside of zipper line, south of FBO, north of runway

C-B03-2: Grated inlet inside of zipper line, south of runway, near B1D sign

C-B05-3: Grated inlet north of Taxiway C, east of Taxiway D

C-B05-4: Grated inlet, south of runway, north of generator yard

C-B06-5: Grated inlet southeast of control tower

C-B07-6: Inlet pipe in manhole west of oil-water separator in Cargo Area

C-B07-7: Grated inlet at south end of Cargo Area, west of the West Wing

C-B08-8: Manhole near Gate 1

C-B04-9: Grated inlet outside of perimeter fence, near beacon, west of Harbor Dr.

SNPTDY-3: Grated inlet, west of sidewalk, west entrance San Park - Harbor Dr.

Wet weather monitoring samples were collected during storm events on October 17, 2005, February 27, 2006, March 10, 2006, and March 28/29, 2006. The laboratory analytical results for these stormwater samples are presented in Tables 3-5A through D.

A total of 446 analyses were performed on the 25 samples collected during the 2005-2006 reporting period. Of these 446 analyses, a total of only 63 analyses exceeded either USPEPA Multi-Sector Permit Benchmarks and Federal, State, and Regional (FSR) Benchmark Values (for those analytes with established benchmarks). Total aluminum, dissolved copper, total copper, total iron, and total zinc accounted for 52 of the 63 (82.5%) Multi-Sector Permit Benchmark exceedances. Sites C-B07-6 and C-B07-7 accounted for the majority (over 50%) of the exceedances. Total aluminum, dissolved copper, total copper, total iron, total zinc, biological oxygen demand (BOD), and chemical oxygen demand (COD) were the parameters with exceedances at these sites. Sites C-B07-6 and C-B07-7 are located near cargo areas and vehicle repair operations. Operations at these locations may result in tire and brake pad wear which may be a possible source of heavy metals. The Airport Authority is using this data to re-evaluate the adequacy and effectiveness of the BMPs implemented in the vicinity of these two sample sites and to identify any needed improvements.



Table 3-5A. Analytical Results of Wet Weather Samples Collected October 17, 2005

						Sam	Sample Site				
Constituent	Units	C-B01-1	C-B03-2	C-B05-3	C-B05-4	C-B06-5	C-B07-6	C-B07-7	C-B08-8	C-B04-9	SNPTDY-3
Hd	pH units	$_{ m LN}$	NT	NT	NT	NT	NT	5.83	NT	6.22	NT
TSS	mg/L	NT	NT	NT	NT	NT	NT	79.0	NT	27.0	NT
Specific Conductance	umhos/cm	NT	NT	NT	NT	NT	NT	157	NT	87.0	NT
BOD	mg/L	NT	NT	NT	NT	NT	NT	95.0	NT	35.0	NT
COD	mg/L	NT	NT	NT	NT	NT	NT	230	NT	141	NT
Ammonia	mg/L	NT	NT	NT	NT	NT	NT	0.440	NT	0.610	NT
Glycols	mg/L	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Oil & Grease	mg/L	NT	NT	NT	NT	NT	NT	2.70	NT	2.20	NT
BTEX	ng/L	NT	NT	NT	NT	NT	NT	<0.50	NT	<0.50	NT
TPH (Gasoline)	ng/L	NT	NT	NT	NT	NT	NT	<50	NT	<50	NT
TRPH	mg/L	NT	NT	NT	NT	NT	NT	9.9	NT	4.7	NT
VOCs	ng/L	NT	NT	NT	NT	NT	NT	<1.0-10	NT	<1.0-10	NT
Total Aluminum	mg/L	NT	NT	NT	NT	NT	NT	2.2	NT	09:0	NT
Total Copper	T/Sn	NT	NT	NT	NT	NT	NT	230	NT	210	NT
Dissolved Copper	ng/L	NT	NT	NT	NT	NT	NT	180	NT	160	NT
Total Iron	mg/L	NT	NT	NT	NT	NT	NT	2.9	NT	0.71	NT
Total Lead	T/Sn	NT	NT	NT	NT	NT	NT	<40	NT	<40	NT
Dissolved Lead	T/Sn	NT	NT	NT	NT	NT	NT	<40	NT	<40	NT
Total Zinc	mg/L	NT	NT	Z	ZZ	Z	Z	790	Z	088	$\Gamma$ N

Table 3-5B. Analytical Results of Wet Weather Samples Collected February 27, 2006

						3	Some Site				
						34111	bic site				
Constituent	Units	C-B01-1	C-B03-2	C-B05-3	C-B05-4	C-B06-5	C-B07-6	C-B07-7	C-B08-8	C-B04-9	SNPTDY-3
Hd	pH units	7.17	6.12	6.19	6.32	5.70	5.96	6.33	7.21	68.9	6.83
TSS	mg/L	4.00	8.00	43.0	32.0	24.0	18.0	56.0	14.0	217	24.0
Specific Conductance	umhos/cm	52.7	42.5	135	207	106	110	186	203	148	25.0
ВОБ	mg/L	6.10	11.2	58.0	64.0	38.0	28.0	72	20	116	23.0
COD	mg/L	17.0	48.0	143.0	151.0	81.0	70.0	142	49.0	48.0	48.0
Ammonia as N	mg/L	2.25	2.00	7.00	4.50	3.75	1.50	3.25	1.00	0.500	0.500
Glycols	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Oil & Grease	mg/L	< 2.00	<2.00	2.2	2.40	2.00	<2.00	5.60	2.20	4.30	<2.00
BTEX	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	1.0 (xylenes)	<0.50	<0.50	<0.50	<0.50
TPH (Gasoline)	ug/L	<50	<50	<50	<50	<50	77	<50	<50	<50	<50
TRPH	mg/L	<1.0	<1.0	3.7	<1.0	<1.0	<1.0	4.4	2.5	<1.0	48
VOCs	ug/L	<1.0-10	<1.0-10	<1.0-10	<1.0-10	<1.0-10	1.0 (m,p- xylenes)	<1.0-10	<1.0-10	<1.0-10	<1.0-10
Total Aluminum	mg/L	<0.063	0.33	0.95	0.67	0.77	0.34	1.1	0.16	6.2	0.37
Total Copper	ug/L	11	180	360	250	320	240	230	73	45	22
Dissolved Copper	ug/L	<10	130	310	200	310	34	160	23	26	14
Total Iron	mg/L	0.064	0.38	0.87	0.87	1.1	3.0	1.4	0.40	8.5	0.51
Total Lead	ug/L	4.8	<4.0	6.1	4.8	4.9	23	17	<4.0	10	4.3
Dissolved Lead	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Total Zinc	mg/L	<0.024	0.059	0.082	0.082	0.15	0.71	0.86	0.13	0.14	0.11



Table 3-5C. Analytical Results of Wet Weather Samples Collected March 10, 2006

						Samı	Sample Site				
Constituent	Units	C-B01-1	C-B03-2	C-B05-3	C-B05-4	C-B06-5	C-B07-6	C-B07-7	C-B08-8	C-B04-9	SNPTDY-3
Hq	pH units	NT	NT	6.85	NT	6.18	6.27	6.27	NT	NT	NT
TSS	T/Sm	NT	NT	00.9	NT	9.00	70.0	89.0	NT	NT	NT
Specific Conductance	umhos/cm	NT	NT	88.0	NT	98.3	135	65.4	NT	NT	NT
BOD	mg/L	$^{ m NT}$	NT	11.0	NT	17.0	74.0	93.0	NT	NT	NT
COD	mg/L	NT	NT	28.0	NT	40.0	142	187	NT	NT	NT
Ammonia as N	mg/L	NT	NT	0.88	NT	1.63	0.740	1.08	NT	NT	NT
Glycols	mg/L	NT	NT	<5.0	NT	<5.0	<5.0	<5.0	NT	NT	NT
Oil & Grease	mg/L	NT	NT	2.00	NT	2.50	3.10	4.30	NT	NT	NT
BTEX	ng/L	$^{ m LL}$	NT	<0.50	NT	<0.50	<0.50	<0.50	NT	NT	NT
TPH (Gasoline)	T/Sn	NT	NT	<50	NT	<50	<50	<50	NT	NT	NT
TRPH	mg/L	$^{ m LL}$	NT	2.0	NT	<1.0	1.3	2.0	NT	NT	NT
VOCs	ng/L	NT	NT	<1.0-10	NT	<1.0-10	<1.0-10	<1.0-10	NT	NT	NT
Total Aluminum	mg/L	NT	NT	0.28	NT	09:0	1.1	1.7	NT	NT	NT
Total Copper	ng/L	NT	NT	87	NT	120	110	95	NT	NT	NT
Dissolved Copper	T/Sn	NT	NT	06	NT	130	92	99	NT	NT	NT
Total Iron	mg/L	NT	NT	0.30	NT	0.63	1.8	2.2	NT	NT	NT
Total Lead	ng/L	NT	NT	<4.0	NT	<4.0	<4.0	14	NT	NT	NT
Dissolved Lead	T/Sn	NT	NT	<4.0	NT	<4.0	<4.0	<4.0	NT	NT	NT
Total Zinc	mg/L	NT	NT	0.22	NT	0.079	0.39	0.65	NT	NT	NT

Table 3-5D. Analytical Results of Wet Weather Samples Collected March 28/29, 2006

						Samı	Sample Site				
Constituent	Units	C-B01-1	C-B03-2	C-B05-3	C-B05-4	C-B06-5	C-B07-6	C-B07-7	C-B08-8	C-B04-9	SNPTDY-3
Hd	pH units	7.40	7.20	08.9	7.30	7.20	7.00	08.9	7.30	7.10	NT
TSS	mg/L	5.00	8.00	28.0	24.0	3.00	14.0	10.0	12.0	18.0	NT
Specific Conductance	umhos/cm	64.5	54.0	27.1	40.3	21.0	30.1	31.2	79.0	250	NT
BOD	mg/L	3.00	<2.00	<2.00	3.60	<2.00	<2.00	<2.00	<2.00	<2.00	NT
COD	mg/L	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	NT
Ammonia as N	mg/L	0.240	0.310	0.490	0.530	0.470	0.410	0.420	0.310	0.270	NT
Glycols	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NT
Oil & Grease	mg/L	<2.00	<2.00	<2.00	3.10	<2.00	<2.00	<2.00	<2.00	2.00	NT
BTEX	ng/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NT
TPH (Gasoline)	ng/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	NT
TRPH	mg/L	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	<1.0	2.2	<1.0	NT
VOCs	ng/L	<1.0-10	<1.0-10	<1.0-10	<1.0-10	<1.0-10	<1.0-10	<1.0-10	<1.0-10	<1.0-10	NT
Total Aluminum	mg/L	<0.063	<0.063	0.16	0.13	0.13	0.083	0.10	<0.063	0.39	NT
Total Copper	ng/L	<10	49	35	54	39	23	25	14	36	NT
Dissolved Copper	ng/L	<10	44	31	51	37	21	21	14	30	NT
Total Iron	mg/L	<0.064	<0.064	0.17	0.13	0.11	0.083	0.096	<0.064	0.44	NT
Total Lead	ng/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	NT
Dissolved Lead	ng/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	NT
Total Zinc	mg/L	<0.024	0.065	0.18	<0.024	<0.024	0.19	0.19	0.091	0.042	NT



Based upon review of the analytical data, the Environmental Affairs Department determined that the majority (approximately 86%) of water quality parameters and concentrations of contaminants in the wet weather monitoring samples collected during the reporting period were below the USEPA Multi-Sector Permit Benchmark values or FSR Benchmark values (for those analytes with established benchmarks). The analytical results for stormwater samples collected during the 2005-2006 wet season are consistent with historic sampling data at the airport. Total copper, dissolved copper, total lead, and total zinc have been consistently identified as contaminants of concern in previous runoff monitoring. Past analysis has suggested that tire and brake pad wear from landing aircraft and/or vehicles may be a likely source of heavy metals. In response, the Airport Authority developed the revised storm water sampling plan to help identify the source of these heavy metals. As more storm water data is collected in the future, the increased statistical power of the dataset will be used to determine pollutant sources and long-term adequacy and effectiveness of both BMPs and the runoff monitoring program.

#### REVISIONS TO THE SWMP

The SWMP was last revised in January of 2005. Assessment of the stormwater management controls being implemented for industrial activities does not suggest the need for any further revisions (see Chapter 12). It should be noted, however, that the inventory of industrial operations has changed with 3 tenants being deleted (California Air Cartage dba Shaker Express, Menlo Worldwide Forwarding, and Ontario Aircraft Service) and 8 new tenants being added (Atlantic SE Airlines Inc. dba Delta Connection; ATS; Jazz Air (Air Canada); Kitty Hawk Aircargo Inc.; Mesa Airlines, Inc. dba America West Express; Midwest Airlines; Sun Country; and West Air Inc.). Furthermore, the Annual Report for FY04-05 previously suggested that the Authority expected to use the output from the Storm Drainage System BMP Project (see Chapter 11 of this report) to possibly revise SWMP BMP requirements as appropriate, update the stormwater monitoring program, and possibly update inspection procedures and forms. However, in anticipation of the adoption of a new Municipal Permit (first released by the RWQCB as a Tentative Order No. R9-2006-0011 on March 14, 2006), the Authority elected to suspend any efforts to revise the SWMP in order to simultaneously incorporate changes that might be required by a new Permit. As such, there are currently no proposed changes to the Authority's stormwater management controls for industrial activities.

Storm Water Management Plan - Municipal Stormwater Permit





# 4 Commercial Component of Existing Development

The stormwater management activities of the Authority during FY05-06 that address the Commercial Component of the Municipal Permit are discussed below. There are several airport tenant facilities and/or operations subject to the Commercial Component. Chapters 2, 3, 6, and 7 of the SDIA SWMP describe the stormwater management controls applicable to them.

#### SOURCE IDENTIFICATION AND PRIORITIES (INVENTORY)

Fifteen (15) of the 56 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 dbe under HMS Host
	Medium	McDonald's dbe under HMS Host
	Medium	Nine Dragons dbe under HMS Host
	Medium	Gate Gourmet
Passenger Services	Medium	Huntleigh USA Corporation
	Medium	ITS (aka SMS)
	Medium	Primeflight Aviation Services
Retail Concessionaires	Low	Casa Fenix dba Express Bodicare and Images of CA
	Low	Procurement Concepts
	Low	Smarte Carte, Incorporated
	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 presents dates on which the quarterly and annual commercial activity site inspections were conducted during the reporting period.



Table 4-2. Commercial Activity Site Inspections Conducted during FY05-06

Date	Inspection Element	
08/12/05	Quarterly Site Inspection	
12/29/05	Quarterly Site Inspection	
03/10/06	Quarterly Site Inspection	
05/17/06	Annual Comprehensive Site Inspection	
06/01/06		
06/02/06		

Overall, the quarterly and annual inspections found the facilities to be implementing the required BMPs. 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.

## 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 FY05-06.

#### REVISIONS TO THE SWMP

The SWMP was last revised in January of 2005. Assessment of the stormwater management controls being implemented for commercial activities does not suggest the need for any further revisions (see Chapter 12). It should be noted, however, that the inventory of commercial operations has changed with 2 tenants being deleted (Project Horizon, Inc. and Sunglass Hut) and 1 new tenant being added (Casa Fenix). Furthermore, the Annual Report for FY04-05 previously suggested that the Authority expected to use the output from the Storm Drainage System BMP Project (see Chapter 11 of this report) to possibly revise SWMP BMP requirements as appropriate and

possibly update inspection procedures and forms. However, in anticipation of the adoption of a new Municipal Permit (first released by the RWQCB as a Tentative Order No. R9-2006-0011 on March 14, 2006), the Authority elected to suspend any efforts to revise the SWMP in order to simultaneously incorporate changes that might be required by a new Permit. As such, there are currently no proposed changes to the Authority's stormwater management controls for commercial activities.





# 5 Residential Component of Existing Development

As stated several times in the SDIA SWMP (specifically, 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 FY05-06 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 under the Education and Public Participation components (Chapters 9 and 10 of this report).

Storm Water Management Plan - Municipal Stormwater Permit





# 6 Land Use Planning for New Development and Redevelopment Component

The Municipal Permit requires the Authority's land use planning policies, principles, and processes support efforts to minimize the short- and long-term impacts of land development activities on receiving water quality. The Municipal Permit requires evaluation of the SDIA Master Plan (yet to be adopted) and modification of the development project approval process and environmental review process, as necessary, to reduce pollutants and runoff flows from development and redevelopment projects to the maximum extent practicable. Aspects of the Authority's master planning process and development approval process relevant to stormwater management 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 FY05-06.

## 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). The following discussion builds upon the information presented in the Annual Report for FY04-05 and outlines events conducted by the Authority during this reporting period related to the continuing development and public review of the Airport Master Plan. As noted in the previous Annual Report,

there are five primary steps to the Airport Master Plan process and on June 6, 2005, the Authority Board adopted a resolution authorizing staff to begin the last of these steps, specifically, the preparation of an implementation plan for the SDIA Airport Master Plan and initiation of the environmental review processes in accordance with the California Environmental Quality Act (CEQA).

The Airport Master Plan, guiding the development of SDIA through 2015, consists of two key components. The first is the Airport Land Use Plan and the second is implementation of specific projects contained in the Airport Master Plan, called the Airport Implementation Plan. The Airport Land Use Plan depicts the boundaries of SDIA and describes existing and proposed land uses and future planning areas. The Airport Land Use Plan will describe four general categories of land use on the airport: airfield, terminal, ground transportation and airport support. For the Airport Land Use Plan, the Authority will describe programs for airport uses, request programmatic approvals and will follow with future project specific environmental consideration. The Airport Implementation Plan is intended to provide project-level approvals for those elements that are to be developed at this time. The Authority has identified specific physical improvements at SDIA to allow the airport to effectively continue its mission of serving San Diego's commercial air transportation needs as forecasted through 2015.

Adoption of the Airport Master Plan by the Authority Board requires compliance with the California Environmental Quality Act (CEQA). To that end, on September 19, 2005, the Authority released a Notice of Preparation (NOP) for a Draft Environmental Impact Report (EIR) for the Airport Master Plan (including the adoption of an airport land use plan and implementation plan) for San Diego International Airport. The release of the NOP included four identical public scoping meetings, two of which were held on September 19, 2005 and two more on September 20, 2005. The public scoping meetings consisted of a brief overview presentation of the Airport Master Plan and the EIR scoping process. Attendees had an opportunity to provide oral and written comments on the scope and content of the EIR. Among other environmental concerns, the EIR specifically addresses water quality, drainage, soil erosion, and solid waste impacts.



On January 13, 2006, the Authority released a Revised NOP for a Draft EIR for the Airport Master Plan. The revised Notice of Preparation amended the NOP published on September 19, 2005. The NOP was revised to explain project elements that been added to the Implementation Plan portion of the Master Plan.

On May 22, 2006, the Authority released the Draft EIR for public review and comment for a 120-day period through September 18, 2006. The Draft EIR noted that hydrology, water quality, and urban runoff impacts could be mitigated. The certification of a Final EIR and subsequent adoption of Airport Master Plan by the Authority Board will ensure that a responsible planning and mitigation program will be implemented at SDIA that considers the full range of development possibilities, cumulative impacts and mitigation opportunities related to water quality and stormwater runoff pollution prevention. As the FY05-06 reporting period ended, the Draft EIR for the Airport Master Plan was still being circulated for public review and comment.

# 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, only one development project at SDIA was subject to the SUSMP requirements, Capital Improvement Project (CIP) #3057 - the Installation of the Engineered Materials Arresting System (EMAS) within the Runway Safety Area. The EMAS is an area of crushable material located at the west end of the airport runway. It is designed to decelerate and arrest an aircraft that has overrun its landing.

In compliance with CEQA, on August 10, 2005, the Authority released a Notice of Intent to Adopt a Mitigated Negative Declaration (MND) for the EMAS Project. The MND stated that the project was subject to the Authority SUSMP process. The Authority SUSMP process requires that an Urban Storm Water Mitigation Plan (USWMP) be prepared by a civil engineer registered in the State of California and submitted to the Authority Environmental Affairs Department for review and approval. The site design, source control, and treatment control BMPs recommended by the USWMP were incorporated into the project design and implementation. Based on discussions with SDIA staff, it was decided that the EMAS installation would

be considered a priority project under the Streets, Roads, Highways, and Freeways category of the Authority SUSMP process for the purposes of identifying pollutants of concern (POCs) and appropriate BMPs. The USWMP found there were no primary POCs associated with the project and that the secondary POCs were total aluminum, total and dissolved copper, total iron, TSS, and total zinc. For the EMAS project, the USWMP determined that the most significant secondary POCs were copper and zinc. Table 6-1 presents a description of the project and the site design, source control, and treatment control BMPs that were incorporated into the project.

Table 6-1. SDIA Development/Redevelopment Projects Subject to SUSMP during FY05-06

Project Name and Description	Site Design and Post-Construction BMPs	Project Status During FY05-06
CIP Project #3057 - Installation of Engineered Materials Arresting System (EMAS) within the Runway Safety Area.  Installation of approximately 2.25 acres of crushable pavement designed to decelerate and arrest an aircraft that has overrun its landing. The EMAS Project area covers approximately 10 acres because the installation requires the relocation of existing radio antennas and lighting structures. The EMAS itself has a total paved area footprint of 250 feet wide by 395 feet long to accommodate the 315-foot by 218 foot EMAS. The installation also requires the abandonment of existing drainage facilities and the installation of a new 12-inch drainage line on the north side of the EMAS, connecting a new catch	Site Design - Strict safety guidelines outlined by the Federal Aviation Administration limited the area available for site design BMPs. The location and nature of the EMAS project further limited incorporation of extensive site design BMPs. As a result of these limitations, site design BMPs were not considered economically or technically practicable. However, existing vegetation was not disturbed in order to minimize clearing and exposure of sediment and soil. Since the EMAS installation project redevelops an already developed area, runoff characteristics did not change significantly from pre-project conditions.  Source controls - BMPs were selected from those listed in the Authority's SWMP. The applicable source control BMPs to be fully implemented following construction of the EMAS include: 1) non-stormwater management; 2) employee training; 3) outdoor wash-down and sweeping; 4) storm drain maintenance; 5) housekeeping; 6) spill prevention, control, and cleanup; and 7) legacy soil contamination management.  Treatment controls - The same site limitations associated with site design BMPs resulted in selection	Under Construction as of June 2005.
basin to an existing 18-inch storm drain, as well as a new drainage line on the south side of the EMAS that will connect to an existing 54-inch storm drain.	of drainage or catch basin filter inserts as the most economically and technically practicable treatment control BMP.	



Construction of the EMAS Project began in June of 2005 and continued beyond the end of the reporting period.

#### REVISIONS TO THE SWMP

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

Storm Water Management Plan - Municipal Stormwater Permit





# 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 FY05-06.

#### SOURCE IDENTIFICATION AND PRIORITIES (INVENTORY)

There were 8 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 8 projects, and Allied Aviation initiated the remaining project. The Authority has determined that all 8 construction projects are medium threats to water quality in accordance with the Municipal Permit. The 8 projects subject to the Construction Component requirements of the Municipal Permit are listed in Table 7-1 below.

Table 7-1. SDIA Medium Priority Construction Projects - FY05-06

#	Sponsor	Project Name	Project Description	Project Status during FY05-06
1	Authority	CIP #3096M T2E Baggage Screening Project	Construct structural canopy and baggage conveyor system in Terminal 2 East.	Started March 2005 and completed October 2005
2	Authority	CIP #4010 Airfield Lighting Improvements	Reconfigure Taxiway Edge lights at Taxiways C and D and construct three light masts at the West Remain Over Night.	Started October 2005 and completed March 2006
3	Authority	CIP #3056A Reseal PCC Joints	Pavement and joint repair for airfield pavement including taxiway, runway, and aprons	Started November 2005 and continued through June 2006
4	Authority	CIP #3096I T1E 100% Baggage Screening Project	Construct structural canopy and baggage conveyor system in Terminal 1 East.	Started January 2006 and continued through June 2006
5	Authority	CIP #4007 Perimeter Intrusion	Install new intrusion detection system on airfield perimeter fencing and gates.	Started March 2006 and completed May 2006
6	Authority	CIP #3060A Replace ARFF Bay Doors	Construct supporting wall, widen door spaces, and install new doors at the ARFF station.	Started April 2006 and continued through June 2006
7	Authority	CIP #3057 EMAS	Improve runway safety area by upgrading the instrument approach and installing an Engineered Materials Arresting System.	Started May 2006 and continued through June 2006
8	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.	Continued from June 2005 and completed August 2005

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, 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 shows the 8 construction projects inspected during the fiscal year, corresponding threats to surface water quality prioritization and their corresponding inspection dates. A total of 103 construction inspections were conducted during the fiscal year.

Along with the regular site inspections, the Environmental Affairs Department also participated in pre-construction meetings and regularly-scheduled (typically weekly) construction progress meetings. These meetings provided a means for direct contact with construction contractors in order to reinforce storm water pollution prevention principles and provide more education about BMPs related to the project. The Environmental Affairs Department participated in a total of 95 construction project-related meetings this fiscal year.

In addition to the inspections and attendance at meetings 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 every day of construction activity. The FDD construction inspectors are familiar with proper storm water 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 FY05-06

#	Project Name	Water Quality Threat Priority	Inspectio	n Date
1	CIP #3056A - Reseal PCC Joints	Medium	December 21, 2005	April 26, 2006
			December 28, 2005	April 27, 2006
			January 6, 2006	May 1, 2006
			January 16, 2006	May 2, 2006
			January 17, 2006	May 4, 2006
			January 20, 2006	May 5, 2006
			January 31, 2006	May 8, 2006
			February 1, 2006	May 10, 2006
			February 2, 2006	May 11, 2006
			February 17, 2006	May 15, 2006
			March 9, 2006	May 16, 2006
			March 20, 2006	May 18, 2006
			March 21, 2006	May 19, 2006
			March 22, 2006	May 26, 2006
			March 24, 2006	June 6, 2006
			March 29, 2006	June 12, 2006
			March 30, 2006	June 13, 2006
			April 4, 2006	June 15, 2006
			April 11, 2006	June 16, 2006
			April 12, 2006	June 19, 2006
			April 13, 2006	June 22, 2006
			April 17, 2006	June 23, 2006
			April 20, 2006	June 29, 2006
2	CIP #3057 - EMAS	Medium	June 6, 2006	June 22, 2006
			June 13, 2006	June 23, 2006
			June 15, 2006	June 29, 2006
			June 16, 2006	
3	CIP #3060A - Replace ARFF Bay Doors	Medium	May 19, 2006	
			June 22, 2006	



Table 7-2. Construction Activity Inspections at SDIA during FY05-06 (continued)

#	Project Name	Water Quality Threat Priority	Inspecti	on Date
4	CIP #3096I - T1E 100% Baggage Screening	Medium	February 2, 2006 February 21, 2006 March 9, 2006 March 14, 2006 March 20, 2006 April 4, 2006 April 11, 2006 April 17, 2006 April 23, 2006	April 24, 2006 May 1, 2006 May 8, 2006 May 15, 2006 May 25, 2006 June 12, 2006 June 19, 2006 June 23, 2006 June 29, 2006
5	CIP #3096M - T2E Baggage Screening	Medium	July 12, 2005 July 27, 2005 August 5, 2005 August 17, 2005 August 30, 2005	September 6, 2005 September 20, 2005 September 26, 2005 October 7, 2005
6	CIP #4007 - Perimeter Intrusion	Medium	April 24, 2006 April 27, 2006 May 2, 2006 May 5, 2006 May 8, 2006	
7	CIP #4010 - Airfield Lighting Improvements	Medium	December 6, 2005 December 8, 2005 December 14, 2005 December 21, 2005	January 31, 2006 February 17, 2006 March 9, 2006 March 20, 2006
8	Tenant Improvement Project # 012-035-370 Remote Fuel Dispensing Site and UST Upgrades - Allied Aviation	Medium	July 7, 2005 July 14, 2005 July 21, 2005 July 28, 2005	August 4, 2005 August 11, 2005 August 18, 2005

In general, the construction project inspections conducted by the Environmental Affairs Department found these 8 projects to be in substantial compliance with the requirements of the SDIA SWMP and with the Municipal Permit Construction Component. Lack of housekeeping, poor materials/waste management, improper concrete waste management, and unprotected storm drains were the issues of concern most frequently

identified. The first three concerns were identified in the Annual Report for Fiscal Year 2004-2005 and tend to be issues that require constant attention of construction contract site supervisors. Unprotected storm drains is not a usual concern due to the location of the construction projects at the airport. The majority of projects are in one location and storm drains are identified immediately. However, CIP #3096 - Reseal PCC Joints was a project that required the contractor to move to different locations within the airport in order to complete construction. In response, the Environmental Affairs Department inspected each job site as the contractor moved around the airport. Occasionally the contractor would overlook a storm drain and the inspector would immediately bring it to the attention of the contractor. As soon as the unprotected storm drain was noted, the contractor implemented the required storm drain BMPs.

The Environmental Affairs Department has continued to enhance 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 properly implemented. These issues were generally corrected once they were brought to the attention of the construction contract supervisor at the end of the inspection.

The Environmental Affairs Department issued one Official Notice (Notice) to one construction contractor during the reporting period. The Notice was issued on March 27, 2006 to a construction contractor for a leaking temporary concrete washout pit outside the contractor's laydown yard. The contractor was instructed to reconstruct another washout pit in accordance with their Storm Water Pollution Prevention Plan (SWPPP) and associated stormwater BMPs. The Environmental Affairs Department provided education to the contractor about concrete waste management BMPs. The contractor removed the concrete washout pit and constructed a new one within the laydown yard.



Table 7-3. Types of Construction Activity for which Stormwater BMPs Were Not Properly Implemented as Determined During Site Inspections - FY05-06

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
Storm drains not protected	SE-10 Storm Drain Inlet Protection

<sup>\*</sup> 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 in the field and at weekly progress meetings. One Notice was issued to a construction contractor for improper concrete waste management. The contractor resolved the issue and no follow-up enforcement was needed.

# EDUCATION FOCUSED ON CONSTRUCTION ACTIVITIES

The Authority's efforts during FY05-06 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.

Storm Water Management Plan - Municipal Stormwater Permit





# 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. 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 FY05-06.

SITE-WIDE AND MS4-SPECIFIC INSPECTION ACTIVITIES In order to ensure the health and safety of the more than 17.3 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 (October 1 - May 31). 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.

## DRY WEATHER MONITORING PROGRAM

The Authority dry weather monitoring program utilizes monitoring, 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.



Table 8-1. IDDE MS4 Inspection and Monitoring Conducted During FY05-06

Date	Inspection Element
08/12/05	Dry Weather Monitoring
08/12/05	Quarterly authorized/unauthorized non-stormwater discharge monitoring
09/01/05	Dry Weather Monitoring
09/13/05	Dry Weather Monitoring
10/06/05	Dry Weather Monitoring (follow-up)
10/07/05	Monthly Wet Weather Monitoring - sample collected
10/17/05	Monthly Wet Weather Visual Observations
12/29/05	Quarterly authorized/unauthorized non-stormwater discharge monitoring
12/31/05	Monthly Wet Weather Visual Observations
01/14/06	Monthly Wet Weather Visual Observations
01/27/06	Monthly Wet Weather Visual Observations
02/17/06	Monthly Wet Weather Visual Observations
02/27/06	Monthly Wet Weather Monitoring - sample collected
03/03/06	Monthly Wet Weather Visual Observations
03/10/06	Quarterly authorized/unauthorized non-stormwater discharge monitoring
03/10/06	Monthly Wet Weather Monitoring - sample collected
03/17/06	Monthly Wet Weather Visual Observations
03/28-29/06	Monthly Wet Weather Monitoring - sample collected
04/04/06	Monthly Wet Weather Visual Observations
04/17/06	Monthly Wet Weather Visual Observations
05/17/06 06/01/06 06/02/06	Quarterly authorized/ unauthorized non-stormwater discharge monitoring

Dry Weather Monitoring at the 6 monitoring locations was conducted on August 12, 2005, September 1, 2005, and September 13, 2005, with a follow-up investigation for Site ID 3 and a related site on October 6, 2005. The field data and analytical data reports for the dry weather monitoring at the 6 sample locations is presented in Appendix A. Samples were taken for sites with flowing or ponded water. At all but one site, Site ID 3, no water or discharge of any kind was observed during all 3 monitoring events. Field observations at the time did not suggest that 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.

As mentioned above, the only dry weather monitoring sample was taken from Site ID 3 on three separate monitoring events. Field observations on all sampling dates found no evidence of overland flow, but there was ponded water in the storm drain at the site. Site ID 3 is a slit trench located in the immediate vicinity of the terminal gates. Ground service equipment and vehicles, aircraft, and ramp operations take place around the site. Field screening analytes above the action level on August 12, 2005 were ammonia- N at 6.0 mg/L and conductivity at 70,000 mS/cm. No immediate sources of ammonia-N were present, although it appeared that there was trash and debris inside the trench. High conductivity could possibly indicate seawater or ground water intrusion.

On September 1, 2005, another sample was collected from the site. Field screening analysis showed analytes above the action levels for ammonia-N and conductivity at 2.5 mg/L and 64,100 mS/cm, respectively. Another sample was taken on September 13, 2005. This sample went through laboratory analysis and it was found that ammonia-N, nitrate-N, and phosphorus were all above their action levels at 128 mg/L, 90.0 mg/L, and 16.0 mg/L, respectively. Field tests found that conductivity was high, at 80,000 mS/cm. Bacterial analysis was performed and total coliform, fecal coliform, and enterococcus were all below their respective action levels. Dissolved cadmium and lead were not detected in the sample; however, dissolved zinc was detected. Total hardness was not tested in lab analysis, so metals could not be evaluated according to the California Toxics Rule.



Another sample was taken from Site ID 3 on October 6, 2005 and was analyzed in the lab as a follow-up investigation. Lab analysis found that both ammonia-N and nitrate-N were above their action levels at 1.55 mg/L and 14.0 mg/L, respectively. Bacteria analysis did not show evidence of any exceedances of actions levels. Total copper and total zinc were detected in the sample, however, dissolved metals were not laboratory tested. Another sample was taken on this date from a similar site near Site ID 3. This site is also inside the slit trench around the terminal gates. Ponded water was found inside the trench, and there was no evidence of overland flow into the trench. It has similar activity around it such as ground service equipment and vehicles, aircraft, and ramp operations. Samples analyzed in the lab from this site showed action level exceedances for ammonia-N, nitrate-N, and phosphorus. Action levels for total coliform, fecal coliform, and enterococcus were exceeded as well. Total copper and total zinc were detected in the sample, however, dissolved metals were not laboratory tested. No illegal discharge or water was observed flowing to the site to account for any of the exceedances.

According to the data tested both in the field and in the lab, there were exceedances for ammonia-N, nitrate-N, phosphorus, and conductivity at Site ID 3. A similar site showed exceedances for these constituents, as well as bacteria. There was no evidence of one source causing the exceedances. Possible sources of water to these sites could be operational procedures for the potable water cabinet that connects to the aircraft, seawater intrusion, or a spill from a lavatory truck. All of these sources of water combined with decaying trash and organic material inside the trench could be possible sources of these action level exceedances. The Airport Authority is evaluating options, including a special investigation of the storm drain trenches around the terminals, to aid in determining the possible source(s).

## 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: the Airside Operations Department 24-hour telephone line (619-400-2710); the Environmental Affairs Department main telephone line (619-400-2782) and 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 257 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 airside. 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 257 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 FY05-06\*

Incident Category	Number of Incidents
Trash or non-petroleum spill on the airside	81
Trash or non-petroleum spill on the landside	58
Pest management issue	52
Petroleum spill on the airside	32
Unauthorized discharge	14
Petroleum spill on the landside	10
Sewage issue	8
Construction project issue	2

<sup>\* -</sup> See Appendix B for detailed description of each incident.

The two regional hotline efforts of the Municipal Copermittees, Project Clean Water and THINKBLUE, 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 FY05-06.

Table 8-3. Hazardous Wastes Disposed of by the Authority during FY05-06

Description of Waste	Total Quantity Disposed	
Hazardous Waste, Solid (Debris with Mercury)	175	pounds
Asbestos and Non-friable Waste	104	cubic yards
Waste Flammable Liquid (Paints and Thinners)	50	gallons
Waste Corrosive Inorganic Liquid (Sodium Hydroxide and Stabilizer Solution)	2	gallons
Waste Aerosols, Flammable	10	pounds
Non RCRA Hazardous Waste, Solid (Toner, Soil and/or Debris)	156,020	pounds
Non RCRA Hazardous Waste, Liquid (Waste Oil and/or Latex Paint)	140	gallons
Non RCRA Hazardous Waste, Solid (Oily Debris and/or Diesel)	300	pounds
Non RCRA Hazardous Waste, Liquid (Antifreeze)	30	gallons
Universal Waste, (Fluorescent Lamps, Monitors, Alkali and/or Rechargeable Batteries)	10,065	pounds

## 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 8 IDDE incidents related to sewage at SDIA during the reporting period. Six (6) 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 mobile lavatory trucks and then into the sewer system at the triturator via a connection hose. Of the 8 IDDE incidents involving the triturator, 2 of them involved holes or tears in the connection hose. Four (4) incidents involving the triturator resulted from mechanical breakdowns at the device. One (1) spill incident occurred at 7:55 p.m. on November 19, 2005 involving a lavatory waste spill at the terminal gate area during transfer of sewage from the aircraft to lavatory waste truck. The remaining IDDE incident related to sewage involved a blocked sewer pipe,



which occurred on January 23, 2006 at 1:17 p.m. The sewage spill originated from an indoor public rest room located in the West Rotunda and leaked into an electrical room on the ramp side. The problem was resolved immediately. 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 54% of the incidents listed in Table 8-2 were related to trash and non-petroleum spills on either the airside or the landside. Each of these issues was addressed without impacts to the stormwater conveyance system. Of the 32 petroleum spills on the airside and the 10 petroleum spills on the landside, all but two involved less than 20 gallons of petroleum. Each of these 32 petroleum spills was cleaned up immediately, including the two 20 gallon spills that occurred on November 22, 2005 and March 20, 2006. As previously noted, the pest management issues actually involved 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 8 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 FY05-06 were minor issues that were resolved.

The Authority IDDE program identified 14 incidents as unauthorized discharges during FY05-06, 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 14 incidents. Three (3) of the unauthorized discharge incidents involved improper management of wash water, 3 incidents involved water line breaks, 2 incidents involved fire sprinkler system water, 2 incidents involved a spill at the United Airlines Cargo facility, 1 incident involved fire fighting foam discharged during an aircraft engine fire, 1 incident involved trash, 1 incident

involved a discharge from a leaking heating ventilation and air conditioning (HVAC) unit, and 1 incident involved fire fighting foam discharged during a training exercise. In response to 13 of the 14 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. On October 17, 2005, the Environmental Affairs Department issued a written Notice to United Airlines for an ongoing unauthorized discharge, and directed cleanup and implementation of proper BMPs. The unauthorized discharge was immediately cleaned up. None of the IDDE incidents that occurred during this reporting period required any additional follow-up or further enforcement actions.

#### REVISIONS TO THE SWMP

The SWMP was last revised in January of 2005. Assessment of the stormwater management controls being implemented to address illicit discharge detection and elimination does not suggest the need for any further revisions (see Chapter 12). The Annual Report for FY04-05 previously suggested that the Authority expected to use the output from the Storm Drainage System BMP Project (see Chapter 11 of this report) to possibly update the stormwater monitoring program and possibly update inspection procedures and forms. However, in anticipation of the adoption of a new Municipal Permit (first released by the RWQCB as a Tentative Order No. R9-2006-0011 on March 14, 2006), the Authority elected to suspend any efforts to revise the SWMP in order to simultaneously incorporate changes that might be required by a new Permit. As such, there are currently no proposed changes to the Authority's stormwater management controls to address illicit discharge detection and elimination activities.





# 9 Education Component

The overall goal of the education component of the SDIA SWMP is 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 c) the SWMP and its 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. Described below are the education activities conducted by the Authority during FY05-06.

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 noted previously in this Annual Report). As such, the audiences addressed by the education component of the SWMP include: the general public and school children; Authority departments and personnel; the airport industrial and commercial tenants; quasi-governmental agencies, such as the FAA; and construction site project managers/developers/contractors.

The education program emphasizes the consistent presentation of readily understandable information about 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" message to a particular audience. The education program seeks to partner with other Copermittees, airport tenants, non-profit organizations, and other interested stakeholders to ensure cost-effective use of resources.

The discussion of the Authority's Education Program in Chapter 8 of the SWMP provides details on the education mechanisms and proposed training frequencies. The following tables summarize the education efforts conducted by the Authority during the reporting period. There are several instances where one education mechanism has been applied to several target audiences. For example, the Authority 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 FY05-06: 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 Public and School Children during FY05-06

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 and the SWMP.	4,550	
	Authority home page (www.san.org) announces the 21st Annual California Coastal Cleanup Day from September 13, 2005 until end of month.	10,950	
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	100s of thousands	
Posters/Banners/ Signage in Terminals and	21st Annual California Coastal Cleanup Day Billboard display throughout Terminals beginning September 13, 2005 and on-going.	100s of thousands	
Parking Lots	"Don't Trash California" Anti-litter Campaign Billboard displays throughout Terminals beginning January 9, 2006 and on-going.		
	Protect San Diego Coastal Wildlife Billboard displays throughout Terminals beginning March 7, 2006 and ongoing.		
	"Don't Trash California" Anti-litter Campaign Dashboard Litter Bags distributed at Airport paid-parking lot exits from December 18, 2005 to January 16, 2006	140,000	
Brochures	Copies of the Airport Recycling Guide in airport terminals and at various outreach events.	Up to 2,500	
Public Service Announcements (PSAs)	Think Blue PSAs aired in the Terminal 2-West baggage claim area throughout the entire FY05-06 reporting period.	100s of thousands	
in Terminals	"Don't Trash California" Anti-litter Campaign PSA aired in Terminal 2-West baggage claim area beginning January 16, 2006.		
Media News Releases	a News Releases  November 15, 2005, news release announces the "Green Airports: Balancing Growth and a Healthy Environment" public forum sponsored by the Authority.		
Collaborative Efforts	Continued collaboration with WiLDCOAST to support the "Wildlife Outreach Program" to encourage conservation of endangered wildlife and habitats around San Diego Bay. Includes display of local school kids endangered-species-related artwork on the Art Wall in Terminal 2 from March 1, 2006 until April 16, 2006.	Not Applicable	
	Continued collaboration with San Diego CoastKeeper to support "Project Swell" and educate children with a 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.		
	Collaboration with I Love A Clean San Diego to sponsor the 4th Annual Creek to Bay Cleanup Event held April 29, 2006.		
	Collaboration with Project Clean Water to sponsor the 2006 Clean Water Summit held June 30, 2006.		

Table 9-1. Education Activities for the Public and School Children during FY05-06 (Continued)

Program Element	Description of Activities	Estimated Audience Size
Special Presentations	October 29, 2005. Presentation to the "Price Fellows" group of high school students regarding environmental issues at the Airport.	35
	November 16, 2005. Public forum entitled "Green Airports: Balancing Growth and a Healthy Environment" sponsored by the Authority and featuring a panel discussion on future airport growth and compatibility with a healthy environment. Event was followed by radio interviews with several panelists broadcast on KPBS.	100+in attendance, and 10s of thousands for radio broadcast
	April 23, 2006. Information booth at Earth Day Fair in Balboa Park included brochures about environmental issues at the Airport.	1,000s
	"Green Airports: Balancing Growth and a Healthy Environment" public forum sponsored by the Authority.	200
	June 29, 2006. Authority Environmental Affairs Department staff featured as presenter at seminar for Phase II Stormwater Programs.	30



Table 9-2. Education Activities for Authority Employees during FY05-06

Program Element			
Authority Webpage	Environmental Affairs webpage (www.san.org/environmental) includes information on the Authority's stormwater program and the SWMP.	Up to 300	
	Airport Recycling Guide, Pollution Prevention information, and Energy Savings Checklist remain posted on the intranet and internet.		
	September 13, 2005. Both the Authority internet and intranet home pages announce the 21st Annual California Coastal Cleanup Day.		
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	Up to 300	
Posters/Banners/ Signage in Terminals and	21st Annual California Coastal Cleanup Day Billboard display throughout Terminals beginning September 13, 2005 and on-going.	Up to 300	
Parking Lots	"Don't Trash California" Anti-litter Campaign Billboard displays throughout Terminals beginning January 9, 2006 and on-going.		
	Protect San Diego Coastal Wildlife Billboard displays throughout Terminals beginning March 7, 2006 and ongoing.		
	"Don't Trash California" Anti-litter Campaign Magnetic Bumper Stickers distributed to tenants and staff beginning June 21, 2006 and on-going.	Up to 300	
Brochures	Copies of the Airport Recycling Guide in airport terminals and at various outreach events.	Up to 300	
Public Service Announcements (PSAs)	Think Blue PSAs aired in the Terminal 2-West baggage claim area throughout the entire FY05-06 reporting period.	Up to 300	
in Terminals	"Don't Trash California" Anti-litter Campaign PSA aired in Terminal 2-West baggage claim area beginning January 16, 2006.		
Media News Releases	November 15, 2005. News release announces the "Green Airports: Balancing Growth and a Healthy Environment" public forum sponsored by the Authority.	Up to 300	
	February of 2006. Authority Employee Newsletter (JetStreams) article regarding pollution prevention and recycling.		
Email Announcements/ Tenant Advisories	July 7, 2005. Email to Facilities Maintenance Department as follow-up to June 2005 Stormwater Training, providing weblinks to local jurisdictional Stormwater Management Programs and other pollution prevention issues.	52	
	July 25, 2005. Email to Facilities Maintenance Department regarding pollution prevention and APCD lawn-mower trade-in event.		
	August 4, 2005. Email to Facilities Maintenance Department regarding pollution prevention and electronic waste collection events.		
	September 13, 2005. Email to entire staff regarding the 21st Annual California Coastal Cleanup Day to be held September 17, 2005.	Up to 300	

Table 9-2. Education Activities for Authority Employees during FY05-06 (Continued)

Program Element	Description of Activities	Estimated Audience Size*
Email Announcements/ Tenant Advisories	December 7, 2005. Email to entire staff regarding the Holiday Season pollution prevention tips.	Up to 300
(continued)	January 17, 2006. Email to Facilities Development Department Project Managers and Construction Inspectors regarding the need for vigilant construction stormwater pollution prevention during the rainy season.	20
	February 6, 2006. Email to entire staff regarding the new Universal Waste Rule requirements that go into effect on February 8, 2006 and steps Authority has taken to ensure compliance.	Up to 300
	March 22, 2006. Email to entire staff regarding International World Water Day and appreciation of local and global water resource and water quality issues.	
	June 20, 2006. Email regarding 2nd Annual Airport Safety Fair on June 21, 2006.	
Annual Open House	April 28, 2006. Provided outreach and training materials regarding the Authority's Storm Water Management Program at the Annual Employee Open House.	Up to 300
Department Meetings	Environmental Affairs Staff attendance at Facilities Maintenance Department - Monthly Status Meetings:  September 27, 2005 April 25, 2006  November 27, 2005 May 30, 2006  January 31, 2006	Up to 40
Targeted Training/ Presentations for	July 14, 2005. Facilities Maintenance Department - Stormwater Pollution Prevention and Pesticide Application Practices.	41
Specific Employee Groups	August 29, 2005. Facilities Development Department - Stormwater Management Refresher Training for Project Managers.	15
	September 12, 2005. Facilities Development Department - Stormwater and Low Impact Development Practices Training.	15
	November 7, 2005. Airside Operations Department - Stormwater Management Refresher Training.	9
	March 24, 2006. Strategic Planning Division - Environmental Issues and Stormwater Management Overview.	21
	May 3, 2006. Facilities Maintenance Department - Stormwater Management Refresher and Universal Waste Training.	41
	Mandatory Stormwater Pollution Prevention Awareness Training:         May 15, 2006       May 23, 2006       June 15, 2006         May 16, 2006       May 24, 2006       June 19, 2006         May 19, 2006       May 26, 2006       June 22, 2006         May 22, 2006       May 31, 2006	Up to 300



Table 9-2. Education Activities for Authority Employees during FY05-06 (Continued)

Program Element	Description of Activities	Estimated Audience Size*
Targeted Training/ Presentations for Specific Employee Groups (continued)	June 21, 2006. Airport Tenant and Employee Safety Fair - outreach and training materials regarding the Authority's Stormwater Management Program.	Up to 300
Special Presentations	September 17, 2005. 21st Annual California Coastal Cleanup Day.	15
	October 24, 2005. FAA14CFR Part 139 Airport Emergency Full-scale Training Exercise with simulated aircraft crash.	Up to 100
	April 29, 2006. I Love A Clean San Diego's 4th Annual Creek to Bay Cleanup.	24
Attendance at external professional training/	July 7, 2005. Project Clean Water - Clean Water Summit, entitled Preserving the Blue - Clean Water Challenges for the Future, San Diego, CA.	2
workshops	July 18-21, 2005. StormCon '05, Orlando, FL.	1
	September 17-19, 2005. Airport Council International - North America Environmental Affairs Committee Meeting, Toronto, Canada.	1
	October 26, 2005. The Greening of San Diego - San Diego's Environmental Challenges, San Diego, CA.	1
	November 16, 2005. Green Airports: Balancing Growth and a Healthy Environment, San Diego, CA.	4
	Ending November 2, 2005. 40-hour HAZWOPER Training, San Diego, CA.	1
	March 26-29, 2006. Airport Council International - North America Environmental Affairs Committee Meeting, New Orleans, LA.	1
	April 18, 2006. BIA Stormwater Training for Construction, San Diego, CA.	2
	May 2-3, 2006. Stormwater Treatment - How it Works, San Clemente, CA.	1
	June 7, 2006. 8-hour HAZWOPER Refresher Training, San Diego, CA.	3
	June 30, 2006. Project Clean Water - Clean Water Summit, entitled Integrated Water Resource Management, San Diego, CA.	2

<sup>\* -</sup> 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 FY05-06

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 and the SWMP.	4,550
	Authority home page (www.san.org) announces the 21st Annual California Coastal Cleanup Day from September 13, 2005 until end of month.	10,950
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	1,000s
Posters/Banners/ Signage in Terminals and	21st Annual California Coastal Cleanup Day Billboard display throughout Terminals beginning September 13, 2005 and on-going.	1,000s
Parking Lots	"Don't Trash California" Anti-litter Campaign Billboard displays throughout Terminals beginning January 9, 2006 and on-going.	
	Protect San Diego Coastal Wildlife Billboard displays throughout Terminals beginning March 7, 2006 and ongoing.	
	"Don't Trash California" Anti-litter Campaign Magnetic Bumper Stickers distributed to tenants and staff beginning June 21, 2006 and on-going.	Up to 4,000
Brochures	Copies of the Airport Recycling Guide in airport terminals and at various outreach events.	Up to 2,500
Public Service Announcements (PSAs)	Think Blue PSAs aired in the Terminal 2-West baggage claim area throughout the entire FY05-06 reporting period.	1,000s
in Terminals	"Don't Trash California" Anti-litter Campaign PSA aired in Terminal 2-West baggage claim area beginning January 16, 2006.	
Media News Releases	November 15, 2005. News release announces the "Green Airports: Balancing Growth and a Healthy Environment" public forum sponsored by the Authority.	1,000s
Tenant Advisories	September 13, 2005. Announce the 21st Annual California Coastal Cleanup Day held on September 17, 2005.	1,000s
	October 21, 2005. Announce Waste Reduction and Recycling Survey of Tenants.	
	October 28, 2005. Announce Airside Housekeeping by Contract Services.	
	December 8, 2005. Announce Holiday Season pollution prevention tips.	
	February 7, 2006. Announce new Universal Waste Rule requirements that go into effect on February 8, 2006 and requirement for Tenant compliance.	
	March 15, 2006. Announce "Airfield Sweeping and Scrubbing Schedule."	
	June 20, 2006. Announce 2nd Annual Airport Safety Fair on June 21, 2006.	



Table 9-3. Education Activities for Airport Industrial, Commercial, and Quasi-Governmental Agency Tenants during FY05-06 (Continued)

Program Element	Description of Activities	Estimated Audience Size
Tenant Safety Committee Meetings	Environmental Affairs Department presented stormwater management updates at Tenant Safety Committee meetings:  July 6, 2005 November 2, 2005 March 1, 2006  August 3, 2005 December 7, 2005 April 5, 2006  September 7, 2005 January 4, 2006 May 3, 2006	program 358
	October 5, 2005 February 1, 2006 June 5, 2006	
Lindbergh Airport Managers Committee (LAMC) Meetings	Environmental Affairs Department presented specific stormwater many program updates to air-carrier station managers at monthly LAMC mee August 17, 2005 November 16, 2005  October 19, 2005 May 17, 2006	
Targeted Training/	August 19, 2005. Fuel Spill Cleanup Materials Demo for Fueling Operat	ors. 14
Presentations for Specific	January 4, 2006. Basic Fuel Spill Response Training.	33
Tenant Groups	June 21, 2006. Airport Tenant and Employee Safety Fair - outreach and materials regarding the Authority's Stormwater Management Program.	training 556

Table 9-4. Education Activities for Airport Construction Project Managers, Developers, and Contractors during FY05-06

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 and the SWMP.	4,550	
	Authority home page (www.san.org) announces the 21st Annual California Coastal Cleanup Day from September 13, 2005 until end of the month.	10,950	
Storm Drain Stenciling	"No Dumping" warning on storm drain inlets throughout the airport.	100s	
Posters/Banners/ Signage in Terminals and	21st Annual California Coastal Cleanup Day Billboard display throughout Terminals beginning September 13, 2005 and on-going.	100s	
Parking Lots	"Don't Trash California" Anti-litter Campaign Billboard displays throughout Terminals beginning January 9, 2006 and on-going.		
	Protect San Diego Coastal Wildlife Billboard displays throughout Terminals beginning March 7, 2006 and ongoing.		
Brochures	Copies of the Airport Recycling Guide in airport terminals and at various outreach events.	Up to 2,500	
Public Service Announcements (PSAs)	Think Blue PSAs aired in the Terminal 2-West baggage claim area throughout the entire FY05-06 reporting period.	1,000s	
in Terminals	"Don't Trash California" Anti-litter Campaign PSA aired in Terminal 2-West baggage claim area beginning January 16, 2006.		
Direct Contact through Project Meetings and	Environmental Affairs Department staff attendance at Pre-construction meetings: 13 meetings.	265	
Inspections	Environmental Affairs Department staff attendance at regularly scheduled Project Progress meetings: 82 meetings.	1,043	
	Environmental Affairs Department follow-up meetings to site inspections and tailgate meetings. Typically, one-on-one with construction contract site supervisor: 103 meetings.	103	





# 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 to improve the implementation of the SWMP.

The Authority's public participation program is directed primarily at airport tenants and Authority staff, while also addressing the general public to the extent possible. The mechanisms used to facilitate public participation on the part of these groups during FY05-06 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 FY05-06, the Board held a combined total of 74 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 4 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 FY05-06.

### 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 dedicated to 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 4,550 hits during FY05-06. The Authority webpage homepage (www.san.org) announced the 21st Annual California Coastal Cleanup Day from September 13, 2005 throughout the month and had 10,950 hits during FY05-06.

### 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 general stormwater management issues and theses 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 FY05-06, the Authority conducted or participated in three outreach events that allowed the Environmental Affairs Department to share concerns about proper stormwater management at SDIA with tenants and staff.

On April 23, 2006, the Authority staffed a booth at Earth Day 2006 and provided outreach and education materials through the SDIA recycling guide and the Authority's Environmental Affairs Fact Sheet that included information on the SDIA Recycling Program, the Authority's Storm Water Management Program, and the Environmental Management System.

On April 28, 2006, the Environmental Affairs Department provided outreach and training materials about the SWMP to Authority staff at the Annual Employee Open House.

On June 21, 2006, at the Authority's Annual Safety Fair, the Environmental Affairs Department provided outreach and education materials on trash, litter, and debris as stormwater pollutants. Giveaways included a dashboard litter bag, a battery-less flashlight, and a "Don't Trash California" magnetic bumper sticker. In collaboration with the Surfrider Foundation "Hold On To Your Butt" anti-cigarette litter campaign, the Authority also provided pocket-ashtrays, refrigerator magnets, and literature to both Airport tenants and Authority staff.

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 21st Annual California Coastal Cleanup Day on September 17, 2005 and the I Love A Clean San Diego's 4th Annual Creek to Bay Cleanup event on April 29, 2006.



### 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 include a) regular meetings of the San Diego County Regional Airport Authority Board; b) regular meetings of the San Diego Municipal Permit Copermittees; c) the Authority's 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 for the General Public.

### 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 FY05-06, the Board held a combined total of 74 general and subcommittee meetings.

#### b) San Diego Municipal Permit Copermittee Meetings:

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

Combined, the Copermittees held more than 46 general, subcommittee, and workgroup meetings during FY05-06.

# c) Authority Webpage:

As stated above, the Authority webpage features several sections regarding 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 4,550 hits during FY05-06. The Authority webpage homepage (www.san.org) announced the 21st Annual California Coastal Cleanup Day from September 13, 2005 throughout the month and had 10,950 hits during FY05-06.

## d) Project Clean Water Webpage:

Partly in response to its duties as the Principal Copermittee to the Municipal Permit, the County of San Diego 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's. The hotlines also provide another mechanism for the general public to report unauthorized non-stormwater discharges and/or other stormwater concerns, which are then referred to the appropriate jurisdiction. The hotlines provide services in English and Spanish and are available 24-hours a day.

### g) Outreach Events for the General Public:

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

During FY05-06, 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 Coastkeeper to help support the "Project Swell" campaign aimed at engendering environmental stewardship in local schoolchildren through education using water-quality-specific curricula. In addition, the Authority has collaborated with WiLDCOAST to support its "I Love San Diego Bay's Endangered Sea Turtles and Wildlife" bilingual campaign aimed at educating the public and schoolchildren 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 began during FY04-05 and continued throughout FY05-06. Finally, as a member of the San Diego Bay Watershed Copermittees, the Authority also helped to sponsor one of the

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local cleanup sites of the I Love A Clean San Diego's 4th Annual Creek to Bay Cleanup event on April 29, 2006.

REVISIONS TO THE SWMP

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





# 11 Special Investigations

The FY04-05 Annual Report outlined a special project that had been in the planning and design phase since the inception of the Authority in 2003 and which finally got underway in January of 2005. Entitled the "Storm Drainage System BMP Project (CIP #3105A)," the scope of work featured 10 tasks that were expected to take up to 12 months to complete. The FY04-05 Annual Report presented the status of each of each of these 10 tasks as FY04-05 ended. Now completed, the information presented below is an update on the Storm Drainage System BMP Project and discussion of the work performed during FY05-06. 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

The Storm Drainage System BMP Project was 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 work was divided into the 10 tasks listed below

(which were fully described in the FY04-05 Annual Report). MACTEC Engineering and Consulting, Incorporated was contracted to assist the Authority in conducting this project. The FY04-05 Annual Report noted that 4 of the tasks had already been completed. The work performed during FY05-06 to complete the remaining 6 tasks is briefly discussed here.

Task 1 - Data Gathering and Review - COMPLETED IN FY04-05

Task 2 - Hydrology Assessment - COMPLETED IN FY04-05

Task 3 - Hydraulic Analysis

Task 4 - Tidal Surge Study

Task 5 - BMP Document Review - COMPLETED IN FY04-05

Task 6 - Site Audit - COMPLETED IN FY04-05

Task 7 - Stormwater Sampling Plan

Task 8 - Catastrophic Fuel Release Evaluation

Task 9 - Chemical Emergency Response Evaluation

Task 10 - BMP Recommendations

# a) Hydraulic Analysis:

Once MACTEC had completed the Hydrology Report, they initiated a hydraulic assessment of the drainage system 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, deficiences in the airport MS4 drainage system were identied. Deficiencies were related to undersized pipes, inadequate slope, unfavorable inlet conditions, and inadequate flow through. The baseline model results were used as a guide to develop recommendations for improving portions of the storm drain system to meet the design capacity. MACTEC evaluated 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. The baseline was also used to assess the effects of proposed BMPs or combinations of BMPs on discharge water quality, possible treatment options, and proposed changes for the improvement of drainage system capacity. The effort was summarized in the Hydraulic Modeling and Tidal Surge Study Final Report, dated November 2005, and included recommendations for improvements to the storm drainage system based on priority, costs and associated timelines.

### b) Tidal Surge Study:

Under this task, the effects of downstream tidal conditions on the drainage system were simulated using relevant site data and the SWMM computer program. This effort was designed to evaluate sediment transport and deposition in the drainage system in response to fluctuating tidal conditions, and to evaluate the need for mitigation measures, if any. The task relied on the outcome of the hydraulic assessment noted above. As such, the conclusions and recommendations were incorporated into the Hydraulic Modeling and Tidal Surge Study Final Report, dated November of 2005.

### c) Stormwater Sampling Plan:

A completely revised and updated Sampling Plan was one of the tasks of the Storm Drainage System BMP Project. The Storm Water Sampling Plan addresses the runoff sampling requirements of the General Industrial Storm Water Permit. MACTEC evaluated the quality of the existing historic stormwater sampling data set and recommended a sampling program that provides sufficient data to produce adequate statistical power to demonstrate long-term program effectiveness. Development of the Storm Water Sampling Plan included consideration of the variability in annual precipitation patterns at the airport and the impact of such variability on program implementation and on the assessment of long-term program effectiveness. The Final Storm Water Sampling Plan was completed in November of 2005.

### d) Catastrophic Fuel Release Evaluation:

The Catastrophic Fuel Release Evaluation & Recommended Control & Response Measures Letter Report was completed in May of 2006. The Report included an inventory of existing fuel sources and existing response

resources and procedures. Spill/release scenarios related to fuel transfer facilities, bulk storage facilities, and fuel transfer equipment were used to identifying deficiencies in response resources and procedures. The scenarios addressed potential spill volumes, spill causes, locations, possible chain reactions, spill pathways and the likelihood of traveling off-site, and the potential to impact receiving waters and/or sensitive environments. MACTEC identified response deficiencies and evaluated the adequacy of response resources and procedures to prevent potential spills/releases from entering the storm drainage system, receiving waters, and/or sensitive environments. MACTEC provided recommendations for additional (and/or modified) resources and/or procedures in the Report.

### e) Chemical Emergency Response Evaluation:

MACTEC evaluated the status of Authority compliance with Federal, State, and local statutory and regulatory chemical emergency response planning and training requirements. They also evaluated 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 used the National Response Team's Integrated Contingency Plan Guidance (Federal Register/Vol 61, No. 109/June 5, 1996) as a model in evaluating the feasibility of developing such a plan. The Chemical Emergency Response Evaluation and Recommendations Letter Report, dated March 2006, summarized the conclusions and recommendations from this task.

### f) BMP Recommendations:

The Storm Drainage System BMP Project had been designed to take the outcome from several task and use that information to develop 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. MACTEC's recommendations for source control BMPs, treatment control BMPs, and drainage or structure modification or additions were based in large part on consideration of historic site information, the Site Hydrology Report, the Hydraulic Modeling and Tidal Surge Study Final Report, the Site Audit Report, and professional judgment. In a report entitled, Final BMP Recommendations Report, dated March of 2006, MACTEC provided recommendations for BMP improvements, process improvements,



and capital improvements. The recommendations in the report were prioritized, and included costs and projected implementation timelines.

**SUMMARY** 

Representing the lone special investigation/project conducted by the Authority during FY05-06, the Storm Drainage System BMP Project that began in January of 2005 was completed in March of 2006. The project evaluated existing stormwater management practices and made recommendations for improvements to the Authority's stormwater management program.

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# 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 have developed, and continue to develop, criteria that allows for an assessment of the effectiveness of stormwater management efforts implemented in accordance with the Municipal Permit. In FY02-03, the Copermittees produced a guidance document entitled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" (Framework). The concepts originally developed in the Framework have since been incorporated into guidance offered by the California Stormwater Quality Association (CASQA). 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 FY05-06 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 outline the Authority's implementation of program components during FY05-06 and note 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. These components are considered to be well defined and properly implemented. Although the programs have been expanded to include implementation of stormwater management practices related to roads and parking lots, most of the program elements of the Municipal Component have been in place since the 1990's when airport operations were first required to comply with the General Industrial Storm Water Permit. The Municipal, Industrial, and Commercial Components are essentially the strength of the SWMP. Chapter 3 of this Annual Report notes that the number of wet weather monitoring sample sites has increased from 6 to 10 as part of the revised Stormwater Sampling Plan (also discussed in Chapter 11). Chapter 3 also identifies changes to the inventory of industrial operations - with 3 tenants being deleted and 8 new tenants being added. Changes to the inventory of commercial operations are noted in Chapter 4 with 2 tenants being deleted and 1 tenant being added. In addition to these inventory changes, Chapters 2, 3, and 4 note that the Authority intends to conduct a thorough evaluation of the SWMP, and the need for further changes, in light of the new Municipal Permit scheduled for adoption in January of 2007.

The Land Use Planning Component of the SWMP has focused on adoption 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 was undergoing CEQA review throughout FY05-06. The SUSMP process was applied to only 1 development project during FY05-06. The Land Use Planning Component of the SWMP remains effective and no revisions are currently proposed for this component.



With the Environmental Affairs Department taking an active role in pre-construction project meetings and regular 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, the Authority issued 1 written Notice during the reporting period to address an on-going unauthorized discharge. The dry weather monitoring program identified 1 issue requiring further evaluation. In general, Chapter 8 notes that illicit discharges are being reported and resolved and that the IDDE Component of the SDIA SWMP is considered effective. There are no revisions proposed for this aspect of the SWMP.

The Education Component of the SDIA SWMP has been designed to increase public knowledge about stormwater issues and concerns both at the airport and throughout the San Diego Bay watershed. The tables included in Chapter 9 of this Annual Report outline the substantial amount of training and outreach conducted during FY05-06. The education and outreach efforts have been expanded in an attempt to strengthen the effectiveness of this component of the SWMP. The expanded efforts appear to be having positive effects as noted in the next section of this chapter.

Chapter 10 of this Annual Report reports that there are numerous meetings either held by or attended by the Authority Board or staff which represent significant opportunities for public participation. In short, the Public Participation Component remains an effective element of the 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 the expenditures for FY05-06, the budget for FY06-07, the source of the funds, and a description of the use of these funds. There are no revisions proposed to the Fiscal Analysis Component of the SDIA SWMP.

### ASSESSMENT OF THE SDIA SWMP PROGRAM USING THE FRAMEWORK

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

Level 1 - Compliance with Activity-based Permit Requirements

Level 2 - Changes in Knowledge/Awareness

Level 3 - Behavioral Changes and BMP Implementation

Level 4 - Load Reductions

Level 5 - Changes in Discharge Quality

Level 6 - Changes in Receiving Water Quality

The Authority recognizes the importance of evaluating the effectiveness of program components and the program as a whole. To that end, the Authority has adopted the Framework planning and implementation processes to conduct pollutant source characterization, select appropriate BMPs, target the outcomes of BMP implementation, and identify adequate measures of program effectiveness. The application of the Framework to the Authority's stormwater management program follows:

#### Level 1 - Compliance with Activity-based Permit Requirements

The Municipal Permit requires the establishment of specific urban runoff management program components, activities, and frequencies, with the assumption that these particulars will reduce urban runoff pollution and improve receiving water quality. The degree to which the activities required by the Permit are implemented constitutes the first level and foundation of the Framework program assessment hierarchy. Tracking this information over time will allow the Authority to assess consistent and incremental program improvements. Table 12-1 presents the activity-based requirements of the Permit and the Authority's implementation of these requirements during FY05-06. As shown in Table 12-1, the Authority has met all the activity-based requirements of the Municipal Permit.



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	1	1
F.2 Construction	Number of high priority construction sites subject to inspection	0	0
	Number of medium/low priority construction sites subject to inspection	8	8
	Number of enforcement actions taken	1	1
	Number of construction projects referred to RWQCB for enforcement of State General Construction Storm Water Permit	0	0
F.3.a Municipal	Number of high priority municipal operations subject to inspection	15	15
	Quantity of debris and material removed from the MS4 (in tons)	11.2	11.2
	Quantity of debris and material captured by street sweeping (in tons)	3.3	3.3
F.3.b Industrial	Number of high priority industrial operations subject to inspection	41	41
	Number of enforcement actions taken	14	14
	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	2,500
	Number of stormwater education mechanisms for the general public	Not applicable	8
	Number of stormwater training mechanisms for staff	Not applicable	12
	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
F.5. IDDE	Number of dry weather monitoring locations	6	6
	Number of IDDE events recorded by hotlines and other reporting methods	Not applicable	257
	Number of enforcement actions taken	14	14
F.6 Public	Number of types of participation mechanisms for staff and tenants	Not applicable	6
Participation	Number of types of participation mechanisms for the general public	Not applicable	7

### Level 2 - Changes in Knowledge/Awareness

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

For FY05-06, the Authority has used three issues to assess 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 683 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 257 IDDE incidents reported during FY05-06 in comparison to the 167 incidents and 218 incidents reported in FY03-04 and FY04-05, respectively. This increasing trend is expected to reach a plateau and reverse over time. At this time, the initial increase suggests that staff, tenants, and the general public are becoming more aware of stormwater pollution and the need for pollution prevention.

The Authority's website, particularly the environmental webpage, provides staff, tenants, and the general public access to information regarding stormwater management efforts at SDIA, including the SWMP itself. Making basic urban runoff management information available should increase public awareness of stormwater management concerns. The environmental webpage had a total of 4,550 hits during the reporting period. This represents an average of approximately 88 hits per week which is a decrease from the approximately 120 hits and 370 hits per week during FY03-04 and FY05-06, respectively. Since these three years of data are not indicative of a trend, the Authority will continue to track the number of hits to the environmental webpage in future annual reports. It should be noted that approximately 10,950 hits were made to the Authority homepage during approximately 2 weeks in September of 2005 when the homepage featured an announcement of the 21st Annual California Coastal Cleanup Day.



During FY05-06, the Authority was able to repeat an assessment of changes in knowledge and awareness of staff and tenants using a survey instrument similar to one used in FY04-05. The survey of 683 total individuals (127 staff and 556 tenants) was conducted on June 21, 2006. The survey of 127 staff represents approximately 42% of the total number of staff, and the 556 tenants surveyed represents approximately 11% of the tenants. In general, the Authority staff answered the questions with a higher rate of accuracy than the tenants and both groups generally scored better than the results of the previous year. The results suggests that the expanded education and outreach efforts by the Authority are effective, although still more effort may need to be directed at reaching the tenants. It should be noted, however, that the statistical significance of the data has not been evaluated. The survey questions and a summary of the survey results are presented in Table 12-2.

The survey results show that 93% of staff, compared to 77% of tenants, could identify a watershed. The results of the survey also show that 92% of staff, compared to 71% of tenants, know which type of runoff water is permitted in the storm drain. All things considered, 63% may represent an adequate level of awareness on the part of our tenants, particularly when these results are compared to results from surveys conducted by other Copermittees over the last few years.

The education and outreach efforts directed at tenants were expanded and/or more frequently employed during the reporting period. As seen in Chapter 9 of this report, these efforts included more terminal displays and signage, more Tenant Advisories, and more training. The impact of the expanded efforts can be seen in increases in tenant knowledge and awareness as captured by the survey conducted June 21, 2006, which included questions similar to the May 24, 2005 survey discussed in the previous Annual Report. For example, two of the issues discussed above (which is a watershed and what hotline number do you call), the tenant results for 2006 versus 2005 are 77% and 53%, compared to 63% and 46%, respectively.

Table 12-2. FY05-06 Awareness Survey Summary

Question	Authority Staff	Tenants
Number of individuals surveyed	127	556
1) Which of the following is a watershed?		
Correct responses	93%	77%
Incorrect responses	7%	23%
2) How much litter do you see around the airport?		
A lot	9%	25%
Some	48%	47%
Not very much	43%	28%
3) Have you ever heard of Best Management Practices (BMPs), which are used to prevent pollution from entering the storm drain system?		
Yes	78%	45%
No	22%	55%
4) Water that goes into the storm drain goes to a treatment plant before it is discharged into the ocean.		
True or Don't Know	21%	59%
False	79%	41%
5) Which type of runoff water is permitted in the storm drain?		
Correct responses	92%	71%
Incorrect responses	8%	29%
6) What is Universal Waste?		
Correct responses	82%	64%
Incorrect responses	18%	36%
7) 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?		
Correct responses	75%	53%
Incorrect responses	25%	47%



### 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 indicates that estimating or quantifying BMP implementation is a necessary component of a successful effectiveness assessment strategy.

As noted in the Annual Report for FY04-05, the Authority conducted a site audit during the FY04-05 reporting period. The site audit was conducted between February 2, 2005 and March 11, 2005. A total of 33 Authority and tenant operations/facilities were audited using a site inspection and interview. The methodology used to conduct the audit and the results of the audit were documented in the June 2005 Final Site Audit Report prepared by MACTEC. The audit was part of the Storm Drainage System BMP Project discussed in Chapter 11 of this report.

The site audit contains elements of both the Program Assessment and Water Quality Assessment aspects of the Framework. In terms of Program Assessment, the site audit provides an accounting of BMP implementation activities, as well as an assessment of the spatial distribution of implementation activities, which may provide useful information as to whether priority areas and problems are being adequately addressed. The site audit helped identify potential pollutant sources and assessed the level of implementation of SWMP-required BMPs by staff and tenants. Considered a snapshot-in-time, the site audit developed standardized methods for documenting potential pollutant sources and BMP implementation. The site audit establishes a solid baseline for assessing future changes in behavior and BMP implementation.

The site audit was designed as an internal audit intended to help the Authority judge staff and tenant awareness of and implementation of BMPs and other measures to reduce pollutants in stormwater runoff. Among other things, the audit is being used to increase the frequency and adequacy of BMP implementation. By reviewing and identifying any need to update the BMPs required for implementation and the control strategies selected to ensure their implementation, the site audit report also made recommendations to

improve the SWMP. The site audit represents a major step by the Authority to develop a mature program assessment strategy.

The site audit identified, inventoried, and evaluated potential pollutant sources at SDIA, recording the activity, material, and procedural information for each source by conducting staff and tenant interviews, reviewing Authority and tenant documents (such as Hazardous Materials Business Plans, tenant Storm Water Pollution Prevention Plans, corporate environmental business plans, etc.), and by mapping locations of industrial wastes, material storage, fuel storage, oils storage, metals storage, and dumpster locations. The criteria used for categorizing significant materials as being potential pollutants were (1) stored outdoors; (2) used or involved in outdoor activities; or (3) the potential to leak from aircraft, ground vehicles, or equipment. All potential pollutant sources were identified for a particular facility or operation, regardless of whether the operations were performed by staff, tenants, subtenants, or subcontractors.

The site audit was organized around the BMP categories contained in the SWMP. These BMP categories closely reflect the California Storm Water Quality Association (CASQA) Industrial and Commercial Handbook BMP categories. However, whereas the CASQA source control BMP categories are grouped by types of activities typically performed at industrial and/or commercial facilities, the SWMP BMP categories are grouped by types of activities specific to the operations at SDIA. As a result of SWMP review, 2 additional BMP categories from the CASQA BMP Handbooks were added to the 19 BMP categories listed in the SWMP. These general "BMP categories" were then subdivided into several separate BMPs that make up each BMP category. The 21 categories were subdivided into 136 separate BMPs.

During the Site Audit, staff and tenants were questioned about the level of implementation of required BMPs, including treatment or structural BMPs, for each potential pollutant source. The level of implementation of specific BMPs was based on the frequency of need, and the status on the degree of implementation as fully implemented, partially implemented, and not implemented. BMP implementation rates were then calculated for staff (that is, the Authority as a whole), individual tenants, and 4 general land use categories (airport operations, industrial, commercial, and ground transportation).



A BMP was considered "fully implemented" if the BMP was consistently put into practice in the manner described in either the SWMP or the CASQA BMP Handbooks. BMPs were assessed as being "partially implemented" when the BMP was not put into practice when it should have been or was used inconsistently. If on the other hand, there was absolutely no attempt to implement the required BMP, then the BMP was considered "not implemented." The BMPs or BMP categories were considered "not applicable" if the specific activity was not being performed. A fully implemented BMP scored 1.0 points, a partially implemented BMP was assigned a score of 0.5, and non-implemented BMPs scored 0. The total was then divided by the number of BMPs applicable to the operation/facility and multiplied by 100 to give a percentage of applicable BMPs implemented by that entity (Authority or tenant).

Implementation rates alone do not fully describe how well BMPs are implemented by any particular operation - whether the Authority or tenant. Other factors need to be considered, such as the complexity of the operations. The Site Audit developed a method to weigh the operational complexity of BMPs required for implementation. For purposes of the site audit, Complexity (C) was based on the frequency that a BMP should be implemented and hence the importance of that BMP in preventing the exposure of potential pollutants to stormwater runoff. BMP complexity categories and the scores given to a BMP for each category (in parenthesis) were as follows: Frequent/Routine (Score = 1), Infrequent/Routine (Score = 0.75), Situational (used infrequently and generally only in specific situations) (Score = 0.5), Emergency (Score = 0.25). The BMP Complexity scores are totaled for each operation (Authority or tenant) by summing the scores of all applicable BMPs, and then normalizing all the scores of each operation, resulting in a Complexity Factor between 0 and 1.

The BMP implementation rates (percentages of full implementation, partial implementation, and non-implementation for each BMP) and total complexity scores for operations conducted by either Authority staff or tenants are presented in the Final Site Audit Report. Fourteen (14) tenants scored between 81 and 100 percent, 15 tenants and the Authority itself scored between 61 and 80 percent, and 2 tenants scored a BMP implementation rate of 60 percent or less. BMPs that were 100 percent fully implemented tended to be those applicable to only a few tenants or to the Authority alone. For

the more widely applicable BMPs, the 100 percent fully implemented BMPs tended to be ones involving preventative maintenance. The audit revealed that employee training regarding stormwater pollution prevention is implemented with only a moderate frequency. Generally, tenants have their own training programs in place, which appear to range from extensive to very limited. BMPs fully implemented to a moderate degree included the inspection and maintenance of structural BMPs.

In general, the top 4 BMP categories in terms of highest percentage of being fully implemented occurred in the categories of: Spill Prevention, Control and Cleanup; Aircraft, Ground Vehicle and Equipment Fueling; Lavatory Service Operation; and Fire Fighting Foam Discharge categories.

The BMP categories scoring the highest percentages for not being implemented included BMPs which designate, cover, berm or slope particular areas prior to conducting certain activities, such as fueling, loading and unloading, outdoor storage of materials and/or waste, outdoor washing, and aircraft and equipment maintenance. The nature of operations conducted at an airport often makes the use of bermed and covered or sloped areas difficult to implement. One BMP category also scoring a high percentage for not being implemented was Non-Storm Water Management. Training in non-storm water management tends to be infrequent. The reporting of non-storm water discharges, however, appears to be commonly conducted and there was little evidence of illicit connections and illegal discharges.

A total of 13 of the 136 BMPs were not being implemented at all - there was no full or partial implementation by any of the operations at SDIA. These 13 BMPs will be re-evaluated for applicability to activities at SDIA. If they are applicable, perhaps more employee training is required to ensure implementation. Those BMPs that are no longer applicable and unlikely to be applicable in the future will be deleted from the SWMP and any future assessment activities.

The assessment of the implementation status of BMPs consisted of evaluating whether BMPs were appropriately applied and properly implemented to prevent or minimize the exposure of potential pollutants to



storm water discharges. The site audit report identified those BMPs not being fully implemented and/or partially implemented. These BMPs are generally non-structural, source control measures that should be fully implemented to prevent and/or minimize the possible exposure of potential pollutants to storm water runoff. The site audit identified deficiencies in BMP implementation and provided a list of recommended changes for the Authority's stormwater management program. The site audit provides the Authority with a better understanding of the pollutant sources and associated activities, as well as a baseline on the current implementation rates for those BMPs considered adequate for addressing each of these activities. The findings of the site audit will be used to revise the SWMP, achieve increased awareness, and changes in behavior and BMP implementation rates. The Authority intends to perform future inspections using the same criteria established by the site audit which will allow for future comparisons of findings.

#### Level 4 - Load Reductions

The primary goal of BMP implementation is to reduce the pollutant loadings to stormwater discharges and, in turn, effect improvements to receiving water quality. Evaluating load reductions related to BMP implementation is one part of the Authority's program assessment process and the Framework. By working to establish Framework Level 4 outcomes, the Authority hopes to understand the relationship of BMP implementation to water quality improvement. The site audit, discussed in Chapter 11 of this report and the Level 3 program assessment above, begins to identify and characterize the pollutants of concern that impact storm water quality at the airport. The results of the site audit, conducted as part of the Storm Drainage System BMP Project (see Chapter 11), were documented in the June 2005 Final Site Audit Report prepared by MACTEC. With completion of the site audit and the evaluation of BMP implementation, the Authority continues to develop mechanisms for estimating load reductions related to the Authority's stormwater management program.

The site audit did more than calculate loads or load reductions, it calculated a relative risk for the Authority and each tenant to pollute stormwater based on BMP implementation rates, the complexity and size of the operation (which may indicate a certain level of activities being performed that potentially

introduce contaminants into stormwater runoff), the nature of the activities conducted, and the drainage characteristics of the operational area. The relative risk of each entity to pollute stormwater can be used to prioritize stormwater management activities and identify areas needing improvement.

As suggested in the discussion of Level 3 outcomes above, BMP selection and implementation rates alone do not fully describe the likelihood that any particular operation might potentially contribute to stormwater runoff impacts. Other factors need to be considered. The Site Audit developed a method to weigh an operation's risk of polluting stormwater runoff according to a combination of: 1) the implementation rate of the associated BMPs (Implementation Frequency); 2) the likelihood of stormwater pollution occurring based on the complexity of activities performed, and hence the complexity of BMPs required (Complexity); and 3) the magnitude of the potential pollution which is comprised of the expected level of particular pollutants (Event Mean Concentration, EMC) based on the operation/facility land use type, and the size and drainage of the operation (Runoff Volume). The concept was called the "Relative Pollution Risk." The Relative Pollution Risk (RPR) of potentially discharging polluted stormwater runoff from the airport into San Diego Bay was assessed for the Authority itself and each tenant. The RPR was based on the relative potential exposure of pollutants from any particular operation to stormwater runoff and the pollutant load anticipated in stormwater runoff based on the land use of the operation. The equation for calculating RPR is, therefore: RPR = EF x PL, where EF is the Exposure Factor and PL is the estimated Pollutant Load.

The Exposure Factor (EF) was the relationship between Implementation Frequency (IF) and Complexity (C). The IF is the same as the implementation rates discussed in Level 3 above expect that rather than being expressed as a percentage, the rate is expressed as a number between 0 and 1. Again, the Complexity was based on the frequency that a BMP should be implemented (frequent, infrequent, situational, or emergency) and hence the importance of that BMP in preventing the exposure of potential pollutants to stormwater runoff. The BMP Complexity scores were normalized to a score between 0 and 1. The EF was then calculated for the Authority and each tenant based on the equation EF = (1-IF) x C. Hence, a high BMP Complexity Factor (C) increases the Exposure Factor (EF), while a high BMP implementation frequency (IF) lowers the Exposure Factor (EF).



The Pollutant Load (PL) anticipated in stormwater runoff was considered to be a function of the hydrology of the operational area, the surface area of the space in which the operation was performed, and the type of land use at that location. It was defined as: PL = Event Mean Concentration (EMC) x Runoff Volume (V). The volume was calculated based on the amount of runoff generated from the particular operational area during the 85th percentile storm event. The Authority and tenants were assigned to one of the following land use categories for the purposes of identifying an approximate EMC: airport operations; industrial; commercial; ground transportation; and open space. Since the median concentrations of copper and zinc measured historically at SDIA was found to exceed certain benchmark values a majority of the time, EMCs for copper and zinc were used to develop the Pollutant Load (PL) values in the site audit report. The RPR was calculated for the Authority and each tenant, normalized by the highest RPR, and then expressed as a percentage, resulting in a score between 0 and 100. RPRs were calculated for both copper and zinc. This information was used to develop an estimated potential pollutant loading for the operational areas at the airport. The range of RPRs for the tenants fell into three main groups, with (1) aircraft fueling operations rated higher than

(2) cargo/parking lot and other out door large-footprint operations, both of

which groups rated higher than (3) the passenger airlines as a group.

The contribution of specific sources to stormwater runoff at the airport are not currently well-known, although some of the probable contributors appear to be fairly ubiquitous throughout the airport and, possibly, adjacent properties. The site audit determined that the activities and sources most closely associated with the airport operations, industrial, and ground transportation land use categories are assumed to be the primary contributors of potential pollutants. The 3 probable contributors of the copper and zinc associated with both the airport operations and ground transportation land use categories are: 1) vehicle and aircraft use and emissions; 2) galvanized metal structures; and 3) atmospheric deposition. The probable contributors of copper, zinc and other metals associated with industrial land uses are: 1) vehicle, equipment, and aircraft maintenance and emissions; 2) outdoor storage and use of paints, motor oils, inoperable vehicles, etc.; 3) industrial spills and releases; and 4) other industrial activities.

The site audit has provided the Authority with estimated potential pollutant loads when all appropriate BMPs are implemented. The outcomes from the site audit will be used to prioritize stormwater management activities and identify potential program improvements. By working to establish Framework Level 4 outcomes, the Authority hopes to understand the relationship of required BMPs to water quality improvement. To avoid specious conclusions, these load reduction estimation exercises often require large datasets collected over time. The Level 4 assessment provided here outlines a process for estimating future load reductions and sets a baseline from which to draw future comparisons.

### 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, can still be difficult. The 2 NPDES permits applicable to SDIA require that the quality of stormwater runoff from SDIA not cause or contribute to the violation of applicable water quality standards. Although neither of these 2 NPDES permits contains effluent limitations, they both require monitoring programs. The Municipal Permit requires a jurisdictional dry weather monitoring program. The General Industrial Stormwater Permit requires a facility to conduct wet weather stormwater sampling. As stated in the Level 4 program assessment above, the site audit (discussed in Chapter 11 of this report), identified and characterized the pollutants of concern impacting storm water quality at the airport based on wet weather sample data.

The site audit conducted a preliminary assessment of discharge stormwater quality using a 2 step process. Step 1 consisted of compiling analyte benchmarks with which to evaluate historical storm water runoff data. Water quality objectives were used to develop benchmarks for the constituents analyzed in runoff samples collected at SDIA between 1994 and 2004. The water quality criteria used to develop the benchmarks were compiled from the California Toxics Rule, the USEPA Multi-Sector General Permit, and USEPA Recommended Ambient Water Quality Criteria. The benchmarks selected were the lowest concentration criteria for each constituent. These benchmarks are not applicable from a regulatory standpoint, since they are derived from water quality objectives that are only applicable to receiving



waters. Step 2 identified pollutants of concern based on comparisons to the benchmark values. The median concentration of each pollutant of concern as calculated from historical storm water quality sampling conducted at SDIA was compared to the benchmark values for each pollutant. The median concentrations of copper and zinc as measured historically at SDIA exceeded the benchmark values more than 50% of the time. For this reason copper and zinc were used to develop the Pollutant Load (PL) values discussed Level 4 above.

Chapter 3 of this Annual Report states that the results of the wet weather monitoring performed at SDIA during the FY05-06 wet season were consistent with the historical trends and that the median concentrations of copper and zinc measured in stormwater runoff at SDIA in FY05-06 also exceeded USEPA Multi-Sector Permit Benchmarks. As discussed in Chapter 11, one element of Authority's Storm Drainage System BMP Project was the development of a new sampling plan that should allow for a statistically valid assessment of the Authority's ability to improve stormwater discharge quality. Over time, data collected in accordance with this new sampling plan will allow the Authority to evaluate changes in discharge water quality in response to improvements in the SWMP.

### Level 6 - Changes in Receiving Water Quality

The ultimate objective of the Authority's stormwater management program is to protect the water quality of the water bodies receiving discharges from the Authority's MS4. That receiving water is San Diego Bay. Level 6 measures can be addressed through outcomes such as compliance with regulatory benchmarks, protection of biological integrity, and beneficial use attainment. The Authority has not conducted any receiving water quality monitoring independent of the Copermittees' Receiving Water Monitoring Program, since neither of the two NPDES permits currently applicable to activities at SDIA requires that the Authority monitor receiving waters and/or benthic communities to detect the potential impacts of stormwater runoff. The Authority must rely on studies conducted by others to evaluate Framework Level 6 outcomes and attempt to establish relationships, if possible, between receiving water quality and specific program components of the Authority's stormwater management efforts.

The receiving water quality issues in the vicinity of the airport that have been studied or noted by others have generally resulted from the activity related to federal Clean Water Act (CWA) Section 303(d) requirements. The waters of San Diego Bay in the vicinity of the airport are currently on the 2002 CWA Section 303(d) list of water quality segments for 1) benthic community effects, 2) sediment toxicity, and 3) bacteria indicators. A 2006 CWA Section 303(d) list of water quality limited segments, which includes coppper as a pollutant in the vicinity of the airport, was approved by the State Water Resources Control Board, but has not been adopted by the Environmental Protection Agency.

The RWQCB has been in the process of investigating the establishment of TMDLs for 19 of the 38 bacteria-impaired waterbodies in the San Diego region in a two part study (Project I and Project II). Project I looked at indicator bacteria in beaches and creeks in the San Diego region. Project II will look at bacteria-impaired shorelines in San Diego Bay and Dana Point Harbor. No technical reports have been released to date for Project II. The Authority will continue to track the progress of Project II.

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

INTEGRATED EFFECTIVENESS ASSESSMENT An integrated assessment of the Authority's stormwater management program uses the results of the Framework's Program Implementation Assessment and Water Quality Assessment to draw general conclusions about overall effectiveness. Based on the information discussed for Framework Level 1 through 6 outcomes above, the management measures currently being implemented by the Authority are generally effective. The Authority



has demonstrated compliance with the Level 1 activity-based permit requirements. The awareness survey discussed in the Level 2 assessment above noted that scores for both staff and tenants have increased, even as education and outreach efforts continued to be expanded and re-evaluated. The Level 3, Level 4, and Level 5 outcome assessments above made extensive use of the site audit information obtained from the recently completed special investigation entitled "Storm Drainage System BMP Project." The site audit information has helped to establish baselines for BMP implementation rates and for load reduction estimates. These baselines will allow the Authority to more accurately assess Level 3 and Level 4 outcomes in future years. The discharge water quality information discussed in the Level 5 assessment noted that discharge water quality continues to match the historical trend of exceeding benchmarks for copper and zinc. The stormwater monitoring program has already been revised in accordance with the new stormwater sampling plan mentioned in Chapter 11 of this report. The assessment at Framework Level 6 (changes to receiving water quality) is a difficult and complex task, involving numerous assumptions about the relationship of runoff water quality from the airport on receiving water quality in San Diego Bay. Efforts by the Authority to refine the Level 6 assessment have yet to be expanded beyond the current collaborative efforts of regional monitoring due in most part to the extensive resources required and long timeframe generally needed to collect sufficient monitoring data from which to draw conclusions. Taken on the whole, the Authority's stormwater management program continues to be effective at preventing, minimizing, and/or eliminating impacts to the water quality of San Diego Bay.

In addition to all the program outcomes noted above, the site audit established the baseline for the identification of pollutant sources and the effectiveness of the BMPs selected for implementation to address those sources. The examination of the BMP implementation rates and the potential for pollutant sources to impact stormwater runoff gives an indication of the effectiveness of those BMPs at reducing the levels of pollutants of concern. The assessment of current BMP effectiveness was accomplished by first identifying the drainage basins and land uses within those basins where pollutants of concern are generated. Secondly, BMP implementation frequencies and the Relative Pollution Risk factors in those basins were examined to provide an indication of the effectiveness of those BMPs. Based on this methodology, the site audit considered BMPs to be effective if

(1) they were fully implemented and (2) the results of sampling and analysis do not exceed the certain benchmark water quality values. In general, the audit found that BMPs were not fully effective in drainage basins where BMP implementation frequencies were low, Relative Pollution Risks were high, and pollutants regularly exceed benchmark values.

A new stormwater sampling plan has been implemented during this reporting period to establish a monitoring program that is more representative of runoff water quality at SDIA. Implementation of the new sampling plan also established a formal mechanism to help evaluate and track the effectiveness of BMPs over time, ensure regulatory compliance, and better define the contribution of probable sources of pollutants of concern. The stormwater sampling plan will utilize the benchmarks identified in the Final Site Audit Report for comparison with future sampling results in order to track benchmark exceedances and assess BMP effectiveness.

The Authority continues to assemble information on those factors which appear to be key for assessing the stormwater management program and for recommending improvement to the program. As noted in the previous Annual Report, the elements being assembled 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 developed methods to assess program effectiveness in terms of Levels 1 through 5 of the Framework. As more information is collected, the Authority will attempt to link program implementation directly to discharge water quality. The Authority has developed procedures to identify pollutants, required BMPs, and implementation rates for the required BMPs. Over time, the Authority intends to estimate the load reductions from BMP implementation and attempt to connect those estimates to the results of runoff monitoring. As BMP implementation rates increase, it is expected that the pollutant loadings will decrease. Presently, the Authority's stormwater management program continues to work at preventing or eliminating impacts to the water quality of San Diego Bay.



## MANAGEMENT MEASURES PROVEN TO BE INEFFECTIVE

The Annual Report for FY04-05 suggested, but did not confirm, that the effectiveness of the education and outreach efforts of the Authority may not have been adequate in reaching the tenants. The FY04-05 Annual Report even noted that "it would be premature to say that the education efforts are ineffective." Nonetheless, the Authority expanded the education and outreach efforts directed at tenants during FY05-06. The information presented in the program effectiveness assessment above, in particular the recent awareness survey discussed in the Framework Level 2 assessment, indicates that the current education and outreach efforts now in place are effective at reaching the tenants.

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

### PROPOSED PROGRAM CHANGES

The Annual Report for FY04-05 noted the Authority expected to use the output from the Storm Drainage System BMP Project to 1) revise SWMP BMP requirements as appropriate, 2) update inspection procedures and forms, 3) update the stormwater monitoring program, and 4) incorporate other program improvements. As discussed in Chapter 11 of this report, the Storm Drainage System BMP Project was completed during FY05-06 and included the Final Site Audit Report, the Final Storm Water Sampling Plan, and the Final BMP Recommendations Report. Each of these reports contains data, information, and recommendations for improvements to the SWMP. In anticipation of the adoption of a new Municipal Permit (first released by the RWQCB as Tentative Order No. R9-2006-0011 on March 14, 2006), the Authority elected to suspend any efforts to revise the SWMP in order to simultaneously incorporate changes that might be required by a new Permit. In light of this, there are no proposed changes to the SWMP at this time.

## WATER QUALITY IMPROVEMENT OR DEGRADATION

The discharge water quality information discussed above and in Chapter 3 of this report noted that discharge water quality continues to match the historical trends and exceed benchmarks for copper and zinc. No other assessments of water quality improvement or degradation have been made by the Authority. Implementation of the new stormwater sampling plan, which began during FY05-06, will lead to continued evaluation and validation of discharge water quality at SDIA using trend analysis and other statistical methods.

### REVISIONS TO THE SWMP

At this time, the Authority is evaluating the utility of revising the SWMP in a manner that would incorporate the site audit methodology and/or Framework assessment methodology directly. The Authority will continue to refine and implement the site audit and Framework methodologies in a manner similar to the discussion above, with the goal to incorporate various aspects of the methodologies 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 FY05-06, the budget for FY06-07, the source of the funds, a description of the use of these funds, and any legal restrictions on the use of the funds.

## 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 maintenance (O&M) aspects of the program, including: a) inspection and maintenance of

the MS4; b) maintenance of facilities and grounds; c) securing the materials, equipment, and vehicles necessary to perform required tasks; and d) supporting the management of the Authority's wastes.

### FISCAL-YEAR 2005-2006 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 FY05-06 was \$2,409,502. The expenses for FY05-06 are shown in Table 13-1 according to expense category. A total of \$992,600 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 \$276,500 and the staff time for the Facilities Maintenance Department equated to an allocation of \$716,100.

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 FY05-06 were \$1,269,866.

In FY05-06, 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 FY05-06 were \$147,036.



Table 13-1. Storm Water Management Program Expenditures for FY05-06

Description	Costs
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	\$2,981
2. Professional Services	
a. Legal	\$0
b. Consulting	\$23,611
3. Routine Maintenance	\$14,190
4. Ramp Cleaning/Runway Rubber Removal	\$555,000
5. Landscape Maintenance	\$265,000
6. MS4/BMP Cleaning/Maintenance	\$186,367
7. Parking Lot and Street Sweeping	\$73,840
8. Hazardous Waste Disposal	\$74,910
9. Equipment Purchases	\$2,136
10. Education, Training, and Public Outreach	\$71,831
Subtotal	\$1,269,866
C. Capital Improvement Program Expenses	
1. Storm Drainage System BMP Project (CIP #3105A)	\$147,036
Subtotal	\$147,036
GRAND TOTAL	\$2,409,502

### FISCAL-YEAR 2006-2007 BUDGET

Table 13-2 presents the SWMP implementation budget of \$3,216,125 for FY06-07. A total of \$1,022,378 is allocated for the combined staff time of the Environmental Affairs Department and the Facilities Maintenance Department.

A total of \$2,073,747 is allocated for Non-Personnel expenses in FY06-07, including professional services, site and infrastructure cleaning and maintenance, training, and education and public outreach efforts.

The remainder of the FY06-07 budget, \$120,000, is represented by CIP Project #4022, "General Dynamics Lot and Dust Mitigation."

### 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 FY06-07

Description	Budget
A. Personnel Expenses	
1. Environmental Affairs Department	\$284,795
2. Facilities Maintenance Department	\$737,583
Subtotal	\$1,022,378
B. Non-Personnel Expenses	
1. NPDES Permit Fees	\$15,000
2. Professional Services	
a. Legal	\$25,000
b. Consulting	\$350,000
3. Routine Maintenance	\$25,000
4. Ramp Cleaning/Runway Rubber Removal	\$400,000
5. Landscape Maintenance	\$320,000
6. MS4/BMP Cleaning/Maintenance	\$250,000
7. Parking Lot and Street Sweeping	\$213,747
8. Hazardous Waste Disposal	\$75,000
9. Equipment Purchases	\$350,000
10. Education, Training, and Public Outreach	\$50,000
Subtotal	\$2,073,747
C. Capital Improvement Program Expenses	
1. General Dynamics Lot and Dust Mitigation Project (CIP #4022)	\$120,000
Subtotal	\$120,000
GRAND TOTAL	\$3,216,125

Storm Water Management Plan - Municipal Stormwater Permit





# 14 Conclusions and Recommendations

The FY05-06 Annul Report summarizes the Authority's efforts to manage stormwater at SDIA in compliance with the San Diego Municipal Permit. Based upon this Annual Report and the Annual Reports for FY03-04 and FY04-05, the Authority believes the stormwater management program at SDIA is adequately planned, executed, reviewed, and funded. The program 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 4 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 presented 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 FY05-06 effectiveness assessment in Chapter 12, the management measures currently being implemented have proven to be effective.

### 3. Program Elements Identified for Improvement

Again, the majority of the management measures currently being implemented by the Authority have proven to be effective. The assessment of program effectiveness in Chapter 12 noted that the site audit identified deficiencies in BMP implementation and provided a list of recommended changes for the Authority's stormwater management program. Those recommendations are being evaluated in concert with other revisions being considered. However, it should be noted that the site audit identified deficiencies in implementation and not in the BMP requirements themselves.

### 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 Authority expected to use the output from the Storm Drainage System BMP Project (Chapter 11) to revise portions of the SWMP. The closing statement goes on to say, however, that the Authority elected to suspend any efforts to revise the SWMP in order to simultaneously incorporate changes that might be required by a new Permit that is soon to be adopted. In light of all this, there are no proposed changes to the SWMP at this time.

Chapter 3 also stated that the inventory of industrial operations has changed with 3 tenants being deleted and 8 new tenants being added, although the SWMP has yet to be updated. And Chapter 4 also stated that the inventory of commercial operations has changed with 2 tenants being deleted and 1 new tenant being added, although the 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 is one significant recommendation highlighted in Chapter 12 of this report - improve implementation rates for BMPs required in the SWMP. This recommendation was also made in the previous Annual Report (FY04-05). The recommendation is repeated in part due to the origin of the recommendation. The recommendation comes from the Final Site Audit Report which was one outcome of the Storm Drainage System BMP Project (discussed in Chapter 11). The Final Site Audit Report was prepared by MACTEC and dated June of 2005. As such, the information was in hand at the time of the FY04-05 Annual Report, but the results of the site audit are more fully discussed here in the Annual Report for FY05-06.

Again, as noted in the previous Annual Report, improvements in BMP implementation can be addressed in part by continued education of staff and tenants. The Authority continues to review and expand upon effective education and outreach efforts for staff and tenants as a means of achieving improved BMP implementation rates. Information provided in this report indicates that current education and outreach efforts are effective. Successful education efforts should lead to improved BMP implementation.

**CLOSING** 

The FY05-06 Annual Report clearly demonstrates that the stormwater management program at SDIA is adequately planned, executed, reviewed, and funded. The program generally fulfills the requirements of the Municipal Permit. The Authority strives to enhance existing stormwater pollution prevention and control measures at SDIA, to eliminate ineffective measures, and to identify, develop, and incorporate more effective measures whenever possible. Potential stormwater impacts are just one characteristic of the airport's "environmental footprint" that the Authority aims to minimize.

Storm Water Management Plan - Municipal Stormwater Permit





# Appendix A

FY05-06 Dry Weather

Monitoring Data Sheets

Storm Water Management Plan -	Municipal Stormwater Per	mit	



	[	⊠Routine Investi	gation		IC/ID Fo	llow-U <sub>l</sub>	p For			
GENERAL	L SITE DESCRIP	TION	(1	NAD	83 decimal degrees	to 5th pla	ace)			
Site ID	1		Latitud	e	32.43927		Wa	Hydrologic Un	nit	
Location	Area B, Jim's Air	r	Longitu	de	117.10734		Watershed	Hydrologic Ar	ea	
Date	8/12/05		TB Pag	e			hed	Hydrologic Subarea (Option	onal)	
Time	12:04 pm		Observe	er	RG, MG			harge Area tional)		
Land Use (Check one		Residential	Commercial	$\boxtimes$	Industrial	Agricu	ıltural	Parks	Оре	n
(Optional,	( <b>Secondary</b> ) greater than 10%)	Residential	Commercial	]	[ndustrial	Agricu			Ope	n
Conveyan (Check one		Manhole	⊠Catch Basin	(	Outlet	Concre Channel	ete	Natural Creek	Eart	hen Channel
ATMOSP	HERIC CONDIT	IONS			•					
Weather	Sunny	Partly Cloudy	⊠Overcast	F	og					
Tide	N/A	Low		Н	igh Ou	utgoing		Tide Height: 4	ft.	
Last Rain	$\boxtimes$ > 72 hours	< 72 hours								
Rainfall	None None	< 0.1"	> 0.1"							
RUNOFF	CHARACTERIS	TICS								
Odor	None	Musty	Rotten Eggs		Chemical		Sev	vage	Other	
Color	None	Yellow	Brown		White		Gra	ny	Other	
Clarity	Clear		Slightly Clou	ıdy	Opaque			•	Other	
Floatables	None	Trash	Bubbles/Foa	•	Sheen		Fed	al Matter	Other	
Deposits	None	Sediment/Gravel	Fine Particul	ates	Stains		Oil	y Deposits	Other	
Vegetation	n 🛮 None	Limited	Normal		Excessive			*	Other	
Biology	⊠None	Insects	Algae		Snails/Fisl	h	Mu	ssels/Barnacles	Other	
Flow O	bserved Yes	⊠No Pond	_							
Does the	e storm drain flov	v reach the Receiv	ing Water?		Yes	No	N	/A		
Evidenc	e of Overland Flo	w? Yes	No Irrigati	on R	unoff Othe	er:	······································			
Photo T	aken 🛛 Yes	No Photo #	T1a_081205, T1	d_08	31205					
Field Scree	ning Samples Col	lected? Yes	⊠ No							
Water Te		NH3-N (mg.			NO3-N (mg/L)			React PO	(mg/L)	
pH (pH unit		TURB (NT			COND (mS/cm)		<del></del>		,,,,,	
Analytical	Lab Samples Co	llected?	čes ⊠ No							
FLOW ES	STIMATION WO	RKSHEETS								
Flowin	g Creek or Box C	ulvert	Filling a Bottle	e or l	Known Volume	e		Flov	ving Pipe	
Width			ume		mL		] []	Diameter	I	ft
Depth			e to Fill		sec		] [ī	Depth		ft
Velocity		ft/sec Flo	w .		gpm	l		Velocity		ft/sec
Flow		gpm					ل ل	Flow		gpm
COMMEN	TS: Concrete	e inlet located acr	oss from ABX							

		575										
CENTED A		⊠Routine Investi	gation				•	-		•		
	SITE DESCRIE	TION					rees to 5th pla		·····			·
Site ID	2			Latitude	32.	43788		Wa	Hydrolog	gic Unit		
Location	Area C, Least Te	rn Area		Longitude	11	7.10768		Watershed	Hydrolog	gic Area		
Date	8/12/05			TB Page				hed	Hydrolog Subarea		)	
Time	12:21 pm			Observer	RC	i, MG			harge Are	a		
Land Use (Check one		Residential	Com	nmercial	⊠ Indı	ıstrial	Agricu	ıltural	Parks	3	Oper	1
(Optional,	( <b>Secondary</b> ) greater than 10%)	Residential	Com	nmercial	Indus	trial	Agricu	ıltural	Parks	S	Oper	1
Conveyand (Check one		Manhole	⊠Cat	ch Basin	Outle	t	Concre Channel	ete	Natur Creek	ral	Earth	en Channel
ATMOSP	HERIC CONDIT	IONS										
Weather	Sunny	Partly Cloudy	⊠Ove	ercast	Fog							
Tide	N/A	Low	⊠Inco	oming	High		Outgoing		Tide Hei	<b>ght: 4</b> ft.		
Last Rain Rainfall	<ul><li></li></ul>	< 72 hours < 0.1"	> 0.	1"								
	CHARACTERIS			-								
Odor	None	Musty	Rot	tten Eggs		Chemic	·al	Sev	vage		Other	
Color	None	Yellow		own		White	,ui	Gra	-		Other	
Clarity	Clear	. One v		ghtly Cloudy	1	Opaque	<b>.</b>	Oit	.,		Other	
Floatables		Trash	-	bbles/Foam		Sheen		Fee	al Matter		Other	
Deposits	None	Sediment/Gravel		e Particulate		Stains			y Deposits		Other	
Vegetation		Limited		rmal		Excessi	VA.	On	y Deposits		Other	
Biology	⊠None	Insects	Alg			Snails/I		Mu	ssels/Barna		Other	
Flow Ol	oserved Yes	⊠No Pond	_	Γidal								
Does the	e storm drain flov	v reach the Receiv	ving Wa	ter?	Y	l'es	No	N.	/A			
Evidenc	e of Overland Flo	w? Yes	No	Irrigation	Runof	f C	ther:					
Photo T	aken 🛛 Yes	No Photo #	CLTa_	081205, CL	Tb_08	1205						
Field Screen	ning Samples Col	lected? Yes	⊠ No	)								
Water Tei		NH3-N (mg			NO	3-N (mg/l	_)		Reac	t PO <sub>4</sub> (mg/	(L)	
pH (pH units	)	TURB (NT	U)		CO	ND (mS/	cm)					
Analytical	Lab Samples Co	llected?	Yes [	⊠ No								
FLOW ES	TIMATION WO	RKSHEETS										
Flowing	g Creek or Box C	ulvert	Fillin	g a Bottle o	r Knov	vn Volu	ıme			Flowing	g Pipe	
Width			ume				mL		Diameter			ft
Depth		ft Tim	ne to Fill				sec	4 H—	Depth			ft
Velocity		ft/sec Flo	w				gpm	4	Velocity			ft/sec
Flow		gpm							low			gpm
COMMEN	TS:											

		Dry	Weati	ier Moi	HU	oring i	ieid Dai	ıasıı	eei		
		⊠Routine Invest	igation			IC/I	D Follow-U	p For	•		
GENERAI	L SITE DESCRII	PTION		(NA	AD 8	3 decimal de	egrees to 5th pl	ace)			
Site ID	3			Latitude		32.43947	7	W	Hydrologic Un	it	
Location	Area E, T1 East	- Airside		Longitude	e	117.1172	27	Watershed	Hydrologic Are	ea	
Date	8/12/05			TB Page				hed	Hydrologic Subarea (Option	nal)	
Time	10:40 am			Observer		RG, MG			charge Area		
Land Use (Check one		Residential	Com	mercial	$\boxtimes$	Industrial	Agric		tional) Parks	Оре	en
	(Secondary) greater than 10%)	Residential	Com	mercial	Iı	ndustrial	Agric	ıltural	Parks	Оре	en
Conveyand (Check one	ce	Manhole	⊠Cato	ch Basin	C	Outlet	Concr Channel		Natural Creek	Eart	hen Channel
ATMOSP	HERIC CONDIT	IONS									
Weather	Sunny	Partly Cloudy	⊠Ove	rcast	Fo	g					
Tide	N/A	Low	⊠Inco	ming	Hi	gh	Outgoing		Tide Height: 4	ft.	
Last Rain		< 72 hours		Ü		8			<b></b>		
Rainfall	None None	< 0.1"	> 0.1	,,							
RUNOFF	CHARACTERIS	STICS									
Odor	None None	Musty	Rot	ten Eggs		Chei	nical	Sev	wage	Other	
Color	None None	Yellow	Bro			Whi	te	Gra	-	Other	
Clarity	Clear		⊠ SI	ightly Clou	dy	Opa	que			Other	
Floatables	None None	Trash	Bul	bles/Foam		Shee	-	Fee	cal Matter	Other	-
Deposits	None	Sediment/Gravel	🛛 Fi	ne Particula	ites	Stair	ıs	Oil	y Deposits	Other	
Vegetation	<b>i</b> ⊠None	Limited	Noi	mal		Exce	essive	******		Other	
Biology	⊠None	Insects	Alg	ae		Snai	ls/Fish	Mι	issels/Barnacles	Other	
Flow Ob	oserved Yes	No 🛛 Poi	nded	Tidal							
Does the	storm drain flov	v reach the Recei	ving Wa	ter?		Yes	⊠ No	N	/A		
Evidenc	e of Overland Flo	ow? Yes [	⊠ No	Irrigation	ı Rı	unoff	Other:				
Photo T	aken 🛮 Yes	No Photo #	T1a_08	1205, T1b_	_081	1205, T1c	_081205, T	1d_08	31205		
Field Screen	ning Samples Col	lected? 🛛 Yes	No	)							
Water Ter		NH3-N (mg				NO3-N (m	g/L) ND		React PO <sub>4</sub>	(mg/L)	4.5
pH (pH units	7.05	TURB (NT	บ) <b>60</b>			COND (m	S/cm) 70,0	)00			
Analytical	Lab Samples Co	llected?	Yes [	⊠ No							
FLOW ES	TIMATION WO	RKSHEETS								· · · · · · · · · · · · · · · · · · ·	
	Creek or Box C			g a Bottle o	r K	nown Vo	lume	<b>,</b>	Flow	ing Pipe	
Width			lume				mL	4 <b>—</b>	Diameter		ft
Depth			ne to Fill				sec	~ ⊢	Depth		ft
Velocity		ft/sec Flo	W				gpm		Velocity		ft/sec
Flow		gpm						J LI	Flow		gpm

Revised 4/20/2004

COMMENTS: \_\_

1		Dry	weati	iter ivio	ш	oring r	ieia Dat	asm	eei		
		⊠Routine Investi	gation			IC/II	Follow-U	p For			
GENERAL	L SITE DESCRI	PTION		(N	AD 8	33 decimal de	grees to 5th pla	ace)			
Site ID	4			Latitude		32.43992		I	Hydrologic Unit		
Location	Area E, Between	T1 and T2	r	Longitud	le	117.1200	3	Watershed	Hydrologic Area	1	
Date	8/12/05			TB Page				hed	Hydrologic Subarea (Option	al)	
Time	11:32 am			Observe	r	RG, MG			charge Area tional)		
Land Use (Check one		Residential	Com	ımercial	$\boxtimes$	Industrial	Agricu			Ope	n
	(Secondary) greater than 10%)	Residential	Com	mercial	Ι	ndustrial	Agricu	ıltural	Parks	Ope	n
Conveyand (Check one	ce	Manhole	⊠Cat	ch Basin	(	Outlet	Concre Channel		Natural Creek	Eart	hen Channel
ATMOSP	HERIC CONDIT	TIONS				··· · · · · · · · · · · · · · · · · ·					
Weather	Sunny	Partly	⊠Ove	ercast	Fo	)g					
Tide	N/A	Cloudy Low	⊠Inco	ming		igh	Outgoing		Tide Height: 4ft.		
Last Rain	$\boxtimes$ > 72 hours		ZAIIIC	Jilling	11	ıgıı	Outgoing		ride Height. 4n.	•	
Rainfall	⊠ None	< 0.1"	> 0.	1"							
RUNOFF	CHARACTERIS	STICS									
Odor	None	Musty	Rot	ten Eggs		Chemi	ical	Sev	wage	Other	
Color	None	Yellow		own		White		Gra	•	Other	
Clarity	Clear			ghtly Cloud	dy	Opaqu			-9	Other	·-
Floatables	None	Trash		bbles/Foam	-	Sheen		Fed	cal Matter	Other	
Deposits	None	Sediment/Gravel		e Particula		Stains			y Deposits	Other	
Vegetation		Limited		rmal		Exces			<u> </u>	Other	
Biology	⊠None	Insects	Alg			Snails		Mu	issels/Barnacles	Other	•
Flow O	<del></del>	_	_	Γidal			- 1011		issols, Darnacies	outer	
Does the		w reach the Receiv				Yes	No	N	7/A		
Evidenc	e of Overland Flo	ow? Yes	No	Irrigatio	n R	unoff	Other:				
Photo T	aken 🛛 Yes	No Photo #	T1T2a	_081205, T	1T.	2b_081205	, T1T2c_08	31205			
Field Screen	ning Samples Col	lected? Yes	⊠ No	)							
Water Ter	mp (°C)	NH3-N (mg	/L)			NO3-N (mg	/L)		React PO <sub>4</sub> (n	ng/L)	
pH (pH units	s)	TURB (NT	U)			COND (ms	S/cm)				
Analytical	Lab Samples Co	llected?	Yes	⊠ No							
FLOW ES	STIMATION WO	RKSHEETS									
	g Creek or Box C			g a Bottle	or I	Known Vol	ume	, ,	<del></del>	ng Pipe	
Width			ume				mL	<del>-</del>	Diameter		ft
Depth			ne to Fill				sec	<del>-</del> { }	Depth		ft
Velocity		ft/sec Flo	w				gpm		Velocity		ft/sec
Flow		gpm							Flow		gpm

Revised 4/20/2004

COMMENTS: \_

		⊠Routine Invest	igation			IC/ID	Follow-U	p For	•		
GENERAL	L SITE DESCRI	PTION		(N	AD 8	33 decimal deg	rees to 5th pl	ace)			
Site ID	5			Latitude		32.44080		Wa	Hydrologic Un	it	
Location	Area A, North R	amp		Longitud	le	117.11141		Watershed	Hydrologic Are	ea	***************************************
Date	8/12/05			TB Page		<del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>		hed	Hydrologic Subarea (Optio	nal)	
Time	11:42 am			Observe	r	RG, MG			charge Area tional)		
Land Use (Check one	•	Residential	Соп	nmercial	$\boxtimes$	Industrial	Agricu			Оре	en
	(Secondary) greater than 10%)	Residential	Com	nmercial	I	ndustrial	Agricu	ıltural	Parks	Ope	en
Conveyand (Check one	ce	Manhole	⊠Cat	ch Basin	C	Outlet	Concre Channel		Natural Creek	Ear	then Channel
ATMOSP	HERIC CONDIT	TIONS									
Weather	Sunny	Partly Cloudy	⊠Ove	ercast	Fo	)g					
Tide	N/A	Low	⊠Inco	oming	Hi	igh	Outgoing		Tide Height: 4	ft.	
Last Rain	$\boxtimes$ > 72 hours										
Rainfall	None None	< 0.1"	> 0.	1"							
RUNOFF	CHARACTERIS	STICS									
Odor	None	Musty	Ro	ten Eggs		Chemic	cal	Sev	wage	Other	
Color	None	Yellow	Bro	own		White		Gra	ay	Other	
Clarity	Clear		Sli	ghtly Cloud	ју	Opaque	2			Other	
Floatables	None	Trash	Bu	bbles/Foan	1	Sheen		Fee	cal Matter	Other	
Deposits	None	Sediment/Gravel	Fin	e Particula	tes	Stains		Oil	y Deposits	Other	
Vegetation		Limited	No	rmal		Excess	ive			Other	
Biology	⊠None	Insects	Alg	gae		Snails/	Fish	Mι	issels/Barnacles	Other	
Flow O	bserved Yes	No Pono	ied T	Γidal							
Does the	e storm drain flo	w reach the Recei	ving Wa	ter?		Yes	No	N	//A		
Evidenc	e of Overland Fl	ow? Yes	No	Irrigatio	n Ri	unoff C	Other:				
Photo T	aken XYes	No Photo #	WTHR	•		s, WTHRS		05			
	Kand 1 CV					, , , , , , , , , , , , , , , , , , , ,					
Field Screen	ning Samples Col		⊠ No	)							
Water Ter		NH3-N (mg				NO3-N (mg/			React PO <sub>4</sub>	(mg/L)	
pH (pH units	5)	TURB (NT	U)			COND (mS/	(cm)				
Analytical	Lab Samples Co	ollected?	Yes	⊠ No							
FLOW ES	TIMATION WO	RKSHEETS									
Flowing	g Creek or Box C	ulvert	Fillin	g a Bottle	or K	Known Volu	ıme		Flow	ing Pipe	
Width		<del></del>	lume				mL	] [	Diameter	-115 I TPC	ft
Depth		<del></del>	ne to Fill			<u> </u>	sec	┥ ├	Depth		ft
Velocity		ft/sec Flo	w				gpm	<b>-</b> -	Velocity		ft/sec
Flow		gpm	~~~					<b>-</b> -	Flow	***************************************	gpm
								_ L			
<b>COMMEN</b>	TS: Evidence of f	flow lines on conc	rete (see	pictures)							

		Γ2n						
~		⊠Routine Investi	_	IC/ID Follow-U	<del></del>			
	L SITE DESCRII	PTION		83 decimal degrees to 5th pl	ace)			
Site ID	6		Latitude	32.44101	Wai	Hydrologic Uni	t	
Location	Area E/F, NTC		Longitude	117.12270	Watershed	Hydrologic Are	a	
Date	8/12/05		TB Page			Hydrologic Subarea (Option	nal)	
Time	11:35 am		Observer	RG, MG		charge Area tional)		
Land Use (Check one		Residential	Commercial 🗵	Industrial Agricu	ıltural	Parks	Ope	n
	( <b>Secondary</b> ) greater than 10%)	Residential	Commercial	Industrial Agrico	ıltural	Parks	Оре	n
Conveyand (Check one		Manhole	⊠Catch Basin	Outlet Concr Channel		Natural Creek	Eart	hen Channel
ATMOSP	HERIC CONDIT	TIONS						
Weather	Sunny	Partly Cloudy	⊠Overcast I	Fog				
Tide	N/A	Low		High Outgoing		Tide Height: 4f	t.	
Last Rain Rainfall	$\boxtimes$ > 72 hours $\boxtimes$ None	< 72 hours < 0.1"	> 0.1"					
	CHARACTERIS		, v.1					
Odor	None	Musty	Rotten Eggs	Chemical	Sev	wage	Other	
Color	None	Yellow	Brown	White	Gra	•	Other	
Clarity	Clear	2011011	Slightly Cloudy	Opaque	OI	ر~	Other	
Floatables		Trash	Bubbles/Foam	Sheen	Ear	cal Matter	Other	<del></del>
Deposits	None	Sediment/Gravel	Fine Particulates			y Deposits	Other	
Vegetation		Limited	Normal	Excessive	Oli	y Deposits	Other	
Biology	⊠None	Insects	Algae	Snails/Fish	Μu	issels/Barnacles	Other	
Flow O	<b>bserved</b> Yes	⊠No Pond	_					***************************************
Does the	e storm drain flo	w reach the Receiv	ing Water?	Yes No	N	//A		
Evidenc	e of Overland Fl	ow? Yes	No Irrigation l	Runoff Other:				
Photo T	aken 🛛 Yes	No Photo #	NTCa_081205, NTC	Cb_081205				
Field Scree	ning Samples Col	llected? Yes	⊠ No					
Water Te	mp (°C)	NH3-N (mg	/L)	NO3-N (mg/L)		React PO4	(mg/L)	
pH (pH units	5)	TURB (NT	U)	COND (mS/cm)				
Analytical	Lab Samples Co	ollected?	Yes 🛛 No					
FLOW ES	STIMATION WO	ORKSHEETS						
	g Creek or Box C	ulvert	Filling a Bottle or	Known Volume		Flow	ing Pipe	
Width		<del></del>	ume	mL		Diameter		ft
Depth		ft Tim	ne to Fill	sec		Depth		ft
Velocity		ft/sec Flo	w	gpm		Velocity		ft/sec
Flow		gpm				Flow		gpm
COMMEN	TS:							

		⊠Routine Investi	gation		IC/ID	Follow-U	p For		_	
GENERAL	L SITE DESCRIE	PTION	1)	NAD 8	3 decimal deg	rees to 5th pla	ace)			
Site ID	1		Latitud	e	32.43927		Wa	Hydrologic Unit	t	
Location	Area B, Jim's Ai	r	Longitu	de	117.10734		Watershed	Hydrologic Are	a	
Date	9/1/05		TB Page	e			ned	<b>Hydrologic</b> <b>Subarea</b> (Option	nal)	
Time	10:01 AM		Observe	er	RG, MG			charge Area tional)		
Land Use (Check one		Residential	Commercial	$\boxtimes$	Industrial	Agricu	ıltural	Parks	Оре	n
	(Secondary) greater than 10%)	Residential	Commercial	I	ndustrial	Agricu	ıltural	Parks	Оре	n
Conveyand (Check one		Manhole	⊠Catch Basin	C	Outlet	Concre Channel	ete	Natural Creek	Eart	hen Channel
ATMOSP:	HERIC CONDIT	IONS							<u> </u>	
Weather	Sunny	Partly Cloudy	Overcast	Fo	)g					
Tide	N/A	Low	⊠Incoming	Hi	igh	Outgoing		Tide Height: 4ft	·.•	
Last Rain Rainfall	⊠ > 72 hours ⊠ None	< 72 hours < 0.1"	> 0.1"							
RUNOFF	CHARACTERIS	TICS								
Odor	None	Musty	Rotten Eggs		Chemic	cal	Sev	wage	Other	
Color	None	Yellow	Brown		White		Gra	•	Other	******
Clarity	Clear		Slightly Clou	ıdv	Opaque	<b>.</b>		,	Other	
Floatables		Trash	Bubbles/Foa:		Sheen	_	Fed	cal Matter	Other	
Deposits	None	Sediment/Gravel	Fine Particul		Stains			y Deposits	Other	
Vegetation		Limited	Normal		Excess	ive		) Deposito	Other	
Biology	⊠None	Insects	Algae		Snails/		Mu	issels/Barnacles	Other	
Flow O	bserved Yes	⊠No Ponde	ed Tidal							
		v reach the Receiv	_		Yes	No No	N	/A		
Evidenc	e of Overland Flo	ow? Yes 🛭	No Irrigati	on R	unoff C	ther:				
Photo T	aken ⊠Yes	No								
Field Screen	ning Samples Col	lected? Yes	⊠ No							
Water Te		NH3-N (mg/			NO3-N (mg/	L)		React PO <sub>4</sub> (	mg/L)	
pH (pH units		TURB (NTU			COND (mS/					
Analytical	Lab Samples Co	llected? Y	es 🛛 No							
FLOW ES	TIMATION WO	RKSHEETS		******			······································			
Flowing	g Creek or Box C	ulvert	Filling a Bottle	or F	Known Volu	ıme		Flowi	ing Pipe	
Width		ft Volu	ume			mL	] []	Diameter		ft
Depth		ft Tim	e to Fill			sec	] []	Depth		ft
Velocity		ft/sec Flow	v			gpm		Velocity		ft/sec
Flow		gpm						Flow		gpm
COMMEN	TS: Concrete	e inlet located acr	ose from ADV							
COMMEN	13: Concrete	e miet iocated acr	USS ITUM ABA							

		⊠Routine Investi	gation			IC/ID	Follow-U	n For		······································		
GENERAL	L SITE DESCRI		8	(NA	AD 8	3 decimal degr		_			_	
Site ID	2			Latitude		32.43788	ous to sur pr		Hydrolo	gic Unit		
	Area C, Least To	A ====			_			Watershed				
Location	Area C, Least To	em Alea		Longitude	e	117.10768	She		gic Area		······	
Date	9/1/05			TB Page				Hydrologic Subarea (Option			.D	
Time	10:09 AM			Observer		RG, MG			harge Arcional)			
Land Use (Check one		Residential	Com	mercial		Industrial	Agricu	ıltural	Park	S	Ope	n
	( <b>Secondary</b> ) greater than 10%)	Residential	Com	mercial	Ir	ndustrial	Agricu	ıltural	Park	s	Ope	n
Conveyand (Check one		Manhole	⊠Cato	ch Basin	О	utlet	Concre Channel	ete	Natu Creek	ıral	Eart	hen Channel
ATMOSP	HERIC CONDIT	TIONS	· · · · · · · · · · · · · · · · · · ·									
Weather	Sunny	Partly Cloudy	Over	cast	Fo	g						
Tide	_N/A	Low	⊠Inco	oming	Hi	gh	Outgoing		Tide He	ight: 4ft.		
Last Rain Rainfall	$\boxtimes$ > 72 hours $\boxtimes$ None	< 72 hours < 0.1"	s 0 1	***								
	<del></del>		> 0.1									
	CHARACTERIS											
Odor	None	Musty		ten Eggs		Chemic	al		vage		Other	
Color	None	Yellow	Bro			White	Gra	ıy		Other		
Clarity	Clear		-	tly Cloud	-	Opaque				Other		
Floatables		Trash		bles/Foam		Sheen			al Matter		Other	
Deposits	None	Sediment/Gravel	*****	e Particulat	es	Stains		Oil	y Deposits	3	Other	
Vegetation		Limited	Nor	rmal		Excessi					Other	
Biology	⊠None	Insects	Alg	ae		Snails/F	Fish	Mu	ssels/Barn	acles	Other	
Flow Ol	bserved Yes	No Pond	ed T	Cidal								
Does the	e storm drain flo	w reach the Receiv	ing Wa	ter?		Yes	⊠ No	N.	/A			
Evidenc	e of Overland Fl	ow? Yes	⊠ No	Irrigation	ı Ru	noff O	ther:		·····			
Photo T		No Photo #										
									·····			
	ning Samples Co		⊠ No	)	Τ.	NO N			1 =	1.70.0		<del></del>
Water Ter	<del></del>	NH3-N (mg				NO3-N (mg/L			Rea	ct PO <sub>4</sub> (mg	g/L)	
pH (pH units	s) [	TURB (NT	U)			COND (mS/d	em)					
Analytical	Lab Samples Co	ollected?	Yes [	⊠ No								
FLOW ES	TIMATION WO	ORKSHEETS										
	g Creek or Box C	ulvert	Filling	g a Bottle o	r_K	nown Volu	<u>me</u>	_		Flowin	g Pipe	
Width			ume			1	nL		Diameter			ft
Depth		ft Tin	ne to Fill				sec		Depth			ft
Velocity		ft/sec Flo	w			{	gpm		Velocity			ft/sec
Flow		gpm							Flow			gpm
COMMEN	TS:											

· · · · · · · · · · · · · · · · · · ·		∑D4: - I4:	4.9		ICAD	T. 11 T.	т.			
CENEDAI	L SITE DESCRI	⊠Routine Investi	igation	ALLE		Follow-U	_			
		FIION			83 decimal deg	rees to 5th pl				
Site ID	3			Latitude	32.43947			Hydrologic U	nit	
Location	Area C, Least Te	ern Area		Longitude	117.11723	7	Watershed	Hydrologic A	rea	
Date	9/1/05			TB Page			TEG.	Hydrologic Subarea (Opt	tional)	
Time	10:30 AM			Observer RG, MG				charge Area tional)		
Land Use (Check one		Residential	Comr	mercial 🗵	Industrial	Agricı			Ope	en
(Optional,	( <b>Secondary</b> ) greater than 10%)	Residential	Comr	mercial	Industrial	Agricu			Ope	en
Conveyand (Check one		Manhole	⊠Cate:	h Basin	Outlet	Concre Channel	ete	Natural Creek	Ear	then Channel
ATMOSP	HERIC CONDIT	TIONS								
Weather	Sunny	Partly Cloudy	Overo	cast F	og					
Tide	N/A	Low	⊠Inco	ming F	Iigh	Outgoing		Tide Height:	<b>4</b> ft.	
Last Rain	$\boxtimes$ > 72 hours		0.11	••						
Rainfall	None None	< 0.1"	> 0.1	,,						
RUNOFF	CHARACTERIS	STICS								
Odor	None None	Musty	Rott	en Eggs	Chem	ical	Sev	wage	Other	
Color	None None	Yellow	Brov		White		Gra	ıy	Other	
Clarity	Clear			ghtly Cloudy	1 1				Other	
Floatables	_	Trash		bles/Foam	Sheer			al Matter	Other	
Deposits	None	Sediment/Gravel		ne Particulate		~~~~~	Oil	y Deposits	Other	
Vegetation		Limited	Nori		Exces				Other	
Biology	⊠None	Insects	Alga	ae	Snails	s/Fish	Mu	ssels/Barnacles	Other	
Flow Ol	<b>bserved</b> Yes	No 🖾 Por	ded	Tidal						
Does the	e storm drain flo	w reach the Receiv	ing Wat	er?	Yes	⊠ No	N	/A		
Evidenc	e of Overland Flo	ow? Yes [	⊠ No	Irrigation F	Runoff (	Other:				
Photo T	aken 🛛 Yes	No Photo #								
Field Scree	ning Samples Col	llected? Xes	No							
Water Ter		NH3-N (mg			NO3-N (mg/	L) ND	****	React PC	)4 (mg/L)	4.0
pH (pH units	6.70	TURB (NT	U) 50		COND (mS	/cm) 64,1	00			
Analytical	Lab Samples Co	llected?	Yes 🔀	☑ No						
FLOW ES	TIMATION WO	RKSHEETS							· · · · · · · · · · · · · · · · · · ·	
	g Creek or Box C	ulvert	Filling	a Bottle or	Known Vol	ume		Flo	wing Pipe	
Width		ft Vol	ume			mL	] []	Diameter		ft
Depth			e to Fill			sec	4 <b>—</b>	Depth		ft
Velocity		ft/sec Flo	w			gpm	1 —	Velocity		ft/sec
Flow		gpm						Flow	-7-1-m	gpm
COMMEN	TS:									

					<u> </u>						
		⊠Routine Investi	gation	IC/ID Follow-Up For							
GENERAL	L SITE DESCRI	PTION		(NA	D 83 decimal deg	rees to 5th pla	ace)				
Site ID	4			Latitude	32.43992		<b>≰</b> Hydrologic Uni		t		
Location	Area E, Betweer	T1 and T2		Longitude	117.12003	,	Watershed	Hydrologic Are	a		
Date	9/1/05			TB Page			hed	Hydrologic Subarea (Option	nal)		
Time	9:16 AM			Observer	r RG, MG			charge Area tional)			
Land Use (Check one	se (Primary) one only) Residential Com		mercial	☑ Industrial	Industrial Agricu		ıltural Parks		n		
	(Secondary) greater than 10%)	Residential	Com	mercial	Industrial	Agricu	ıltural Parks		Оре	n	
Conveyand (Check one		Manhole	⊠Cat	ch Basin	Outlet	Concre Channel	ete	Natural Creek	Eart	hen Channel	
ATMOSP	HERIC CONDIT	TIONS									
Weather	Sunny	Partly Cloudy	⊠Ove	ercast	Fog						
Tide	N/A	Low	⊠Inco	oming	High Outg			Tide Height: 4ft	t.		
Last Rain	_										
Rainfall	None None	< 0.1"	> 0.1	0.1"							
RUNOFF	CHARACTERIS	STICS									
Odor	None	Musty	Rot	ten Eggs	Chemic	Chemical		wage	Other		
Color	None	Yellow	Bro	wn	White	White		ay	Other		
Clarity	Clear		_	ghtly Cloudy	Opaque	Opaque			Other		
Floatables		Trash		Bubbles/Foam Sheen					Other		
Deposits	None	Sediment/Gravel		e Particulate		***************************************		y Deposits	Other		
Vegetation		Limited		rmal	Excessi				Other		
Biology	⊠None	Insects	Alg	lgae Snails/Fish			Mu	issels/Barnacles	Other		
Flow Ol	<b>bserved</b> Yes	⊠No Pond	ed T	idal							
Does the	e storm drain flo	w reach the Receiv	ing Wa	ter?	Yes	⊠ No	N,	/A			
Evidenc	e of Overland Fl	ow? Yes	No	Irrigation	Runoff C	ther:					
Photo T	aken 🛛 Yes	No Photo #		C							
Field Screen	ning Samples Col	llected? Yes	⊠ No								
Water Ter	~~~~~~	NH3-N (mg/			NO3-N (mg/l			React PO <sub>4</sub> (	mo/L)		
pH (pH units		TURB (NT	_		COND (mS/			100001	iiig/L/		
Analytical	Lab Samples Co	llected?	es [	⊠ No							
FLOW ES	TIMATION WO	RKSHEETS									
Flowing	g Creek or Box C	ulvert	Filling	g a Bottle or	r Known Volu	ıme		Flowi	ing Pipe		
Width		ft Vol				mL		Diameter		ft	
Depth		ft Tim	e to Fill			sec	] [[	Depth		ft	
Velocity		ft/sec Flox	V			gpm		Velocity		ft/sec	
Flow		gpm					] [F	Flow		gpm	
COMMEN	TS:										

		· · · · · · · · · · · · · · · · · · ·									
		⊠Routine Investi	gation	IC/ID Follow-Up For							
GENERAL	L SITE DESCRII	PTION		(NAD	83 decimal deg	rees to 5th pla	dace)				
Site ID	5		Latitı	ıde	32.44080		Wa	Hydrologic Un	it		
Location	Area A, North R	amp	Longi	itude	117.11141		Watershed	Hydrologic Ar	ea		
Date	9/1/05	TB Pa	TB Page			ned	Hydrologic Subarea (Optio	onal)			
Time	9:47 AM			rver	RG, MG			charge Area tional)			
Land Use (Check one		Residential	Commercia	nmercial 🛛 Industrial Agric		Agricu			Open		
(Optional,	( <b>Secondary</b> ) greater than 10%)	Residential	Commercia	mmercial Industrial Agricu		ıltural	Parks	Open			
Conveyand (Check one		Manhole	⊠Catch Basi	n (	Outlet	Concre Channel	ete	Natural Earthen Chan Creek			
ATMOSP	HERIC CONDIT	IONS									
Weather	Sunny	Partly Cloudy	⊠Overcast	Fo	og						
Tide	N/A	Cloudy Low	<b>∑</b> Incoming			Outgoing		Tide Height: 4	ft		
Last Rain	$\boxtimes > 72$ hours	< 72 hours	Zincoming	☑Incoming High Outg				ride Height.	11.		
Rainfall	None     Non	< 0.1"	> 0.1"	> 0.1"							
RUNOFF	— CHARACTERIS										
Odor	None	Musty	Rotten Egg	gs	Chemi	cal	Sev	wage	Other		
Color	None	Yellow	Brown	J	White		Gra	<del>-</del>	Other		
Clarity	Clear		Slightly Cl	loudy	Opaqu	e		•	Other		
Floatables	None	Trash	Bubbles/F	Sheen		Fed	cal Matter	Other			
Deposits	None	Sediment/Gravel	Fine Partic	Fine Particulates Stains			Oil	y Deposits	Other		
Vegetation		Limited	Normal						Other		
Biology	⊠None	Insects	Algae	gae Snails/Fish			Mu	ssels/Barnacles	Other		
Flow Ol	oserved Yes	⊠No Pond	ed Tidal								
Does the	e storm drain flov	w reach the Receiv	ing Water?		Yes	⊠ No	N	/A			
Evidenc	e of Overland Flo	ow? Yes	No Irrig	ation R	unoff (	Other:					
Photo T	aken 🛮 Yes	No Photo #	•								
	ning Samples Col		⊠ No								
Water Ter		NH3-N (mg			NO3-N (mg/			React PO <sub>4</sub>	(mg/L)		
pH (pH units	(3)	TURB (NT	U)		COND (mS	/cm)					
*	Lab Samples Co		res No								
FLOW ES	TIMATION WO	RKSHEETS									
Flowing	g Creek or Box C	ulvert	Filling a Bot	tle or I	Known Vol	ume		Flow	ving Pipe		
Width			ume			mL	<b>-</b>	Diameter	ft		
Depth		<del></del>	e to Fill			sec		Depth	ft		
Velocity		ft/sec Flov	w	······································		gpm		Velocity	ft/sec		
Flow		gpm						Flow	gpm		

Revised 4/20/2004

**COMMENTS:** Evidence of flow lines on concrete (see pictures)

		•		0							
	[	$oxtimes$ Routine Investi ${}_{i}$	gation	IC/ID Follow-Up For							
GENERA	L SITE DESCRIF	PTION	(NA	D 83 decimal degrees to 5th pl	ace)						
Site ID	6		Latitude	32.44101	∯ Hydrologic Unit						
Location	Area E/F, NTC		Longitude	117.12270	Hydrologic Unit  Hydrologic Area  Hydrologic						
Date	9/1/05		TB Page		B Hydrologic Subarea (Optional	al)					
Time	9:18 AM		Observer	RG, MG	Discharge Area (Optional)						
Land Use (Check one		Residential	Commercial	☐ Industrial Agricu		Open					
(Optional,	(Secondary) greater than 10%)	Residential	Commercial	Industrial Agricu	ıltural Parks	Open					
Conveyan (Check one		Manhole	⊠Catch Basin	Outlet Concre Channel	ete Natural Creek	Earthen Channel					
ATMOSP	HERIC CONDIT	IONS									
Weather	Sunny	Partly Cloudy	⊠Overcast	Fog							
Tide	N/A	Low	☑Incoming	High Outgoing	Tide Height: 4ft.						
Last Rain	$\boxtimes$ > 72 hours	< 72 hours									
Rainfall	None None	< 0.1"	> 0.1"								
RUNOFF	CHARACTERIS	TICS									
Odor	None	Musty	Rotten Eggs	Chemical	Sewage	Other					
Color	None	Yellow	Brown	White	Gray	Other					
Clarity	Clear		Slightly Cloud	y Opaque	·	Other					
Floatables	None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other					
Deposits	None	Sediment/Gravel	Fine Particulate	es Stains	Oily Deposits	Other					
Vegetation	n 🛮 None	Limited	Normal	Excessive		Other					
Biology	⊠None	Insects	Algae	Snails/Fish	Mussels/Barnacles	Other					
Flow O	bserved Yes	_	_								
		v reach the Receiv		Yes 🛛 No	N/A						
Evidenc	ce of Overland Flo	ow? Yes 🛭	No Irrigation	Runoff Other:		_					
Photo T	`aken ⊠Yes	No Photo #									
Field Scree	ning Samples Col	lected? Yes	⊠ No								
Water Te		NH3-N (mg/	<del></del>	NO3-N (mg/L)	React PO <sub>4</sub> (n	ng/L)					
pH (pH unit	s)	TURB (NTU	J)	COND (mS/cm)							
Analytica	l Lab Samples Co	llected?	es No								
FLOW ES	STIMATION WO	RKSHEETS									
Flowin	g Creek or Box C	ulvert	Filling a Bottle o	r Known Volume	Flowi	ng Pipe					
Width		ft Vol		mL	Diameter	ft					
Depth			e to Fill	sec	Depth	ft					
Velocity		ft/sec Flox	<i>N</i>	gpm	Velocity	ft/sec					
Flow		gpm			Flow	gpm					
COMMEN	TS:										

		⊠Routine Investi	gation	IC/ID Follow-Up For							
GENERAL	L SITE DESCRI	PTION	<u> </u>	(NAD	83 decimal degi	rees to 5th pla	ace)				
Site ID	1	•	La	titude	32.43927		Wa	Hydrologic Uni	t		
Location	Area B, Jim's Ai	r	Lo	ngitude	117.10734		Watershed	Hydrologic Are	a		
Date	09/13/05		ТЕ	TB Page			hed	Hydrologic Subarea (Option	nal)		
Time	9:20 am			server	RG, MG			harge Area ional)			
Land Use (Check one	(Primary) ne only) Residential Con		Comme	cial 🛚	Industrial	Agricu	ıltural	ltural Parks			
	(Secondary) greater than 10%)	Residential	Comme	cial 1	Industrial	Agricu	ıltural Parks		Open		
Conveyand (Check one		Manhole	⊠Catch B	Basin (	Outlet	Concre Channel	ete Natural Creek		Earth	en Channel	
ATMOSP	HERIC CONDIT	TIONS									
Weather	Sunny		Overcas	t F	og						
Tide Last Rain Rainfall	N/A	N/A Low $\boxtimes$ Inc $\boxtimes$ > 72 hours < 72 hours		coming High Outgoing			Tide Height:ft.				
	CHARACTERIS		2 0.1								
Odor	None	Musty	Rotten	tten Eggs Chemical				vage	Other		
Color	None	Yellow	Brown				Gra	· ·	Other		
Clarity	TVOILE	Clear		y Cloudy	Opaque		Oit	•,	Other		
Floatables	None	Trash		ubbles/Foam Sheen			Fed	cal Matter	Other		
Deposits	None	Sediment/Gravel		e Particulates Stains			y Deposits	Other			
Vegetation		Limited	Norma					y Deposits	Other		
Biology	None	Insects	Algae					ssels/Barnacles	Other		
Flow O	<del></del>	_	•	1						· · · · · · · · · · · · · · · · · · ·	
Does the	e storm drain flo	w reach the Receiv	ing Water	?	Yes	No No	N	/A			
Evidenc	e of Overland Fl	ow? Yes	⊠No I	rrigation R	Runoff C	Other:		***************************************			
Photo T	aken \( \sum Yes	No Photo #									
Field Scree	ning Samples Co	llected? Yes	⊠ No								
Water Te		NH3-N (mg	/L)		NO3-N (mg/	L)		React PO4	mg/L)		
pH (pH unit	s)	TURB (NT	U)		COND (mS/	(cm)					
Analytical	l Lab Samples Co	ollected?	Yes 🖂 N	No							
FLOW ES	STIMATION WO	ORKSHEETS									
Flowing	g Creek or Box C	Culvert	Filling a	Bottle or l	Known Volu	ıme		Flow	ing Pipe		
Width			ume			mL		Diameter		ft	
Depth		ft Tin	ne to Fill			sec		Depth		ft	
Velocity		ft/sec Flo	w			gpm		Velocity		ft/sec	
Flow		gpm						Flow		gpm	
COMMEN	TS: Concret	e inlet located aci	oss from A	BX							

<del></del>											
		⊠Routine Investi	igation	• •							
GENERAL	L SITE DESCRI	PTION		(NAD 8	3 decimal deg	rees to 5th pla	ace)				
Site ID	2	· · · · · · · · · · · · · · · · · · ·	Latit	ude	32.43788		Wai	Hydrologic U	nit		
Location	Area C, Least Te	ern Area	Long	itude	117.10768		Watershed	Hydrologic A	rea		
Date	9/13/05		TB P	TB Page			Subarea (Optional)				
Time	9:32 am			rver	RG, MG			charge Area tional)			
Land Use (Check one		Residential	Commercia	ı 🛛	Industrial	Agricu	ıltural	Parks	Open		
(Optional,	( <b>Secondary)</b> greater than 10%)	Residential	Commercia	ıl I	ndustrial	Agricu	ıltural Parks		Open		
Conveyand (Check one		Manhole	⊠Catch Basi	in C	Outlet	Concre Channel	ete	Natural Creek	Earth	en Channel	
ATMOSP	HERIC CONDIT	TIONS									
Weather	Sunny	□ Partly     Cloudy	Overcast	Fo	og						
Tide	N/A	Low		H	igh	Outgoing		Tide Height:_	ft.		
Last Rain	$\boxtimes$ > 72 hours	< 72 hours			_						
Rainfall	None None	< 0.1"	> 0.1"	0.1"							
RUNOFF	CHARACTERIS	STICS									
Odor	None	Musty	Rotten Eg	tten Eggs Chemical			Sev	wage	Other		
Color	None	Yellow	Brown			Gra	-	Other			
Clarity		Clear		ightly Cloudy Opaque			Glay				
Floatables	None	Trash		ubbles/Foam Sheen			Fee	cal Matter	Other Other		
Deposits	None	Sediment/Gravel				Stains		y Deposits	Other		
Vegetation		Limited	Normal				<i>y</i> = •F • • • • • • • • • • • • • • • • •	Other			
Biology	None	Insects	Algae				Mι	issels/Barnacles			
Flow Obse	erved Yes	⊠No Ponded	_								
Does the s	torm drain flow	reach the Receivin	g Water?		Yes	⊠ No	N/A				
Evidence (	of Overland Flow	? Yes ⊠	No Irrigati	on Run	off Oth	er:					
Photo Taken	⊠ Yes	No Photo #									
	ning Samples Co		⊠ No								
Water Ter		NH3-N (mg			NO3-N (mg/l			React PO	4 (mg/L)		
<b>pH</b> (pH units	s)	TURB (NT	U)		COND (mS/	cm)					
	Lab Samples Co		Yes 🛭 No								
	STIMATION WO		DIII		·						
	g Creek or Box C	<del></del>	Filling a Bot	ttle or I			7 -		wing Pipe		
Width			lume			mL	-l -	Diameter		ft	
Depth		<del></del>	ne to Fill	······································		sec	⊸ -	Depth	·	ft	
Velocity		ft/sec Flo	<u>w</u>			gpm	+ ⊢	Velocity		ft/sec	
Flow							Flow		gpm		

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**COMMENTS:**\_

						8							
		⊠Routine Invest	igation	IC/ID Follow-Up For									
GENERAL	L SITE DESCRII	PTION		(NA	AD 83 c	lecimal deg	rees to 5th pla	ace)					
Site ID	3		]	Latitude	3	32.43947		Wa			;		
Location	Area E, T1 East	- Airside	]	Longitude		117.11727		Watershed	Hydrologic Are		1		
Date	9/13/05	-	TB Page				hed		rologic area (Option	al)			
Time	9:41 am		I INCOPUOR I RITIVIIT				Discharge Area (Optional)						
Land Use (Check one		Residential	Comn	nercial	⊠ In	dustrial	Agricu	-		Parks	Open		
(Optional,	( <b>Secondary</b> ) greater than 10%)	Residential	Comm	nercial	Ind	ustrial	Agricu	ıltura	1 :	Parks	Open		
Conveyand (Check one		Manhole	⊠Catch	⊠Catch Basin		elet	Concre Channel			Natural eek	Earth	en Channel	
ATMOSP	HERIC CONDIT	TIONS											
Weather	Sunny	Overc	ast	Fog									
Tide	N/A	Cloudy  V/A Low			☐ Incoming High Outgoing				Tide Height:ft.				
Last Rain	_> 72 hours												
Rainfall	None None	< 0.1"	> 0.1"	•									
RUNOFF	CHARACTERIS	STICS	ı										
Odor	None None	Musty	Rotte	otten Eggs Chemical			Se	Sewage					
Color	None None	Yellow	Brow			White			Gray				
Clarity	Clear		•	Slightly Cloudy 🔲 Opaque						Other			
Floatables		Trash		Bubbles/Foam ⊠ Sheen			Fecal Matter			Other Other			
Deposits	None	Sediment/Gravel		ine Particulates Stains			Oi						
Vegetation		Limited		Normal Excessive						Other			
Biology	⊠None	Insects	Alga					Mussels/Barnacles			Other		
Flow Obse	erved Yes	No 🛛 Ponde	ed T	idal									
Does the s	torm drain flow i	reach the Receivin	g Water?	•	Y	es	⊠ No	N/A					
Evidence o	of Overland Flow	? Yes 🛛	No Ir	rigation F	Runoff	Oth	er:						
Photo Tak	ken 🛚 Yes	No Photo #		U			-						
Field Scree	ning Samples Col	llected? 🛛 Yes	No										
Water Te		NH3-N (mg	<del></del>		N	03-N (mg/l	L) 90.0	)		React PO <sub>4 (r</sub>	ng/L)	16.0	
pH (pH unit	s) 7.15	TURB (NT	u) 170		C	OND (mS/	(cm) 80,0	000					
Analytical	Lab Samples Co	llected?	Yes	No									
	TIMATION WO												
	g Creek or Box C			a Bottle o	or Kn	- 1		, r			ng Pipe		
Width			lume				mL	- ⊢	Diame			ft	
Depth			ne to Fill				sec	<b>⊣</b> ⊢	Depth			ft	
Velocity		ft/sec Flo	w				gpm	- ⊢	Veloci	ity		ft/sec	
Flow		gpm		].			*****	J L	Flow			gpm	

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COMMENTS: Possible Source - Potable Water Cabinet

		⊠Routine Invest	igation	IC/II	Follow Ur	. For		···	
CENERAL	L SITE DESCRII		Ŭ	IAD 83 decimal de	-				
Site ID	4		Latitude		grees to our pra-		Herdus Is also He		
						Watershed	Hydrologic Un		····
Location	Area E, Between	TI and T2	Longitud	de 117.1200	3	ersh	Hydrologic Ar	ea	
Date	9/13/05		TB Page	•		led	Hydrologic Subarea (Optic	onal)	
Time	9:04 am		Observe	r RG, MG			harge Area		
Land Use ( (Check one		Residential	Commercial		Agricul	ltural	Parks	Open	
(Optional, g	( <b>Secondary</b> ) greater than 10%)	Residential	Commercial	Industrial	Agricul	ltural	Parks	Open	
Conveyance (Check one		Manhole	⊠Catch Basin	Outlet	Concre Channel	te	Natural Creek	Earthen	Channel
ATMOSP	HERIC CONDIT	TONS			· · · · · · · · · · · · · · · · · · ·				
Weather	Sunny	⊠ Partly Cloudy	Overcast	Fog					
Tide	N/A	Low		High	Outgoing		Tide Height:	3ft.	
Last Rain	$\boxtimes$ > 72 hours				-				
Rainfall	None	< 0.1"	> 0.1"						
RUNOFF	CHARACTERIS	STICS							
Odor	None	Musty	Rotten Eggs	Chemi	cal	Sev	vage	Other	
Color	None	Yellow	Brown	White		Gra	•	Other -	
Clarity	Clear		Slightly Cloud	dy Opaqu	e			Other	
Floatables	None	Trash	Bubbles/Foan			Fed	al Matter	Other	
Deposits	None	Sediment/Gravel	Fine Particula	ites Stains		Oil	y Deposits	Other	
Vegetation	None	Limited	Normal	Excess	sive		<u> </u>	Other	
Biology	⊠None	Insects	Algae	Snails		Mu	ssels/Barnacles	Other	***************************************
Flow Obse	erved Yes	⊠No Ponded	Tidal						
Does the st	torm drain flow r	each the Receivin	g Water?	Yes	⊠ No	N/A			
Evidence o	of Overland Flow	? Yes 🖂	No Irrigation	Runoff Oth	ner:				
Photo Tak	en 🛛 Yes	No Photo #			***************************************			•	
Field Samon	ning Samples Col	leeted? Vec	⊠ No						
		lected? Yes NH3-N (mg	······	NO <sub>3</sub> -N (mg.	/L)		React PO <sub>4</sub>	(mg/L)	<u> </u>
Water Ten		TURB (NT		COND (ms			133357 37	(IIIg/L)	
Water Ten			Yes 🛛 No					-1	**********
pH (pH units		llected?							
pH (pH units  Analytical	Lab Samples Co								
pH (pH units  Analytical  FLOW ES	Lab Samples Co	RKSHEETS		on Known V-1			TD) -	.:	
pH (pH units  Analytical  FLOW ES  Flowing	Lab Samples Co	RKSHEETS ulvert	Filling a Bottle	or Known Vol		[ ī		ving Pipe	
pH (pH units  Analytical  FLOW ES  Flowing  Width	Lab Samples Co	PRKSHEETS ulvert ft Vo	Filling a Bottle	or Known Vol	mL	_	Diameter	ft	
PH (pH units  Analytical  FLOW ES  Flowing  Width  Depth	Lab Samples Co	PRKSHEETS ulvert ft Vol ft Tin	Filling a Bottle ume ne to Fill	or Known Vol	mL sec	I	Diameter Depth	ft	
pH (pH units  Analytical  FLOW ES  Flowing  Width	Lab Samples Co	RKSHEETS ulvert  ft Vol ft Tin	Filling a Bottle ume ne to Fill	or Known Vol	mL	I	Diameter	ft ft ft	

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		Dry W	eather wior	ntoring r	icia Dat	asii		
		⊠Routine Investigati	ion	IC/II	Follow-U	p For		Military and the second
GENERAL	L SITE DESCRIP	TION	(NA	D 83 decimal de	grees to 5th pla	ace)		
Site ID	5		Latitude	32.44080		W	Hydrologic Uni	t
Location	Area A, North Ra	mp	Longitude	117.1114	1	Watershed	Hydrologic Are	ea ea
Date	9/13/05		TB Page			hed	Hydrologic Subarea (Option	nal)
Time	9:14 am		Observer	RG, MG			charge Area tional)	
Land Use (Check one		Residential	Commercial	✓ Industrial	Agricu			Open
	(Secondary) greater than 10%)	Residential	Commercial	Industrial	Agricu	ıltural	Parks	Open
Conveyand (Check one	ce	Manhole 🛚 🖂	Catch Basin	Outlet	Concre Channel	ete	Natural Creek	Earthen Channel
ATMOSP	HERIC CONDIT	IONS						
Weather Tide Last Rain Rainfall	Sunny N/A	<ul><li>☑ Partly Cloudy</li><li>Low</li><li>&lt; 72 hours</li><li>&lt; 0.1"</li></ul>	Overcast  ☑ Incoming  > 0.1"	Fog High	Outgoing		Tide Height:	ft.
RUNOFF	— CHARACTERIS							
Odor Color Clarity Floatables Deposits Vegetation Biology Flow Obse	None None Clear None None  Mone  None	Musty Yellow  Trash Sediment/Gravel Limited Insects  No Ponded	Rotten Eggs Brown Slightly Cloudy Bubbles/Foam Fine Particulate Normal Algae Tidal	Sheen	e sive	Gra Fec Oil	wage cal Matter y Deposits assels/Barnacles	Other Other Other Other Other Other Other Other Other
	of Overland Flow?	each the Receiving W Yes No No Photo #	Vater? Irrigation R		⊠ No	N/A Othe		
Field Screen Water Ter pH (pH units	ning Samples Coll	ected? Yes  NH3-N (mg/L)  TURB (NTU)	☑ No	NO3-N (mg.			React PO4 (	mg/L)
FLOW ES	TIMATION WO	RKSHEETS						
	Creek or Box Cu		illing a Bottle o	r Known Vol	ume	. –		ing Pipe
Width		t Volume			mL		Diameter	ft
Depth Velocity		ft Time to ft/sec Flow	Fill		sec	. —	Depth Valority	ft
Flow		gpm FIOW			gpm	· -	Velocity Flow	ft/sec gpm
			····			ئے ب		

Revised 4/20/2004

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

		⊠Routine Investiga	ation			IC/ID	Follow-U	p For		····	
GENERA	L SITE DESCRI	PTION		(NA	D 8	decimal deg	rees to 5th pla	ace)			
Site ID	6			Latitude		32.44101		Wa	Hydrologic U	nit	
Location	Area E/F, NTC			Longitud	e	117.12270	)	Watershed	Hydrologic A	rea	
Date	9/13/2005			TB Page				hed	Hydrologic Subarea (Opti	ional)	
Time	9:08 am			Observer		RG, MG			charge Area tional)		
Land Use (Check one		Residential	Com	nercial		Industrial	Agricu	ıltural	Parks	Oper	n
	( <b>Secondary</b> ) greater than 10%)	Residential	Com	nercial	In	dustrial	Agricu	ıltural	Parks	Ope	n
Conveyand (Check one	ce	Manhole	Catch	n Basin	О	utlet	⊠Concr Channel	ete	Natural Creek	Eartl	nen Channel
ATMOSP	HERIC CONDIT	TIONS									
Weather	Sunny	□ Partly     Cloudy	Over	cast	Fog	g					
Tide Last Rain	N/A $\boxtimes$ > 72 hours	< 72 hours	⊠ Inco		Hig	gh	Outgoing		Tide Height:_	ft.	
Rainfall	None None	< 0.1"	> 0.1	**							
	CHARACTERIS										
Odor	None	Musty		en Eggs		Chemic	cal		wage	Other	
Color	None	Yellow	Bro			White		Gra	ay	Other	
Clarity	Clear		_	htly Cloud	y	Opaque	2			Other	
Floatables		Trash		bles/Foam		Sheen			cal Matter	Other	
Deposits	None	Sediment/Gravel	-	Particulat	es	Stains		Oil	y Deposits	Other	
Vegetation Biology	n ⊠None ⊠None	Limited Insects	Nor Alga			Excess Snails/		Mu	ssels/Barnacles	Other Other	
Flow Obse	<del></del>	⊠No Ponded	Tida				- 1011			omei	***************************************
Does the s	torm drain flow i	reach the Receiving	Water	?		Yes	⊠ No	N/A			
Evidence o	of Overland Flow	? Yes 🖾 No	o I	rrigation R	.uno	ff Oth	er:			<del></del>	
Photo Tak	en 🛚 Yes	No Photo #									
Field Scree	ning Samples Col	llected? Yes	⊠ No								
Water Ter		NH3-N (mg/L)			1	NO3-N (mg/l	L)		React PO	4 (mg/L)	T
pH (pH units	(1)	TURB (NTU)				COND (mS/					
Analytical	Lab Samples Co	llected? Ye	es D	<b>∑</b> No							
FLOW ES	TIMATION WO	PRKSHEETS									
Flowing	g Creek or Box C	ulvert	Filling	a Bottle o	r K	nown Volu	ıme		Fla	wing Pipe	
Width	,	ft Volur			- 41		mL	] [	Diameter	······· ipc	ft
Depth			to Fill				sec	<b>-</b> ⊢	Depth		ft
Velocity		ft/sec Flow					gpm	<b>-</b> -	Velocity		ft/sec
Flow		gpm						1 ⊢	Flow		gpm
COMMEN	TS:										

Revised 4/20/2004

		D 4: I 4:	.•		57 reap						
CENTEDAI	CITE DECCDII	Routine Investiga	tion	ALAD	⊠ IC/ID 1		•	r			
	L SITE DESCRII	PHON	-	Latitude	83 decimal degree 32.43947	s to 5th pla		Undersla	aia IInit		
Site ID		<u> </u>					Watershed	Hydrolo			
Location	Area E, T1 East	- Airside		Longitude	117.11727		ersh	Hydrologic Are			
Date	10/06/05			TB Page			ed	Hydrolo Subarea	<b>gic</b> (Optional)		
Time	8:50 am			Observer	RG, MG			harge Are	ea		
Land Use (Check one		Residential	Com	nmercial 🏻	Industrial	Agricu	ltural	Park	s C	)pen	
	(Secondary) greater than 10%)	Residential	Com	nmercial l	Industrial	Agricu	ltural	Park	s C	)pen	
Conveyand (Check one		Manhole	⊠Cat	ch Basin	Outlet	Concre Channel	ete	Natu Creek	ıral E	Earthen Chann	el
ATMOSP	HERIC CONDIT	TIONS									
Weather	⊠ Sunny	Partly	Ove	ranet E	0.0						
		Cloudy			og			m'i II	• • .	c.	
Tide Last Rain	⊠N/A ⊠ > 72 hours	Low < 72 hours	Inco	oming H	igh C	Outgoing		Tide He	ight:	π.	
Rainfall	⊠ None	< 0.1"	> 0.	1"							
	CHARACTERIS										
Odor	None None	Musty	Ro	tten Eggs	Chemical	l	Sev	wage	Ot	her	
Color	None None	Yellow		own	White		Gra	-	O	ther	
Clarity	Clear			lightly Cloudy					O	ther	
Floatables	<del></del>	Trash		bbles/Foam	Sheen			al Matter		ther	
Deposits	None n ⊠None	Sediment/Gravel		ne Particulates			Oil	y Deposits		her	
Vegetation Biology	n ⊠None ⊠None	Limited Insects		rmal gae	Excessive Snails/Fi		Mı	ıssels/Barr		ther ther	
Flow Obse	<u> </u>	No Ponded		gac Tidal	Shans/11	511	IVIU	155C15/15a11.	iacies O		
		<del></del>			Yes 🗵	No	N/A				
		reach the Receiving									
	of Overland Flow		0	Irrigation Rur	off Other	*			anno anno anno anno anno anno anno anno		
Photo Tak	ken 🛛 Yes	No Photo #									
Field Scree	ning Samples Col	llected? Xes	N	o							
Water Te		NH3-N (mg/L			NO3-N (mg/L)	14.0	)	Rea	ct PO4 (mg/L)	1.05	
<b>pH</b> (pH unit	s) 7.30	TURB (NTU)	N7		COND (mS/cm	n) NT					
Analytica	l Lab Samples Co	ollected?	l'es	No							
FLOW ES	STIMATION WO	ORKSHEETS									
	g Creek or Box C			g a Bottle or	·····		<b>-</b>	=:	Flowing I		
Width		ft Volum		<u> </u>	ml	······································		Diameter Donth		ft	
Depth Velocity		ft Time	to Fil	1	gp		~	Depth Velocity		ft ft/sec	
Flow		gpm					~	Flow		gpm	
	<u> </u>	1		I			نا د		3	. 1 =-	

Revised 4/20/2004

COMMENTS: \_\_\_\_

	Routin	e Investigation		⊠ I	CAD E	ollow-Up	For				
GENERAL	L SITE DESCRI	<u> </u>				nal degrees to					
Site ID	N/A	TION		Latitude	32.43		o sui pia		II. dualacia I	1	
					-			Watershed	Hydrologic U	nit	
Location	Area E, T1 Airsi	de (Gate 9)		Longitude	117.	11727		ersh	Hydrologic A	rea	
Date	10/06/05			TB Page				ied	Hydrologic Subarea (Opt	tional)	
Time	9:50 am			Observer	RG,	MG			harge Area ional)		
Land Use (Check one		Residential	Comn	mercial 🗵	Indust	rial ,	Agricul			Оре	n
(Optional,	( <b>Secondary</b> ) greater than 10%)	Residential	Comn	mercial	Industr		Agricul			Оре	n
Conveyance (Check one		Manhole	⊠Catcl	h Basin	Outlet		Concre nannel	te	Natural Creek	Eart	hen Channel
ATMOSP	HERIC CONDIT	IONS									
Weather	Sunny	Partly Cloudy	Overc	east F	og						
Tide	_N/A	Low	⊠Incor	ming H	Iigh	Out	going		Tide Height:	ft.	
Last Rain	$\boxtimes$ > 72 hours										
Rainfall	None None	< 0.1"	> 0.1'	,							
RUNOFF	CHARACTERIS	STICS									
Odor	None None	Musty	Rotte	en Eggs	C	hemical		Sev	vage	Other	
Color	None None	Yellow	Brov	<i>w</i> n	W	hite		Gra	ıy	Other	•
Clarity	Clear		⊠ Slig	ghtly Cloudy	′ O	paque				Other	•
Floatables	None None	Trash		bles/Foam		heen		Fec	al Matter	Other	•
Deposits	None	Sediment/Gravel	⊠Fine	e Particulates	s S	tains		Oil	y Deposits	Other	•
Vegetation		Limited	Norr	mal	Е	xcessive				Other	•
Biology	⊠None	Insects	Alga	ne	S	nails/Fish		Mu	ssels/Barnacles	Other	•
Flow Obse	rved Yes	No 🛛 Ponde	ed T	idal							
Does the st	orm drain flow r	each the Receivin	g Water?	?	Yes	$\boxtimes$ N	Ю	N/A			
Evidence of	of Overland Flow	? Yes ⊠	No I	rrigation Rur	noff	Other: _					
Photo Tak	en 🛚 Yes	No Photo #									
Field Scree	ning Samples Col	lected? Xes	No	· · · · · · · · · · · · · · · · · · ·							
Water Ter		NH3-N (mg			NO <sub>3</sub> -l	V (mg/L)	24.5		React PC	<b>)</b> <sub>4</sub> (mg/L)	2.65
pH (pH units	7.10	TURB (NT	u) NT		CON	D (mS/cm)	NT				
Analytical	Lab Samples Co	llected?	Yes	No							
FLOW ES	TIMATION WO	RKSHEETS									
<u>Flowi</u> ng	Creek or Box C	ulvert	Filling	a Bottle or	Known	Volume			Flo	wing Pipe	•
Width		ft Vol	ume			mL		I	Diameter	<u> </u>	ft
Depth			ne to Fill			sec			Depth		ft
Velocity		ft/sec Flo	w			gpm			/elocity		ft/sec
Flow		gpm						F	Flow		gpm
COMMEN	ΓS:										

Revised 4/20/2004



Ocean Blue Env. Services

Project: NA 2775 Kurtz St. Project Number: [none] San Diego CA, 92110 Project Manager: Don Ostrand

Reported: 09/28/05 14:30

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DW-3	0509217-01	Liquid	09/13/05 09:41	09/13/05 12:00

### **CASE NARRATIVE**

Samples were received intact, at 4 °C, and accompanied by chain of custody documentation. SAMPLE RECEIPT: PRESERVATION: Samples requiring preservation were verified prior to sample preparation and analysis. All holding times were met, unless otherwise noted in the report with data qualifiers. HOLDING TIMES: All quality objective criteria were met, except as noted in the report with data qualifiers. QA/QC CRITERIA:



San Diego CA, 92110

Ocean Blue Env. Services 2775 Kurtz St.

Project: NA
Project Number: [none]
Project Manager: Don Ostrand

**Reported:** 09/28/05 14:30

# Microbiological Parameters by APHA Standard Methods Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW-3 (0509217-01) Liquid	Sampled: 09/13/05 09:41	Received: 09/1	13/05 12	:00					
Enterococcus	2100	2.0MP1	N/100 mI	. 1	B5I1422	09/13/05	09/13/05	SM 9230B	
Fecal Coliforms	<2	2.0	"	"	"	"	"	SM 9221E	
<b>Total Coliforms</b>	1600	1 CFU	J/100 mL	, "	"	"	"	SM 9222B	



Ocean Blue Env. Services 2775 Kurtz St.

San Diego CA, 92110

Project: NA

Project Number: [none]
Project Manager: Don Ostrand

**Reported:** 09/28/05 14:30

# Conventional Chemistry Parameters by APHA/EPA Methods Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW-3 (0509217-01) Liquid Samp	led: 09/13/05 09:41	Received: 09	9/13/05 1	2:00					
Ammonia as N	128	5.00	mg/L	50	B5I1902	09/13/05	09/13/05	SM 4500-NH3	
Methylene Blue Active Substances	ND	2.00	"	20	"	"	"	EPA 425.1	
Nitrate as N	90.0	1.00	"	50	"	"	"	EPA 353.3	
Phosphorus	16.0	2.50	"	"	"	"	"	EPA 365.2	



Ocean Blue Env. ServicesProject: NA2775 Kurtz St.Project Number: [none]Reported:San Diego CA, 92110Project Manager: Don Ostrand09/28/05 14:30

# Metals by EPA 6000/7000 Series Methods

### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW-3 (0509217-01) Liquid	Sampled: 09/13/05 09:41	Received: 09	9/13/05 1	2:00					
Cadmium	0.015	0.0040	mg/L	1	B5I1912	09/19/05	09/19/05	EPA 6010B	
Lead	0.076	0.015	"	"	"	"	"	"	
Zinc	2.8	0.013	"	"	"	"	"	"	



Ocean Blue Env. ServicesProject: NA2775 Kurtz St.Project Number: [none]Reported:San Diego CA, 92110Project Manager: Don Ostrand09/28/05 14:30

# Metals (Dissolved) by EPA 6000/7000 Series Methods Sierra Analytical Labs, Inc.

### Reporting Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Notes DW-3 (0509217-01) Liquid Sampled: 09/13/05 09:41 Received: 09/13/05 12:00 Cadmium ND 0.0040 mg/L B5I1915 09/19/05 09/19/05 EPA 6010B Lead ND 0.015 EPA 6020 Zinc 0.16 0.013 EPA 6010B



Ocean Blue Env. Services 2775 Kurtz St. San Diego CA, 92110 Project: NA
Project Number: [none]
Project Manager: Don Ostrand

**Reported:** 09/28/05 14:30

# Total Volatile Petroleum Hydrocarbons (TVPH) by GC/FID

### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW-3 (0509217-01) Liquid Sampled	: 09/13/05 09:41	Received: 09	0/13/05 12	2:00					
Gasoline Range Hydrocarbons (C4-C12)	ND	50	μg/L	1	B5I2001	09/20/05	09/20/05	EPA 8015B	
Surrogate: a,a,a-Trifluorotoluene		83.5 %	70-	125	"	"	"	"	



Ocean Blue Env. Services 2775 Kurtz St.

San Diego CA, 92110

Project: NA
Project Number: [none]
Project Manager: Don Ostrand

**Reported:** 09/28/05 14:30

RPD

# Metals by EPA 6000/7000 Series Methods - Quality Control Sierra Analytical Labs, Inc.

Sterra rimary tre	ur 2u05, 11	10.	
Reporting	Spike	Source	%REC

l & Analyzed: 09	9/19/05			
,	9/19/05			
l & Analyzed: 09	9/19/05			
94	4.5 80-120			
99	9.0 80-120			
92	2.0 80-120			
l & Analyzed: 09	9/19/05			
0.0063 81	1.8 75-125			
0.079 82	2.0 75-125			
1.5	0.0 75-125			
l & Analyzed: 09	9/19/05			
0.0063 83	3.4 75-125	1.75	20	
0.079 84	4.5 75-125	2.04	20	
	5.0 75-125	0.601	20	
	0.079 8 1.5 8 d & Analyzed: 0 0.0063 8 0.079 8	0.079 82.0 75-125 1.5 80.0 75-125 d & Analyzed: 09/19/05 0.0063 83.4 75-125 0.079 84.5 75-125	0.079 82.0 75-125 1.5 80.0 75-125 d & Analyzed: 09/19/05 0.0063 83.4 75-125 1.75 0.079 84.5 75-125 2.04	0.079 82.0 75-125 1.5 80.0 75-125 d & Analyzed: 09/19/05 0.0063 83.4 75-125 1.75 20 0.079 84.5 75-125 2.04 20



Ocean Blue Env. Services 2775 Kurtz St.

San Diego CA, 92110

Project: NA Project Number: [none]

Reported: 09/28/05 14:30

Project Manager: Don Ostrand

# Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control Sierra Analytical Labs, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch	B5I1915	- EPA	3010A
-------	---------	-------	-------

Blank (B5I1915-BLK1)				Prepared	& Analyze	d· 09/19/	05			
Cadmium	ND	0.0040	mg/L	Tropurcu	cc rinary zec	u. 05/15/				
Lead	ND	0.015	"							
Zinc	ND	0.013	"							
LCS (B5I1915-BS1)				Prepared	& Analyze	d: 09/19/	05			
Cadmium	0.184	0.0040	mg/L	0.200	-	92.0	80-120			
Lead	0.195	0.015	"	0.200		97.5	80-120			
Zine	0.183	0.013	"	0.200		91.5	80-120			
Matrix Spike (B5I1915-MS1)	Sou	rce: 050921	7-01	Prepared	& Analyze	d: 09/19/	05			
Cadmium	0.196	0.0040	mg/L	0.200	0.00040	97.8	75-125			
Lead	0.205	0.015	"	0.200	0.0067	99.2	75-125			
Zinc	0.593	0.013	"	0.200	0.16	216	75-125			QM-07
Matrix Spike Dup (B5I1915-MSD1)	Sou	rce: 050921	7-01	Prepared	& Analyze	d: 09/19/	05			
Cadmium	0.186	0.0040	mg/L	0.200	0.00040	92.8	75-125	5.24	20	
Lead	0.199	0.015	"	0.200	0.0067	96.2	75-125	2.97	20	
Zinc	0.453	0.013	"	0.200	0.16	146	75-125	26.8	20	QM-07



Ocean Blue Env. Services 2775 Kurtz St. San Diego CA, 92110 Project: NA
Project Number: [none]
Project Manager: Don Ostrand

**Reported:** 09/28/05 14:30

# Total Volatile Petroleum Hydrocarbons (TVPH) by GC/FID - Quality Control Sierra Analytical Labs, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B5I2001 - EPA 5030B P & T										
Blank (B5I2001-BLK1)				Prepared	& Analyz	ed: 09/20/	05			
Gasoline Range Hydrocarbons (C4-C12)	ND	50	μg/L							
Surrogate: a,a,a-Trifluorotoluene	16.5		"	20.0		82.5	70-125			
LCS (B5I2001-BS1)				Prepared	& Analyz	ed: 09/20/	05			
Gasoline Range Hydrocarbons (C4-C12)	646	50	μg/L	600		108	80-120			
Matrix Spike (B5I2001-MS1)	Sou	rce: 050930	2-03	Prepared	& Analyz	ed: 09/20/	05			
Gasoline Range Hydrocarbons (C4-C12)	566	50	μg/L	600	ND	94.3	50-150			
Matrix Spike Dup (B5I2001-MSD1)	Sou	rce: 050930	2-03	Prepared	& Analyz	ed: 09/20/	05			
Gasoline Range Hydrocarbons (C4-C12)	558	50	μg/L	600	ND	93.0	50-150	1.42	30	



Ocean Blue Env. Services

Project: NA

2775 Kurtz St.

Project Number: [none]

San Diego CA, 92110

Project Manager: Don Ostrand

**Reported:** 09/28/05 14:30

### **Notes and Definitions**

\_ND<2 <2

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

# CHAIN OF CUSTODY RECORD

SIERRAANALYTICAL

TEL: 949•348•9389

FAX: 949•348•9115

26052 Merit Circle. Suite 105-Laguna Hills, CA-92653

Date: 09/13/05 Page 1 of 1

Lab Project No.:

0509217

Geotracker EDD Info: Client LOGCODE Field Point Names/ mos. Site Global ID Comments Return to Client ☐ Lab Disposal# Sample Disposal: Archive\_ R3A Analysis Requested & Coling Co Preservatives - Verified By FOR LABORATORY USE ONLY - Sample Receipt Conditions:

Intact
Sample Seals
Preservatives - Verified By wniting between SIERRA and CLIENT.

\* - Samples determined to be hazardous by SIERRA will be relumed to CLIENT. Total Number of Containers Submitted to Total Number of Containers Recieved by X Storage Location— The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analysis specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in Other  $\overline{\times}$ Appropriate Sample Container Laboratory Laboratory X Properly Labelled X <u>×</u>× 5 M NK3-4 × 3/13/65 Containers 2.2 Time: No. of T2 Hour ☐ Mobile 24 Hour Date: Time: 5 Day Client Project ID:  $\leq M \leq 2 \leq 74$ Container PG U 48 Hour Normal 4 Day Matrix | Preservative | Time Requested 9-13-05 9:41 WATER YES Turn Around Company: ZICES B Shipped Via: Received By Received By Client Proj. Mgr. JON OSTRIAND/RICHAND GILB Time 92110 7-1:05 Date 1200 Time: Time: Date Date Date S.H. Sampler Signature: Dough Ostrans SDCRAPA CARCALLANCE CONTRACT SWITE 1 SAN DIEGO, CM Printed Name: DONALD OSTRAND Client Fax. No.: 619.294.6743 Sierra No. Client Tel. No. 619.294.6687 ð Client Address: 2775 KuRTZ COMPANY OCENHE Client: OCEAN BLUE Client Sample ID. Special Instructions: 2 Relinquished By DW-3 4 Relinquished By: Relinquished By Company: Company:



2775 Kurtz St.Project Number:SA 3267 / Dry WeatherReported:San Diego CA, 92110Project Manager:Don Ostrand10/17/05 15:35

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DW3-100605	0510145-01	Liquid	10/06/05 08:50	10/06/05 11:50
G9-100605	0510145-02	Liquid	10/06/05 09:50	10/06/05 11:50

### **CASE NARRATIVE**

SAMPLE RECEIPT: Samples were received intact, at 5 °C, and accompanied by chain of custody documentation.

PRESERVATION: Samples requiring preservation were verified prior to sample preparation and analysis.

HOLDING TIMES: All holding times were met, unless otherwise noted in the report with data qualifiers.

QA/QC CRITERIA: All quality objective criteria were met, except as noted in the report with data qualifiers.



2775 Kurtz St.Project Number:SA 3267 / Dry WeatherReported:San Diego CA, 92110Project Manager:Don Ostrand10/17/05 15:35

# Microbiological Parameters by APHA Standard Methods Sierra Analytical Labs, Inc.

Analyte	Rep Result	orting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW3-100605 (0510145-01) Liquid	d Sampled: 10/06/05 08:50	Receiv	ved: 10/06	5/05 11:5	0				
Enterococcus	9000	2.0MF	PN/100 mL	1	B5J1102	10/06/05	10/06/05	SM 9230B	_
Fecal Coliforms	30	2.0	"	"	"	"	"	SM 9221E	
Total Coliforms	500	2.0	"	"	"	"	"	SM 9221B	
G9-100605 (0510145-02) Liquid	Sampled: 10/06/05 09:50 F	Receive	d: 10/06/0	5 11:50					
Enterococcus	33000	2.0MF	PN/100 mL	1	B5J1102	10/06/05	10/06/05	SM 9230B	
Fecal Coliforms	34000	2.0	"	"	"	"	"	SM 9221E	
Total Coliforms	500000	2.0	"	"	"	"	"	SM 9221B	



2775 Kurtz St.Project Number: SA 3267 / Dry WeatherReported:San Diego CA, 92110Project Manager: Don Ostrand10/17/05 15:35

# Conventional Chemistry Parameters by APHA/EPA Methods Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW3-100605 (0510145-01) Liquid	d Sampled: 10/06/05 0	8:50 Rec	eived: 10/0	6/05 11:5	0				
Ammonia as N	1.55	0.100	mg/L	1	B5J1346	10/06/05	10/06/05	EPA 350.1	
Nitrate as N	14.0	0.0200	"	"	"	"	"	EPA 353.3	
рН	7.30	0.100	pH Units	"	"	"	"	EPA 150.1	
Phosphorus	1.05	0.0500	mg/L	"	"	"	"	EPA 365.2	
G9-100605 (0510145-02) Liquid	Sampled: 10/06/05 09:	50 Receiv	ed: 10/06/	05 11:50					
Ammonia as N	6.25	0.100	mg/L	1	B5J1346	10/06/05	10/06/05	EPA 350.1	
Nitrate as N	24.5	0.0200	"	"	"	"	"	EPA 353.3	
pН	7.10	0.100	pH Units	"	"	"	"	EPA 150.1	
Phosphorus	2.65	0.0500	mg/L	"	"	"	"	EPA 365.2	



2775 Kurtz St.Project Number:SA 3267 / Dry WeatherReported:San Diego CA, 92110Project Manager:Don Ostrand10/17/05 15:35

# Metals by EPA 6000/7000 Series Methods Sierra Analytical Labs, Inc.

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
DW3-100605 (0510145-01) Liquid	d Sampled: 10/06/05 08:5	0 Rece	ived: 10/	06/05 11:50	0				
Copper Lead Zinc	0.44 ND 0.43	0.011 0.015 0.013	mg/L "	1	B5J1109 "	10/11/05	10/11/05 10/11/05 10/11/05	EPA 6010B	
G9-100605 (0510145-02) Liquid	Sampled: 10/06/05 09:50	Receive	ed: 10/06	5/05 11:50					
Copper Lead Zinc	0.33 ND 0.48	0.011 0.015 0.013	mg/L	1	B5J1109 "	10/11/05	10/11/05	EPA 6010B	



Ocean Blue Env. Services

Project: NA

2775 Kurtz St. San Diego CA, 92110 Project Number: SA 3267 / Dry Weather Project Manager: Don Ostrand

**Reported:** 10/17/05 15:35

# Metals by EPA 6000/7000 Series Methods - Quality Control Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ratch R5.11109 - EPA 3010A										

Blank (B5J1109-BLK1)				Prepared of	& Analyze	ed: 10/11/	05			
Copper	ND	0.011	mg/L							
Lead	ND	0.015	"							
Zinc	ND	0.013	"							
LCS (B5J1109-BS1)				Prepared of	& Analyze	ed: 10/11/	05			
Copper	0.213	0.011	mg/L	0.200		106	80-120			
Lead	0.210	0.015	"	0.200		105	80-120			
Zinc	0.192	0.013	"	0.200		96.0	80-120			
Matrix Spike (B5J1109-MS1)	Sour	rce: 051014	5-01	Prepared of	& Analyze	ed: 10/11/	05			
Copper	0.614	0.011	mg/L	0.200	0.44	87.0	75-125			
Lead	0.218	0.015	"	0.200	0.013	102	75-125			
Zinc	0.590	0.013	"	0.200	0.43	80.0	75-125			
Matrix Spike Dup (B5J1109-MSD1)	Sour	rce: 051014	5-01	Prepared of	& Analyze	ed: 10/11/	05			
Copper	0.603	0.011	mg/L	0.200	0.44	81.5	75-125	1.81	20	
Lead	0.217	0.015	"	0.200	0.013	102	75-125	0.460	20	
Zinc	0.574	0.013	"	0.200	0.43	72.0	75-125	2.75	20	OM-07



2775 Kurtz St.Project Number: SA 3267 / Dry WeatherReported:San Diego CA, 92110Project Manager: Don Ostrand10/17/05 15:35

### **Notes and Definitions**

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

CHAIN OF CUSTODY RECORD

Date: 10 / 06 / 05

2510145

Lab Project No.:

**Analysis Requested** T92507 SIERRAANALYTICAL
TEL: 949•348•9389
FAX: 949•348•9115
26052 Merit Circle• Suite 105•Laguna Hills, CA•92653

Geotracker EDD IIIO:	Client LOGCODE	Site Global ID	Field Point Names/	< > > < > < > < > < > < > < > < > < > <	<				The state of the s		Total Number of Containers Submitted to	Return to Client	are on this chain of custody form analysis specified above under	less otherwise agreed upon in  A and CLIENT:	- Arcillye	of Containers Accounts of the Other		X. Sample Receipt Conditions:	Chilled - Temp. (***)  Preservatives - Varified By	Other	Storage Location LIAS / 183.A
SWa	210H 21-07 1011 1000 1000 1000	1450H 1421U 1421U 1421 1100	1d: ND UD U U U U	× > × > × >	< < <			T <sub>1,2</sub> .			Total Number	Laboratory	- 120		* - Samples determined to t	Laboratory		FOR LABORATORY USE ONLY - Sample Receipt Conditions:	Intact Sample Seals		
DRY WEATHER	ate "	A Day S Day	- P	0) 1/6 6/10 0	<i>&gt;</i>				A property of			20/0/01	Mayor!	11.	SIRM D Time:	Date:	Time:	bate:	Time:		
1 SUCKMIT KURTZ ST. SUITE #1 DIEGO, CM 92110	7.8ºF)	6743 RAHD	Sterra Date Time Matrix	20.9.01	7 0360 1 20						Company O	Server Server	10-0-05	Date Received By	Тіте: Сопрапу:	Date Received By:	Time: Company:	Date Received By:			
Client Address: DCME / Client Address: DNS 144	Oliant Tal No. 1 219. 294. (4082	Client Fax. No.: 619.294.6743 Client Proj. Mgr.: Doin OSTRAMO	Client Sample ID.	2090a1-800	69-100605	5				-		٧	Printed Name: Color Printe	Relinquished By Mocket Chema	Company/公屋では おしょう	3 Refinquished By:	Соппану	4 4 Purity Purit	Reiniquistica by.	Special Instructions:	

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel



# Appendix B

FY05-06 Illicit Discharge

Detection and Elimination

Report Log

Storm Water Management Plan	- Municipal Stormwater Peri	mit	
			gunna



		Log of IDDE	Reports to SDIA 24-hour Telephone Line Fiscal Year 2005-2006
Date	Time	Subject/Topic	Log Entry Synopsis
7/1/2005	715	Petroleum Spill Airside	Fuel spill approx 10 gal at gate 15. No storm drains affected. ASIG is involved in the clean up. HPD was advised.
7/2/2005	1945	Petroleum Spill Airside	Fuel Spill at Gate 38; Z-2 and HPD 741 responding; F9 A-318 being re-fueled by ASIG truck No 7971; Filter vessel sump line broke; 5+ gal spilled on ramp; 10+ gal collected in containment pool below leak point; no storm drains affected; ASIG conducting clean-up of ramp with quick-sorb; after containment F9 given ok to board and push-back with fuel truck in place; following ASIG clean-up, Airport scrubber cleaned area; spill clean-up completed by 2145; ASIG pumped containment pool fuel into drums and removed same; temp repairs made to leak and truck transported from Gate 38 to ASIG shop; HPD
7/5/2005	1150	Wildlife/IPM	from the AMF Gate called requesting the gnats be sprayed at the GS-1 Gate. Notified in Maintenance.
7/5/2005	1734	Unauthorized Discharge	Observed washing OO Ramp pick up, on CT ramp. Directed her to stop, dam water from storm drain and remove water from CT ramp. Subject attempted to divert water with towels and returned to washing truck. Contacted OO ramp supervisor to handle. Minimal residual water entered storm drain.
7/6/2005	1240	Unauthorized Discharge	from Southwest called to report water bubbling out of the ground in front of their maintenance facility. Passed to Zebra 2.
7/7/2005	751	Unauthorized Discharge	HPD 740 observed a puddle of water created by a leak from the trash compactor at T-2 transition. SPC will pressure wash the area tonight
7/7/2005	1329	Trash Spill Airside	Maintenance reported problems with the recycle container buttons near the cargo area. Pacific Waste was contacted. Pacific Waste will attempt to send out someone today.
7/8/2005	1230	Trash Spill Airside	from Frontier called requesting the ramp scrubbed at gate 37. The best time is between 1500-1800. Notified in Maintenance
7/10/2005	956	Trash Spill Landside	ATO reports the trash cans are overflowing and there is trash around the bench area curbside AA check-in. Advised SPC
7/10/2005	1336	Trash Spill Landside	Airport paging reports a clean up is needed curbside Independence. Contacted SPC.
7/12/2005	835	Petroleum Spill Landside	ATO called to report a oil spill curbside by United Airlines. Requested maintenance to take some kitty litter for absorption.
7/18/2005	1245	Wildlife/IPM	, ATO Supervisor called to report a swarm of bees at the Terminal 2 shuttle island. Notified in Maintenance.
7/19/2005	1015	Trash Spill Landside	ATO curbside at Commuter Terminal called to report a large coffee spill in front of the sliding door.  Notified SPC
7/20/2005	320	Petroleum Spill Airside	740 reports fuel dripping from a Falcon 50 on JimsAir ramp. It appears that the tanks were overfilled and is barely dripping out the vents.
7/20/2005	1000	Trash Spill Airside	Called a left a message with Allied Waste requesting the compactor by Southwest be emptied.
7/25/2005	837	Trash Spill Airside	Zebra 3 reports the trash compactor and recyclable compactor are full. Contacted advised the normal service truck will be on site in 15 minutes. The recyclable compactor was emptied 2 days ago and should not be full. He will have the driver check the recyclable compactor. Advised Zebra 30858: advised there was a very large box in the recyclable compactor. The driver has taken care of the problem and the compactor is up and running. Advised Zebra 3.
7/26/2005	1629	Trash Spill Airside	UA reports there is a large puddle of water ramp side near the Nine Dragons area. Notified MX.
7/27/2005	1844	Petroleum Spill Airside	Fuel Spill - Approximately 7 gallons of jet fuel spilled from the left wing of HP RJ at gate 21 while being refueled. ASIG completed clean-up at 1910; no fuel entered the storm drain system. ASIG employee:
7/28/2005	1010	Trash Spill Airside	called to report the trash compactor T-2-E is full. Notified Allied Services.
7/28/2005	1135	Wildlife/IPM	Maintenance advised they were calling in the bee contractor for a swarm near the shuttle island. T-2-W. The bees should be removed by 4 p.m.
7/29/2005	825	Wildlife/IPM	ATO called to report a dead skunk on the ramp exiting out of the Terminal 1 parking lot.  Notified in Maintenance.
7/30/2005	1534	Trash Spill Airside	with US reports trash compactor is OTS. Notified Allied Waste dispatch voice mail 1700 Notified , Ops Mgr via cell. Technician will be here within two hours 1830 RTS.
8/4/2005	1145	Wildlife/IPM	ATO, called to report there is a swarm of bees at the T2 shuttle island. Notified in Maintenance.

		Log of IDDE	Reports to SDIA 24-hour Telephone Line Fiscal Year 2005-2006
Date	Time	Subject/Topic	Log Entry Synopsis
8/5/2005	525	Petroleum Spill Airside	Responded rampside Gate no. 17 for a propane leak from an ATS belt-loader HPD 741 reports that propane gas was seeping from ground support equipment Contacted an ATS mechanic who disabled the tank and equipment until repairs can be effected.
8/5/2005	1737	Trash Spill Landside	MX reports trash needs servicing T1 parking lot. Notified SPC via voice mail.
8/6/2005	1133	Trash Spill Airside	Allied Waste reported that his driver advised him that there are several bags of trash around the dumpster near AA and the dumpster is not full. Zebra 2 will handle
8/8/2005	30	Wildlife/IPM	Weed removal conducted in Oval N 2-3 with a 5 min PPR DV
8/9/2005	115	Wildlife/IPM	MX 2 is conducting weed removal in the safety area of runway 09 with a 5 min PPR.
8/10/2005	120	Wildlife/IPM	MX units will be conducting weed removal from C4-RWY 27 localizer antenna in the safety area. Electrician #2 will also be relamping runway 27 with a 30 min PPR.
8/10/2005	1430	Trash Spill Airside	Contacted Allied Waste to empty 3 roll off containers.
8/11/2005	912	Wildlife/IPM	called to give permission to enter ovals for weed removal. Z2 notified.
8/11/2005	1917	Trash Spill Airside	MX reports WN dumpster out of safety compliance. Notified Zebra 2.
8/11/2005	1950	Trash Spill Airside	M-7 advised glove on (regular) trash compactor disabling safety switch on door. Glove removed and compactor still operating with door open. Contacted Allied (Pacific) Waste, advised of problem and requested repair in morning.
8/16/2005	900	Petroleum Spill Airside	Drip pan underneath fuel vehicle over filled with oil at Jimsair Maintenance area. Issue was resolved on site by EAD staff.
8/16/2005	915	Trash Spill Airside	Over filled drum tray waste oil mixed with water needs draining at Jimsair Maintenance area. Issue was resolved on site by EAD staff.
8/16/2005	1000	Trash Spill Airside	Hydraulic fluids were dripping from Custom Air Transport aircraft. Issue was resolved on site by EAD staff.
8/18/2005	900	Trash Spill Airside	Power washing without downstream containment at Gate 34. Issue was resolved on site by EAD staff.
8/18/2005	930	Construction Maintenance	Fire-proofing material blown onto stair landing and railing immediately west of project by Gate 23. Issue was resolved on site by EAD staff.
8/19/2005	710	Trash Spill Airside	Contacted ELS in reference to a request from at Frontier to have the exterior of the jet way steps cleaned (ELS) advised that she would have the stairs power washed.
8/19/2005	1400	Wildlife/IPM	Opened P10 & P11 for weed pulling.
8/19/2005	1509	Trash Spill Airside	SPC reports compactor T1 and T2E not working. Notified Zebra 2. MX enroute also 1643 RTS per Zebra 2.
8/20/2005	1453	Petroleum Spill Airside	, Spvsr with ASIG, reports a minor fuel spill at gate 22 that had already been cleaned up; approx 1 gal fuel spilled from the right wing overflow vent on AQ 737 (cleaned up immediately by ASIG; no drains affected; no HPD report; spill had been cleaned upon Z-2 arrival and inspection.
8/22/2005	1835	Petroleum Spill Airside	Report of fuel spill (approx 10 gallons) at Gate 21. Per Z-3 spill did not reach any storm drains and was from a wing overfill. Z-2 en route, HPD en route. Aircraft moved to gate 20. Gate 21 temporarily closed.  Re: 1835. Fuel spill cleaned up and gate 21 re-opened.
8/29/2005	2100	Trash Spill Airside	with SPC reports trash compactor at T2 is OTS. Notified Zebra 3. Electrician is checking power. — 2147 Left message for at Allied Waste requesting repairs as electrician confirmed compactor has power.
8/29/2005	2118	Trash Spill Landside	ATO reports cleanup needed near mailbox. Notified SPC.
8/31/2005	1300	Trash Spill Airside	from Host Maintenance called to report that the trash compactor in T2E, by Cinnabon, is not working and he has contacted Allied Waste. Notified Zebra 2.
9/1/2005	900	Trash Spill Airside	Delta cargo bins and FOD located in storm drain channel west of Gate 41. Issue was resolved area was reinspected by EAD staff and found to be clean.
9/3/2005	1042	Wildlife/IPM	/RM reports there is a mouse on the trap in their break room. Notified MX.
9/10/2005	5	Unauthorized Discharge	Observed SDFD engines at UA Cargo facility. 0007 - Zebra 2, HPD 701 and 740 onsite. SDFD Engine Co. No. 3 and San Diego County Hazmat Unit are investigating an apparent hazmat spill involving a UA baggage cart and a load of aluminum containers. According to the MSDS the industry name for the material is Hei-Cast 8260-A or polyether polyoll/tris phosphate. The agent is toxic when exposed to skin. Containment of the area begins with County Hazmat units separating damaged containers from the baggage cart. A spill approximately a half-quart in size has developed under the baggage cart. No floor or storm drains affected. 0200 - County Hazmat Units complete containment and clean up of existing containers. 0420 - Cleanup and disposal complete.

Data	т	1	Reports to SDIA 24-hour Telephone Line Fiscal Year 2005-2006
Date	Time	Subject/Topic	Log Entry Synopsis
9/15/2005	900	Trash Spill Airside	Mop grease water left on container over storm drain near Gate 36. Issue was resolved in person by EAD staff.
9/16/2005	703	Wildlife/IPM	Opened P-32A for maint conducting weed pulling.
9/17/2005	1527	Trash Spill Landside	ATO reports clean up needed outside T2 bag claim. Notified
9/18/2005	1300	Trash Spill Landside	ATO's report a minor traffic accident T-1. Maint contacted to clean up glass.
9/19/2005	900	Unauthorized Discharge	Wash waters from washing carts being dumped into the storm drain at the T2W loading dock. Issue was resolved via email by EAD staff.
9/19/2005	943	Trash Spill Airside	WN reports the trash compactor is OTS near their area. Notified MX.
9/19/2005	1342	Trash Spill Landside	reports there is broken glass curbside the CT. Contacted SPC.
9/19/2005	2023	Trash Spill Landside	ATO reports broken glass T1 in the street beneath the sky bridge. Notified MX.
9/20/2005	950	Trash Spill Airside	from American Airlines called regarding the breezeway between gates 23/25 being a mess. She stated there is catering equipment and trash in the area and the grease trap is overflowing. She says there are rats in the area. Left message -
9/21/2005	1435	Wildlife/IPM	GAT reported a bee swarm at gate 40; maintenance notified.
9/23/2005	1626	Trash Spill Landside	ATO reports broken bottle curbside check in UA. Notified SPC.
9/24/2005	1620	Petroleum Spill Airside	Discovered Jimsair re-fueler on Jimsair line leaking fuel from fill hose; advised Jimsair to place a larger volume catch bucket under leak and clean ramp area with quicksorb; no drains affected.
9/30/2005	1100	Trash Spill Landside	Received a call from regarding the sprinklers on the east side of the Commuter Terminal are spraying the sidewalk making it difficult to walk to the parking lot without getting wet. Notified in Maintenance who stated she will contact for action.
10/1/2005	1548	Petroleum Spill Airside	Observed an oil spill from a previously parked F9 Airbus at Gate 38; a minimal attempt had been made to clean the spill; contacted ATS lead for more thorough cleaning; spill cleaned with quicksorb.
10/3/2005	850	Trash Spill Airside	from American Airlines called again regarding the trash, garbage and old furniture in the breezeway between gates 25 & 27. There is mess consistently and it is drawing rats. from AA mechanics office would like a call back to Left message with Real Estate 10:30 called back and advised she will look at the area and she forwarded the message to
10/4/2005	2012	Trash Spill Landside	ATO reports that someone has vomited curbside NW check-in. Notified SPC.
10/5/2005	900	Wildlife/IPM	Escorted weed sprayers in O-2-S and taxiway D south of B.
10/5/2005	1200	Trash Spill Airside	Ryan from Allied called to report that the safety switch on the recycling and trash compactors had been tampered with
10/5/2005	1958	Sewage	Plumber 2 advised the triturator is RTS. Notified UA
10/6/2005	640	Petroleum Spill Airside	Responded to a report of a hydraulic spill on taxiway B abeam gate 13. A UA A320 on pushback from the jetway experienced a severe hydraulic leak spilling approximately 2 gallons of fluid onto the pavement. Z2 coordinated with UA Ops, SDCRAA maintenance, and ATCT for the cleanup response. Aircraft movement in the area was essentially unaffected. Cleanup completed at 0720.
10/9/2005	1056	Trash Spill Landside	ATO reports there is broken glass curbside T2 baggage claim. Notified SPC
10/9/2005	1232	Trash Spill Landside	Travelers Aid reports that a man has vomited curbside T1 baggage claim. Left message for SPC.
10/10/2005	701	Trash Spill Airside	from Allied Waste advised that his driver is on site and there are approximately 30 bags of trash around the compactor. The compactor is not full. Notified Zebra 2 and SPC.
10/10/2005	745	Trash Spill Landside	reports there is broken glass in Lot 8, the employee parking lot on the east side of the CT. It is in the area of the red, white & blue banner. Contacted SPC. Ref. 0745 entry: SPC advised the broken glass has been cleaned, but there is a lot of trash in the lot. Contacted LPI.
10/10/2005	1025	Trash Spill Landside	Overheard HPD reports of a vehicle fire in T2 parking lot row F2. Contacted Zebra 3, who requested I make Landside notifications. Briefed DLO, MTO, ADAO1049: Zebra 3 advised that the fire was out at 1034. The cause was an electrical fire on the face plate for the stereo. DLO was on site.
10/11/2005	900	Trash Spill Landside	Empty Pacific Waste Container parked at the NTC landfill at NTC area. Issue was resolved by EAD.
10/11/2005	1422	Trash Spill Landside	ATO's report there is broken glass curbside WN. Notified SPC.

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Date	Time	Subject/Topic	Log Entry Synopsis
10/12/2005	15	Trash Spill Airside	Electrician 3 reports water leaking from the roof and onto the ramp near Gate nos. 8 and 9 WN rotunda00:20 Plumber 2 and Electrician 2 proceed onto the roof of T1E to find source of leak00:35 Plumber 2 identified Host HVAC unit as the source of the water leak. The water had seeped through the roof and traveled down the support beams and onto the ramp and the floor of jetbridge no. 9. Host maintenance notified of the problem and are attempting to contact their on-call maintenance technician. Directed Plumber 2 the shut off the unit until repairs can be affected. 00:40 Directed SPC to place a carpet dryer/floor blower within jetbridge no. 9.
10/13/2005	1020	Wildlife/IPM	Received a call regarding a dead rat on the east side of the Commuter Terminal near the smoking area. Notified Cheri in Maintenance.
10/13/2005	2315	Trash Spill Airside	Contracts 1 and contractor United Storm Water begin annual slit trench cleaning rampside Terminal 1.
10/14/2005	418	Trash Spill Airside	Contracts 1 and United Storm Water are clear of the AOA. T1E slit trench cleaning is complete.
10/15/2005	1214	Trash Spill Landside	ATO reports that someone has left a 5-gal can of oil curbside WN baggage, near a palm tree.  Notified MX
10/17/2005	900	Unauthorized Discharge	Honey Bee Deodorant 24 discharged from storage drums located on UA Cargo area and going directly into storm drain. Issue was resolved on site by EAD staff a letter was also sent to the tenant.
10/19/2005	740	Trash Spill Landside	ATO called to report the benches in front of Southwest need to be cleaned. Notified SPC
10/19/2005	1030	Unauthorized Discharge	from Southwest Cargo called to report a water leak coming up from the asphalt between their building and UPS. Notified in Maintenance.
10/19/2005	1310	Wildlife/IPM	Until 1334, escort maintenance for weed spraying in O-4-S
10/20/2005	1330	Wildlife/IPM	Until 1403, escort M-9 for weed spraying in O-1-S. Cover over storm drain removed in O-1-S.
10/22/2005	1342	Sewage	AA reports someone has broken the hose that hangs from the ceiling at the triturator. Advised MX. WN reported they broke triturator hose. Maint restored triturator to service.
10/23/2005	825	Wildlife/IPM	ATO reports there is an injured bird curbside T1 near the food court. ATO will be standing by. Notified MX.
10/23/2005	859	Wildlife/IPM	ATO's report there is a dead bird curbside T2 baggage claim, near the crosswalk. Notified MX.
10/27/2005	900	Trash Spill Airside	Trash and debris, grease trap, liquid waste throughout loading dock/dumpster area. Issue was resolved by EAD staff.
10/28/2005	800	Petroleum Spill Airside	Observed clean up in progress for Jet A on Jimsair ramp form Challenger . 3-4 gallons from right wing vent. No storm Drains impacted.
10/28/2005	720	Trash Spill Landside	ATO from Paging called to report a clean-up curbside in front of Building A, Terminal 2. Notified SPC.
11/4/2005	1145	Petroleum Spill Landside	notified that the HVAC unit on the west side of the Commuter Terminal located within the chain link fence is leaking. Notified in Maintenance12:00 Per , it appears like the hydraulic pump has blown a seal. It is not near any drains. HVAC has been notified.
11/5/2005	1700	Petroleum Spill Airside	Observed quick sorb spread over a large area on the CT ramp from previous HP mechanical; oil or hydraulic fluid spill; no drains affected; quick sorb material not cleaned up; notified HP MNX to respond to CT ramp and complete clean-up operations.
11/6/2005	834	Trash Spill Landside	ATO Lead reports he has had complaints from passengers that there is a lot of debris in the area of the benches between WN and the sky bridge. Contacted SPC
11/6/2005	2100	Wildlife/IPM	Obtained pigeon from TSA baggage make up at T-1. Pigeon does not appear to be wounded it is lethargic.
11/7/2005	900	Unauthorized Discharge	Industrial Red Powder with 10 gallons of water discharged into nearby storm drain at HVAC system located on the west side of the CT. Issue was resolved on site by EAD staff.
11/7/2005	1220	Trash Spill Landside	from HPD Dispatch called to report a car battery in lot 2, between rows D and E in a cardboard box that needs to be picked up and disposed of. Notified in maintenance. 12:30 Per HPD Dispatch, an officer will deliver the battery to Lost & Found to be retrieved by maintenance for disposal. Notified to have someone pick it up at Lost & Found.
11/12/2005	2036	Trash Spill Landside	Paging reports cleanup needed at T2 curbside. Notified SPC
11/13/2005	1714	Wildlife/IPM	with the SOC reports a dead rat east end of CT outside near the conduits. Notified MX.

		Log of IDDE	Reports to SDIA 24-hour Telephone Line Fiscal Year 2005-2006
Date	Time	Subject/Topic	Log Entry Synopsis
11/13/2005	2145	Trash Spill Airside	Received a report from SPC that the trash compactor at terminal one was not functioning. Left message with Allied Waste.
11/14/2005	630	Trash Spill Airside	at Allied Waste called to advise that the compactor at Terminal 1 was working after it was recycled a few times. The compactor was pulled anyway and a new one is in it's place.
11/14/2005	900	Wildlife/IPM	Conducted weed spray operations in the unpaved area at the approach of runway 9 and along the MCRD fence line in the vicinity of the ILS.
11/14/2005	1155	Trash Spill Landside	ATO called to report broken glass curbside by America West. Notified SPC
11/15/2005	700	Trash Spill Airside	from Allied Waste called to report that there are about 30 bags outside the compactor in Terminal  1. His driver checked and the compactor is working properly. Notified SPC to have someone throw them in the compactor.
11/15/2005	900	Unauthorized Discharge	AFFF foam discharged from Allied's leasehold drained across the street and discharged into storm drain on SDCRAA airside located north of the control tower. Issue was resolved by EAD staff.
11/19/2005	1955	Sewage	Discovered a lav spill clean-up in progress at Gate 14; UA 757 (
11/21/2005	1738	Petroleum Spill Landside	ATO reports automobile spill T1 WN curbside. Notified MX
11/22/2005	2037	Petroleum Spill Airside	AS reports there is a fuel spill at gate 16. Advised Zebra 22054: Zebra 2 advised ASIG is cleaning up the spill. It was approximately 20 gallons. He is not sure how much went into the "slit trench". He will contact
11/23/2005	1200	Petroleum Spill Airside	Fuel spill at G24 involving the right wing (NWA when mechanic bypassed the system resulting in approx 2 gallons of Jet-A on the ramp while the rest was contained in a pop-up pool. Pictures
11/24/2005	1419	Trash Spill Airside	SPC reports trash compactor T1 full; also the T2E compactor is full; the gates 1 & 2 trash is full as well.  1439 Zebra 2 requested Allied be notified. Left message with dispatch to pull dumpsters as soon as possible.
11/24/2005	1625	Trash Spill Airside	from WN called to report trash compactors are full. Gave her the status and that we had requested service.
11/25/2005	805	Trash Spill Airside	Contacted at Allied Waste, driver should be here any time to start dumping full compactors.  Notified Zebra 2
11/27/2005	742	Petroleum Spill Airside	Observed fuel spill clean up in progress at Jimsair fuel loading pump area. No storm drains impacted. Email to
12/9/2005	819	Petroleum Spill Airside	ASIG reports an accident with ASIG fuel truck at fuel loading rack, requested HPD respond for damage to SDCRAA property report. Minimal fuel leak contained. Storm drains not affected. 08:23 - HPD #740 reports no damage to SDCRAA property at fuel loading rack.
12/9/2005	1659	Trash Spill Airside	SPC reports trash compactor at T1 OTS. Zebra 2 repaired by recycling several times
12/9/2005	1743	Trash Spill Landside	ATOs report cleanup needed curbside beneath sky bridge. Notified SPC.
12/11/2005	726	Wildlife/IPM	Travelers Aid reports there is a dead bird on the sky bridge in T2W. Notified MX
12/17/2005	1410	Petroleum Spill Landside	ATO reports oil spill curbside T2. Notified MX.
12/17/2005	1923	Trash Spill Landside	SPC reports compactor T1 is not working. Asked MX to check operation.
12/18/2005	900	Trash Spill Airside	AA Maintenance reports a Host grease trap overflowing and entering the ramp area at gate 27. Notified Host maintenance for cleanup. ETA onsite 0945. Advised SAN maintenance to dam the area as necessary to prevent the grease residue from entering a storm drain.
12/21/2005	805	Trash Spill Landside	ATO called to report a curbside clean-up at the Southwest check-in. Notified SPC
12/21/2005	2120	Trash Spill Airside	Maintenance reported the emergency shutoff at the T2W Host loading dock trash compactor has be knocked off; message left for Pacific Waste.
12/22/2005	830	Trash Spill Landside	, ATO, called to report that the trash in the taxi hold lot is overflowing. Mike in Maintenance will notify LPI.
12/22/2005	1250	Sewage	from American Airlines called to report that the tritutator is not working. Radioed Maintenance 1.

Date	Time	Subject/Topic	Log Entry Synopsis
12/23/2005	1650	Trash Spill Airside	with HP reports trash compactor is full. Notified Zebra 2.
12/25/2005	400	Trash Spill Airside	Left a message for Host in reference to the HOST kitchen area and adjacent ramp area.  Both are unkempt with trash and debris collecting in both areas.
12/25/2005	2040	Unauthorized Discharge	ATO reports sprinkler T1 near palm tree is creating a geyser. Notified MX.
12/28/2005	1215	Wildlife/IPM	from United Operations called requesting the remains of a rodent be picked up on the ground at the end of jetbridge 13. Left message on voice mail for maintenance.
1/1/2006	1415	Wildlife/IPM	Bird strike: Departing UA 762 reports hitting a pelican on departure; Rwy perimeter inspection revealed a dead Great Blue Heron in RSA just north of Rwy just west of Twy B-5; ATCT advised and Bird Strike Report filed; Project Wildlife called for any interest.
1/1/2006	1530	Wildlife/IPM	Dead heron packaged into FOD bag for claiming by biologist known to Wildlife Assist. Car and license plate # given to ATO along with bird for pickup.
1/3/2006	930	Wildlife/IPM	Recovered a dead seagull in the RSA north of RWY 27 across from TWY B5. Remains were discarded and Bird Strike Report #2006-1-3-112511 was filed.
1/3/2006	1340	Trash Spill Landside	called to report an abandoned water heater in the middle of parking lot 8, east side of the Commuter Terminal. Notified in Maintenance.
1/6/2006	2325	Trash Spill Airside	Trash compactor is inoperative due to an electrical short between the compactor and the control panel. Voice mail left with PacWaste for repairs in the morning.
1/7/2006	829	Trash Spill Airside	Contacted T-1 SPC coach to have lid placed on trash truck, gate 2 ramp side.
1/7/2006	821	Trash Spill Landside	Per Zebra 2, contacted Pac Waste to request an ETA for repairs on the T1/WN compactor. advised he will have a technician out ASAP. Advised Zebra units and MX
1/7/2006	1011	Trash Spill Airside	Ref. 0821 entry: MX advised the compactor is still OTS. Contacted and was advised the technician came out around 0830. The compactor should be in working order. Advised Zebra units and MX 10:41 Advised SPC the compactor is RTS.
1/8/2006	1012	Trash Spill Landside	The reports the trash can is overflowing on the CT transportation island. Contacted SPC.
1/9/2006	705	Trash Spill Airside	from HMS Host called to report that the trash compactor in T2W at the delivery dock is not working Notified at Allied Waste
1/9/2006	1130	Wildlife/IPM	Escorted weed spray operations in ovals 1, 2, and 3 on the south side.
1/11/2006	1645	Trash Spill Landside	ATO reports there is broken glass curbside the CT near baggage claim. Notified SPC.
1/12/2006	1000	Wildlife/IPM	Weed spraying throughout airfield has been completed. MX 10 is continuing to spray throughout the perimeter fencing area.
1/14/2006	1605	Trash Spill Airside	Observed Klean Steam employee cleaning FedEx equipment on ramp, just east of the MNX trailer; it appeared was not using Best Management Practices in containing residue run-off; stated from Environmental was aware of and had ok'd his operation; advised proper containment measures, as the current ones used appeared insufficient; e-mail sent to contain the containing residue run-off; and the containing
1/14/2006	1709	Trash Spill Landside	MX reports trash needs to be emptied at T1 parking lot. Notified SPC.
1/15/2006	1404	Trash Spill Landside	ATO reports transmission spill east end of T1. Notified MX.
1/16/2006	1030	Sewage	at American Airlines called to report that the fill hose at the triturator has a hole in it. Notified Maintenance 1.
1/17/2006	810	Wildlife/IPM	ATO called to report a dead bird on the sky bridge, Terminal 1. Notified in Maintenance
1/18/2006	845	Wildlife/IPM	, ATO, called to report a dead bird by Hawaiian Airlines check-in. Notified in Maintenance
1/20/2006	630	Trash Spill Airside	from United Operations called requesting ramp cleaning for the area around gates 14 and 15.  Wrote work order
1/20/2006	1025	Trash Spill Landside	ATO called to report a large coffee spill on the transportation island at Terminal 1. Notified HC
1/21/2006	1345	Unauthorized Discharge	ATO reports a sprinkler head is broken under the sky bridge near AA. Notified MX

			Reports to SDIA 24-hour Telephone Line Fiscal Year 2005-2006
Date	Time	Subject/Topic	Log Entry Synopsis
1/22/2006	215	Unauthorized Discharge	HPD advises that there has been a water main break along Harbor Drive across from the Coast Guard facility. Contacted at the City of SD 24hr dispatch center for the Water Dep. Requested response from the water dep to secure and repair the water ma main break. 0230Notified environmental. ( 0250Maintenance confirms that all terminals have water. 0315City Water personnel on-site. 0440Requested that City personnel provide a sweeper to clean the westbound lanes of Harbor Drive once the water recedes. 0530-HPD clear. City water dept have placed cones at the critical areas along the west bound lanes.
1/23/2006	1317	Sewage	Ocean Blue is on site for a sewer spill clean-up in Terminal 1 by UA bag make-up; MNX aware.  1535 Ref. 1317 entry: with Ocean Blue adv they have finished cleaning the sewer spill below Gate 18 and are de-mobilizing; the spill originated from the men's RR in the West Rotunda and leaked into an electrical room ramp side, Gate 18.
1/24/2006	930	Trash Spill Airside	Coordinated with process, and process of the Zoological Society r.e., cleanup of the debris from the recent water main break adjacent to the CG crossing gate. Maintenance will be renting a skip loader today to begin the initial cleanup. The debris will be temporarily stored in the Least Tern oval O-3-S. If the debris is found to be safe after testing by Environmental, it will be spread throughout the Least Tern oval and graded. The debris removal and returning the CG gate back to full operation is expected to take several days.
1/24/2006	925	Wildlife/IPM	TSA called to report there are numerous cockroaches at checkpoint 7. Notified in Maintenance.
1/26/2006	945	Trash Spill Landside	Maintenance called requesting the trash be emptied curbside between Northwest and American. Notified SPC.
1/26/2006	1000	Trash Spill Landside	Clean up work on P-13/P-14/TWY CG commencing.
1/27/2006	1735	Construction Maintenance	Spoke to with TSA concerning construction activities outside T1E bag screening room; contractor causing noxious fumes and dust in screening area; after being made aware of issues by contractor ceased activities causing the problems; e-mail sent to project management with TSA SAN Operations reports at T1 is threatening to close down T1 WN bag screening operations due to construction and strong smell of carbon monoxide. Notified Zebra 2
1/28/2006	1205	Wildlife/IPM	Received a report from CT TSA of cockroaches in the area of TSA and the 9 Dragons leasehold. Contacted Host maintenance and he claims no responsibility for the removal of the roach infestation. He claims that 9 Dragons mail with
1/28/2006	1300	Wildlife/IPM	r.e. 1205 entry: Received a call from and he advises he will have exterminators here tonight after 10:00pm to spray for the roach infestation. Notified TSA at CP6 to follow up
1/28/2006	1634	Trash Spill Landside	ATO reports cleanup needed at T1 bus stop. Notified SPC.
1/29/2006	857	Trash Spill Landside	ATO reports the trash cans are overflowing on the T2 transportation island. Notified SPC.
2/2/2006	622	Petroleum Spill Airside	Notified via ATCT that a fuel spill has occurred on a AA MD-80 parked at gate 28. AA Captain reports that they are beginning to deplane passengers. ARFF notified and responding. 0624 - Zebra 2 onsite. AA ramp personnel have contained the spill and are applying absorbent to affected area. HPD notified of spill. All passengers have exited the aircraft. No storm drains affected. 0628 - Rescue 1 and 3 onsite. HPD units 740, 741, and 730 on site. The spill was the result of a faulty fuel gauge on the aircraft was full and a spillage of approximately 10-15 gallons occurred from the left wing of the aircraft before shutoff. 0715 - Cleanup of ramp area complete. HPD Dr. No.
2/7/2006	1320	Petroleum Spill Airside	Received a call from Land TSA about a leaking propane tank in the Alaska bag make-up area.  Notified in Maintenance13:30 Mike from Maintenance advised that there is a tank leaking and have ATS respond to the bag make-up area. Notified ATS; they are en route.
2/7/2006	1405	Trash Spill Landside	reports that someone has vomited curbside the CT at the far end near baggage claim. It is right in front of the bench. Notified SPC1507: reports the same. Advised
2/8/2006	100	Wildlife/IPM	SPC. until 0300: Maintenance personnel removing weeds within the ovals from B1 to B2 DA
2/9/2006	1505	Sewage	from Southwest called to report that the hose at the triturator is stopped up. Notified Maintenance
2/11/2006	639	Trash Spill Landside	ATO reports there is a coffee spill curbside AA near the skycaps. Notified SPC.
2/12/2006	1220	Wildlife/IPM	, CO Ops advised ELS notified her about bees on jet bridge 36. Contacted M-1, requested he verify and contact duty sup and/or bee removal svcs.  1440 - M-1B advised bee removal contractor has been called. Requested ETA when known.
2/14/2006	1015	Trash Spill Airside	from Allied Waste called to request help for his driver to load trash bags which were left next to the compactor; a cardboard box was stuck in the unit and it was not working. This compactor is located by American Airlines. Notified SPC.
2/15/2006	1530	Trash Spill Airside	SPC reported that the trash compactor is not working; Pacific Waste notified.  1625- Compactor back in operation.

Date	Time	Subject/Topic	Log Entry Synopsis
2/16/2006	1020	Trash Spill	called to report a soda spill on the sidewalk next to American curbside check-in. Notified
2/10/2000	1020	Landside	/SPC.
2/17/2006	1537	Trash Spill Airside	with Jimsair reports large spill at triturator. Gave call to Zebra 3.
2/21/2006	1156	Trash Spill Landside	called to report a clean-up in front of gates 1-2, curbside. Notified SPC
2/21/2006	930	Trash Spill Airside	Received a call from at Allied Waste that there is approximately 30 bags of trash outside the trash compactor by American Airlines. Notified SPC to have someone load the compactor.  Called back to advise they are black bags and belong to Host (McDonalds) but they will clean them up. E-Mailed in Concessions.
2/24/2006	830	Trash Spill Airside	Street. Notified and in Maintenance.
2/25/2006	1250	Petroleum Spill Airside	AS #575 pilot requested fire truck response for minor fuel leak from stbd wing at gate 16. Requested one ARFF truck proceed to gate 16, no alert. Advised HPD. AS MD-80, N982AS vented 4-6 gallons from stbd wing during fueling. Execair maintenance pressurizing port MLG strut at time of incident. Storm drains no impacted.
2/25/2006	1350	Petroleum Spill Airside	Fuel spill reported at gate 33. Requested ARFF send one rig via VSR. HPD advised. No alert called. HP #6588, (N902FJ) vented 2-3 gallons out of port wing. ASIG reported automatic shutoff on acft failed. Storm drains not impacted DB
3/4/2006	1458	Trash Spill Landside	WN ramp supervisor, reports trash dumpster full. Asked MX to investigate.
3/5/2006	1619	Trash Spill Airside	ATO Supervisor requests clean up at T1 outside WN for blowing trash. Notified SPC.
3/6/2006	1815	Wildlife/IPM	Report of a dead bird on McCain rd. City of San Diego was advised.
3/8/2006	1710	Petroleum Spill Landside	ATO reports there is a lot of anti-freeze curbside T2 near DL check-in. Notified MX
3/13/2006	1419	Trash Spill Landside	called to complain about condition of cleanliness at T2 outside on the two occasions she visited curbside.
3/14/2006	845	Wildlife/IPM	Bird Strike: Remains of a Western Gull were retrieved from runway 27 abeam B6 intersection. The remains appeared to have been the result of an engine ingestion. The tower received no reports from a pilot in regard to the bird strike. Bird Strike report filed
3/15/2006	900	Wildlife/IPM	Weed spraying in all ovals.
3/16/2006	840	Wildlife/IPM	Least Tern oval fence repairs were conducted in all ovals.
3/17/2006	1111	Trash Spill Airside	Ramp inspection of gate 30/31 area, significant dust evident when vehicles pass through the area.
3/20/2006	830	Wildlife/IPM	Maintenance is conducting weed removal in the Least Tern ovals.
3/20/2006	1030	Petroleum Spill Airside	Fuel spill at the loading racks in Pit #2. There was a failure in the internal system (automatic shutoff) of ASIG truck #4973. Approximately 20 gallons spilled. Most of the fuel entered the oil water separator, the remainder was cleaned up by ASIG and Allied. ARFF Rescue 3 stood by until cleanup was accomplished. HPD DR#1776 applies.
3/20/2006	1942	Trash Spill Airside	with Host reports they will be cleaning T2W grease traps at 0300 for 30 minutes tomorrow a.m.
3/23/2006	815	Wildlife/IPM	MX personnel finishing up the weed removal in the least tern ovals.
3/23/2006	830	Trash Spill Landside	ATO called to report that the trash needs to be emptied at the taxi island in front of the Commuter Terminal. Notified SPC.
3/24/2006	600	Petroleum Spill Airside	FedEx reports a fuel spill from an A300 as a result of a malfunctioning flow valve. The aircraft N655FC experience a 5 gallon fuel spill from its left wing fuel tank. 0605 - ASIG begins cleanup of spill. No storm drains affected.
3/24/2006	1513	Wildlife/IPM	TSA operations, reports a dead bird at AA bag make up. He is concerned about avian flu. Zebra 2 responding 1537 Second call from TSA Operations. Notified Zebra 2
3/24/2006	1707	Unauthorized Discharge	called regarding the area of the TR property where there had been a previous water main break. The pits in the ground are filling with water. MX advises it is the tide rising and it is salt water. Notified
3/25/2006	646	Sewage	Per Tenant Advisory No. 06-19R, MX-5 has shut down/taped-off the triturator area. The alternate area has been opened. Zebra 2 advised. 730 Closed the triturator for sealing of the asphalt. Opened the alternate lav dump site for operation.
3/25/2006	600	Trash Spill Airside	Received complaint from AA Ops with regard to dust being generated at gate 27 from the construction activity of yesterday. Contacted to get the contractor's sweeper to return and clean up the area. In the interim, I had airport maintenance sweep the area until arrival of the contractor's sweeper. The contractor's sweeper arrived on site at 0930.

Log of IDDE Reports to SDIA 24-hour Telephone Line Fiscal Year 2005-2006					
Date	Time	Subject/Topic	Log Entry Synopsis		
3/26/2006	840	Trash Spill Landside	ATO reports there is broken glass curbside the CT, near the city bus stop. Advised SPC.		
3/26/2006	801	Trash Spill Landside	ATO reports a clean-up is needed curbside T2 baggage claim, near 1, 2, & 3. Notified SPC.		
3/27/2006	1426	Petroleum Spill Landside	reports automotive spill at T2 near the west red bus stop. Notified MX		
3/27/2006	1436	Trash Spill Landside	Call to request trash service at T1 taxi island. Notified SPC		
3/27/2006	1956	Trash Spill Landside	with TSA reports a broken box of wine T2W ramp side baggage. He is requesting a cleanup. Notified SPC.		
3/27/2006	2120	Trash Spill Airside	MX reports recycle compactor OTS. There is power to the unit. Notified Allied Waste via voice mail. Asked them to call in when they receive message.		
3/28/2006	1600	Petroleum Spill Airside	Fuel Spill Commuter Terminal. United Express Aircraft N271YV experienced a fuel spill on the commuter terminal ramp. 10 gal. No storm drains affected. Environmental, TSA, ARFF, HPD, Tower notified.		
3/31/2006	605	Petroleum Spill Airside	HAZMAT spill: ASIG (badge #43671) was fueling DL B737 (N#305WA) at G40 when the left tank began to overfill spilling approx 4-5 gals. They reported that DL gave him the wrong fuel slip which overfilled the tanks. No drains were affected, no ARFF response, and dry absorb was used for cleanup.		
3/31/2006	1110	Trash Spill Airside	from HMS Host called to report that the cardboard compactor is full at T2W. Notified at Allied and they will have a driver swing by and pick it up.		
4/4/2006	800	Wildlife/IPM	Escorted maintenance crew in the Least Tern ovals to prepare them for the upcoming season. All ovals are now closed for the season and the speed limit and endangered specie signage have been installed. TA 06-22 applies.		
4/9/2006	515	Construction Maintenance	Contracts-1 reports that the contractor is clear of all movement areas for the morning. They plan to return on the night of 22 Apr to complete the rubber removal process for the quarter.		
4/9/2006	2105	Wildlife/IPM	ATO reports T1 shuttle island has many rats running around the area. Notified MX.		
4/11/2006	730	Trash Spill Landside	in Paging called to report that the trash cans need to be emptied on the transportation island in front of Terminal 1. Notified SPC.		
4/11/2006	1030	Wildlife/IPM	/TSA called requesting treatment to rid of cockroaches at the Commuter Terminal checkpoint 7. Left message on voice mail in maintenance.		
4/15/2006	800	Wildlife/IPM	Conducted repairs to the Least Tern fencing.		
4/15/2006	1816	Unauthorized Discharge	ATO reports T1 shuttle island has an area flooded with water. Notified MX. MX has installed safety tape in the area. A mechanic will repair Monday.		
4/15/2006	2051	Petroleum Spill Airside	Fuel Spill; unreported 5 gal fuel spill from over fill of Jimsair truck 288 at re-fueling rack earlier in the evening; clean-up in progress and almost complete; no storm drains affected; advised Jimsair PM manager of requirement to notify airport ops for any fuel spill on the airport for safety and environmental evaluation.		
4/17/2006	1130	Wildlife/IPM	from GAT called regarding an injured bird ramp side by gate 38. Notified maintenance.		
4/20/2006	740	Wildlife/IPM	Weed spraying throughout airfield perimeter and in West RPZ.		
4/22/2006	1853	Trash Spill Landside	reports T1 shuttle island needs to have the trash emptied. Notified SPC.		
4/24/2006	1541	Wildlife/IPM	ATOs reported a bee swarm forming on the JetBlue canopy at the gate.		
4/25/2006	900	Trash Spill Airside	Approximately 15 oil drums under awning without secondary containment near Delta Airlines. Issue was resolved on site by EAD staff.		
4/27/2006	545	Wildlife/IPM	MX conducted weed spraying throughout the airfield as well as O-3-S under guidance from Environmental.		
4/28/2006	1900	Wildlife/IPM	UPS reports a swarm of bees in a piece of equipment along the fence line on their ramp; MNX-1 notified. 2105- bees have been removed.		
5/1/2006	740	Petroleum Spill Airside	Fuel Spill. Small 1-2 gallon fuel spill on the east ramp. No environmental impact. Southwest tug fuel leak. Clean-up completed by 0800.		
5/1/2006	1130	Trash Spill Airside	Contacted Pacific waste in reference to the broken trash compactor at the east ramp which is not cycling		
5/2/2006	1315	Wildlife/IPM	with Ocean Blue is cleaning out the drains in the Least Tern Oval near the Coast Guard gate.		
5/2/2006	1330	Wildlife/IPM	Bees swarm at gate 35. Contractor called in by Maintenance. HPD was advised.		

Log of IDDE Reports to SDIA 24-hour Telephone Line Fiscal Year 2005-2006					
Date	Time	Subject/Topic	Log Entry Synopsis		
5/3/2006	1215	Trash Spill Landside	, ATO, called to report that the trash curbside by American Airlines is overflowing.  Notified SPC.		
5/3/2006	2004	Petroleum Spill Landside	ATO reports there is a spill curbside AA check-in. Advised SPC.		
5/5/2006	14	Unauthorized Discharge	Alert III: Engine (#2 engine) fire on an American AA MD-80 at gate 28 - no pax or crew - occurred while in maintenance. Fuel leak ignition during maintenance engine start. Fire suppression system did not put out fire. ARFF responded to extinguish residual fuel. Approximate discharge of 800 gallons of water and 100 gallons AFFF. Minor AFFF runoff into slit trench behind gate 30. Ocean Blue performed cleanup, AFFF went approximately six (6) feet down the drain and was easily collected and disposed of. Ocean Blue en route to airport to remediate AFFF. Ocean Blue clean up work complete. AFFF traveled approximately six (6) feet down the drain and was removed.		
5/5/2006	2140	Wildlife/IPM	Bird Strike reported by inbound DL 593; 12 mi east of field at 4000' while turning to localizer at SWAT intersection; no assistance needed; bird struck above captain's window; electronic bird strike for filed		
5/6/2006	940	Wildlife/IPM	Noted significant Least Tern activity within oval 3S. Approximately 12-15 terns observed.		
5/11/2006	1120	Petroleum Spill Airside	from Frontier called to report that the aircraft at gate 18 was over-filled and they have a fuel spill.  Notified Zebra 2 and 3.		
5/11/2006	1125	Trash Spill Airside	Host called to advise that there is trash stored by the compactor in T2E that the seagull's are getting into. She stated she had spoken with an American rep this morning and she would get someone to clean it up. Notified Zebra 2 who spoke with in American Ops and he will get the job done.		
5/11/2006	1245	Wildlife/IPM	Paging ATO called to report of a complaint regarding the smell of bird droppings under the sky bridge at Terminal 1. Notified in Maintenance.		
5/11/2006	1125	Petroleum Spill Airside	Fuel spill at gate 18, ASIG supervisor advised that approximately 10 to 15 gal. fuel spilled out the aircraft fuel vents while being refueled; amount of fuel requested exceeded the fuel tank capacity. No storm drains were affected. ASIG personnel are in the process of cleaning the area.		
5/11/2006	1602	Trash Spill Airside	with WN reports roof drains are draining a lot of water near gates 3 & 9. Notified MX		
5/15/2006	900	Trash Spill Airside	Leaking cleaner/degreaser container at the breezeway at T2 West. Issue was resolved by EAD staff.		
5/15/2006	610	Trash Spill Airside	Responded to gate 26 in reference to an in-ordinate amount of water in the vicinity of the aircraft. Noted that the water came from the spigot on the terminal wall and Maintenance personnel on-site confirmed the presence of a new aircraft cleaning company working in that area last night. E-mail sent to environmental regarding same.		
5/15/2006	1154	Trash Spill Landside	SPC reports the trash compactor near AA is full. Contacted Pacific Waste.		
5/15/2006	1751	Petroleum Spill Landside	ATO reports spill curbside outside bag claim at CT. Notified SPC.		
5/18/2006	900	Trash Spill Airside	Blue liquid in front of AirServ office and Gate 12. Issue was resolved by EAD staff.		
5/18/2006	1000	Unauthorized Discharge	Soapy jet washing water discharged in front of Gates 24-30. Issue was resolved by EAD staff.		
5/19/2006	1936	Petroleum Spill Landside	ATO Supervisor reports auto spill curbside T2W near the crosswalk. Notified MX.		
5/21/2006	618	Trash Spill Airside	SPC reports the drinking fountain is leaking ramp side UA. Advised MX.		
5/26/2006	1457	Trash Spill Airside	Report of smoldering trash can UA curbside. Notified MX. Nothing found.		
5/29/2006	1003	Trash Spill Airside	WN reports the trash compactor is missing in the east ramp area. Pacific Waste contacted and was advised they will be returning the compactor back within the hour. Advised WN		
6/1/2006	900	Trash Spill Airside	Blue lavatory waste deodorizer near Gate 26 and operations area at Gate 26. Issue was resolved by EAD staff.		
6/1/2006	1000	Trash Spill Airside	Small electrical explosion in boneyard near control tower. Issue was resoved by EAD staff.		
6/1/2006	1145	Trash Spill Airside	from HMS Host called to report the cardboard compactor is not working in T2W. Zebra 2 notified maintenance11:55 Per in Maintenance called to report that there is power to the unit. Notified Allied Waste of problem, they will respond today.		
6/4/2006	2020	Petroleum Spill Landside	MX reports spill T1 parking pavilion. Notified SPC.		

	Log of IDDE Reports to SDIA 24-hour Telephone Line Fiscal Year 2005-2006					
Date	Time	Subject/Topic	Log Entry Synopsis			
6/7/2006	1120	Trash Spill Airside	from HMS Host called to report that the recycle trash compactor is full and elevator 15 is not working. Contacted Allied Waste and they will be out today for the compactor. Per maintenance, elevator 15 doors will not close.			
6/7/2006	1447	Trash Spill Airside	Received a report that the dumpster is OTS in T2E. Zebra 3 checked the dumpster and advised it is not operating at all. Contacted Allied Waste. They will have a technician on site in approx. 1 hour. Advised Zebra 3.			
6/7/2006	1845	Petroleum Spill Landside	ATO Lead reports there is a spill curbside AA check-in area. Left a message for SPC.			
6/10/2006	855	Trash Spill Landside	ATO reports there is broken glass curbside the CT. Contacted /SPC.			
6/10/2006	934	Trash Spill Airside	HMS reports the recycle compactor is leaking hydraulic fluid in T2W. Left message for Muste. MX checked the area and advised there is a substantial amount of fluid, but not near the storm drain. Zebra 2 advised. 0946: Allied advised a technician will be on site in approx. 1 hour. Advised Zebra 2.			
6/10/2006	1319	Trash Spill Airside	Ref. 0934 entry: MX advised the compactor is RTS and Allied has cleaned the area. Zebra 2 advised			
6/11/2006	834	Petroleum Spill Airside	ASIG MOD reported a hydraulic fluid leak from ASIG truck #4972 at gate 39. Clean up in progress. No storm drains impacted.			
6/13/2006	2056	Trash Spill Landside	ATO reports someone has vomited curbside T1 baggage claim. Notified SPC.			
6/15/2006	1840	Wildlife/IPM	ATO reports pax witnessed a bird struck by auto. Pax removed carcass to planting area and placed leaves over it. Notified MX to remove bird carcass.			
6/16/2006	900	Trash Spill Airside	Red sealant/lubricant leaking from skybridge at Gates 35 and 36. Issue was resolved by EAD staff.			
6/16/2006	1546	Petroleum Spill Airside	reports he received a call from MX regarding a slippery substance on ramp near jet way at gate 35. Notified Zebra 3 who was close by and he reports it is an FCI cleanup from their joint sealant. Zebra 2 will notify inspector.			
6/18/2006	730	Petroleum Spill Airside	Observed fuel spill cleanup in progress near gate 1. Leak form WN N419WN. No storm drains impacted. Estimated 3-4 GL spill.			
6/23/2006	831	Trash Spill Airside	Request MB, US #30985 (US mechanic) to remove potential FOD from US/ HP GSE; numerous used towels, rags, etc. SAN ID check.			
6/23/2006	838	Trash Spill Airside	Contacted, UA ops to request clean up of FOD, (white paper) on ramp from gate 11 to gate 18. Requested he contact and coordinate with ATS.			
6/23/2006	1300	Trash Spill Airside	Contacted Allied Waste in reference to the broken compactor at T2W. 1400Contacted their dispatch office again and was advised that the tech should be on-site in 15 minutes			
6/23/2006	1515	Trash Spill Airside	Completed terminal inspections of T1 and the CT. The trash compactor at T2W is currently under repair by Allied waste personnel. Escalator 15 and elevator 1 are currently OTS.			
6/26/2006	826	Trash Spill Landside	Officer SOC reports the trash cans are full at the Washington Street gate. Notified /MX.			
6/26/2006	930	Trash Spill Airside	Contacted concerning the unkempt appearance of the T2E/W transition loading docks. advised he would coordinate with SPC and Host for the cleanup			