2011 Annual Report
November, 2011

Arizona Department of Transportation
Office of Environmental Services
206 South 17th Avenue, MD 102A
Phoenix, Arizona 85007

Stormwater Management Plan
2011 Annual Report
MS4 Permit No. AZS000018-2008



TABLES

APPENDICES

ACRONYMNS and DEFINITIONS

A&Wedw – Aquatic and Wildlife (effluent-dependent water)

A&Wc – Aquatic and Wildlife (cold water)

A&Ww – Aquatic and Wildlife (warm water)

AASHTO - American Association of State Highway and Transportation Officials

ADEQ – Arizona Department of Environmental Quality

ADOT – Arizona Department of Transportation

AgL – Agricultural Livestock Watering

AHLI – Adopt-a-Highway Litter Initiative

A.R.S. – Arizona Revised Statute

AZPDES – Arizona Pollutant Discharge Elimination System – The State program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of CWA.

BLM – Bureau of Land Management

BMP – Best Management Practice - Permit condition used in place of or in conjunction with effluent limitations to prevent or control the discharge of pollutants. BMPs may include, but are not limited to, treatment requirements, operating procedures, or practices to control plant/facility site runoff, spillage, leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may also include schedule of activities, prohibition of practices, maintenance procedure, or other management practice.

BOD – Biological Oxygen Demand

COD – Chemical Oxygen Demand

COP – City of Phoenix

CWA – Clean Water Act - The Clean Water Act is an act passed by the U.S. Congress to control water pollution. It was formerly referred to as the Federal Water Pollution Control Act of 1972 or Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500), 33 U.S.C. 1251 et. seq., as amended by: Public Law 96-483; Public Law 97-117; Public Laws 95-217, 97-117, 97-440, and 100-04.

DEC – District Environmental Coordinator

DMR – Discharge Monitoring Report - The form used (including any subsequent additions, revisions, or modifications) to report self-monitoring results by AZPDES permittees. DMRs must be used by approved states as well as by EPA.

EPA – U.S. Environmental Protection Agency

EPCP – Erosion Pollution Control Plan

ERP – Enforcement Response Plan

FBC – Full Body Contact

FC – Fish Consumption

FIS – Features Inventory System

FPPP – Facility Pollution Prevention Plan

IDDE – Illicit Discharge Detection and Elimination

MS4 – Municipal Separate Storm Sewer System - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) owned by a state, city, town or other public body, that is designed or used for collecting or conveying stormwater, which is not a combined sewer, and which is not part of a publicly owned treatment works. Commonly referred to as an "MS4" [40 CFR 122.26(b)(8)].

NASPA – Northern Arizona Stormwater Pollution Alliance

NEPA –National Environmental Policy Act

NOV – Notice of Violation

NTU – Nephelometric Turbidity Units

OES – Office of Environmental Services

PAG – Pima Association of Governments

PBC – Partial Body Contact

Permittee – means the Arizona Department of Transportation.

QAM – Quality Assurance Manual

SCOE - Standing Committee on the Environment

SMP – Slope Management Program

SR – State Route

SSC – Suspended Sediment Characteristics

SSWMP – Statewide Stormwater Management Plan – A comprehensive plan for implementation of AZPDES permit requirements.

STORM – STormwater Outreach for Regional Municipalities

Stormwater – Stormwater runoff, snowmelt runoff, and surface runoff and drainage [40 CFR 122.26(b)(13)].

SWAT – Stormwater Advisory Team

TMDL – Total Maximum Daily Load

TSS – Total Suspended Solids

TDS – Total Dissolved Solids

TKN – Total Kjeldahl Nitrogen

SWPPP – Stormwater Pollution Prevention Plan

SWQS – Surface Water Quality Standard

Waters of the United States – All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide. Waters of the United States include but are not limited to all interstate waters and intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. [See 40 CFR 122.2 for the complete definition.]

EXECUTIVE SUMMARY

The Arizona Department of Transportation (ADOT) is submitting this 2011 Statewide Stormwater Management Program (SSWMP) Annual Report describing activities and programs implemented from July 1, 2010 through June 30, 2011. During this time period ADOT operated under the Arizona Pollutant Discharge Elimination System (AZPDES) Permit No. AZS000018-2008 (Permit). This is the third Annual Report under ADOT's stormwater permit which expires September 18, 2013. The Statewide Permit authorizes ADOT to discharge stormwater, and other discharges as specified, Statewide (except for Indian Country) to Waters of the United States in Arizona in accordance with its terms and conditions. Specifically, the Permit covers:

- Activities associated with the Municipal Separate Storm Sewer System (MS4) operated by ADOT
- Activities associated with construction initiated and controlled by ADOT from the commencement of construction until final stabilization
- Activities associated with industrial and maintenance facilities owned and operated by ADOT

The Annual Report is divided into the following twelve categories: (1) General Information, (2) Annual Report Certification, (3) Narrative Summary of the SSWMP activities, (4) Numeric Summary of SSWMP Activities, (5) Evaluation of the SSWMP, (6) SSWMP Modifications, (7) MS4 Monitoring Location Information, (8) Storm Event Records, (9) Summary of Monitoring Data, (10) Assessment of Monitoring Data, (11) Estimate of Pollutant Loading, and (12) Annual Expenditures. This Annual Report is used by ADOT to assess the performance of its stormwater management program and establish long-term assessment strategies.

1 GENERAL INFORMATION

Permittee Name: Arizona Department of Transportation

Permit Number: AZS000018-2008

Reporting Period: July 1, 2010 - June 30, 2011

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2 ANNUAL REPORT CERTIFICATION

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 assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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.

Todd G. Williams — *Todd G. Williams, M.Sc., Director, OES*

11/10/11 — *Date*

3 NARRATIVE SUMMARY OF SSWMP ACTIVITIES

Permit Section 9.1.2(c)*: Provide a summary of the status of the SSWMP each year, including a brief description of the implementation and progress of every individual best management practice (BMP). Also, provide an explanation of any significant developments or changes to the number or type of activities, the frequency or schedule of activities, or the priorities or procedures for implementation of specific management practices.*

ADOT updated its SSWMP in March, 2010 and submitted it to the Arizona Department of Environmental Quality (ADEQ). The SSWMP outlines how ADOT will manage its stormwater discharges throughout the State. The SSWMP includes the following components:

- Description of the best management practices (BMPs) selected, implemented, maintained, and updated to minimize the discharges of pollutants that may contribute to an exceedence of any surface water quality standard
- List of narrative and/or numeric measurable goals for each BMP
- Timeframe by which ADOT will achieve each measurable goal
- Title(s) of the person(s) responsible for implementing and coordinating each measure

As required by Section 9.1.2(c) of the Permit, ADOT has provided a narrative summary of SSWMP activities in this Annual Report. This summary is provided in Appendix A and includes a brief description of the implementation and progress of individual BMPs. The summary indentifies each BMP, its location within the updated SSWMP, and Permit reference if applicable.

3.1 ADOT Technical Documents

Permit Requirement (Appendix B, Part 3): Include a short statement for each of the following documents indicating if a review was completed. Describe any major updates to each document.

ADOT reviews and updates its technical stormwater documents as needed. A status summary of each technical document is provided:

- *Erosion and Pollution Control Manual* – Update of this manual is on-going and in accordance with Permit Section 3.2.2.1(c). Updates included revision of BMP detail drawings, SWPPP index sheets, associated training module, and a template for ADOT licensed material sources.
- *Maintenance and Facilities Best Management Practices Manual* - This manual was updated in September 2010 by ADOT in accordance with Permit Section 3.2.3.1(c).
- *Stormwater Monitoring Guidance Manual for MS4 Activities* - This manual had no updates in the last reporting year.
- *Stormwater Monitoring Guidance Manual for Construction Activities* - This manual had no updates in the last reporting year.
- *Stormwater Monitoring Guidance Manual for Industrial Activities* - This manual had no updates in the last reporting year.
- *Post-Construction Stormwater Control BMP Manual* - This manual had no updates in the last reporting year.

- *Quality Assurance Manual (QAM)* - This manual had no updates in the last reporting year.
- *Enforcement Response Plan (ERP)* - This manual had no updates in the last reporting year.

3.2 Outfall Inspection and Tracking

Permit Section 3.2.3.2(e): ADOT shall document that a system to track and record the findings of outfall inspections, including the conditions of outfalls, potential sources of pollutants, and maintenance needs has been implemented and is being maintained.

ADOT has developed a system to track and record the condition of major outfalls. The tracking system consists of an excel spreadsheet maintained by ADOT's Office of Environmental Services (OES) that includes major outfalls as identified in ADOT's *Phase I and Phase II Stormwater System Maps* completed September, 2005 (Appendix B). Categories tracked and recorded for the major outfall inspections include:

- Outfall name
- Date of inspection
- Inspector name
- Receiving water
- Outfall type (pipe, channel, tunnel, culvert)
- Condition of outfall
- Maintenance needs
- Dry weather flows
- Potential sources of pollutants
- Follow up actions required (if any)

ADOT has initiated a pilot program within the Kingman District to track and record the condition of its stormwater drainage features in the Lake Havasu area. This pilot program uses ADOT's Features Inventory System (FIS). The FIS is a geographic information system capable of tracking and maintaining highway attributes, such as guardrail and signs, but also includes drainage features. The FIS pilot program remains ongoing within the Lake Havasu area.

ADOT has begun populating the FIS, which is capable of storing information regarding highway attributes, such as guardrail, signs, and drainage features. The FIS allows for attribute data, e.g., photos, global positioning system datum, and condition of features, to be documented. ADOT Districts started using the FIS drainage mapping component in October 2010 as a pilot to assist in tracking dry weather screenings. It is anticipated that the FIS will be fully populated with all drainage features by the end of this Permit term (2013). ADOT will continue to identify which assets are outfalls and priority outfalls as defined by the Permit and will complete the mapping effort three years later (i.e., 2016). In the meantime, outfall tracking will be conducted manually for Districts that do not have the FIS fully implemented.

3.3 Public Access to Stormwater Documents

Permit Section 3.2.2.3(a): ADOT shall summarize the status of public access to stormwater documents.

ADOT has maintained its online Stormwater Library for the general public and internal use. The Stormwater Library is a virtual library that can be accessed via the internet at the following location:

http://www.azdot.gov/Inside_ADOT/OES/Water_Quality/Stormwater/Index.asp.

This library houses documents required by the Permit. Anyone without internet access can also view available documents by contacting OES at (602) 712-8353. ADOT is currently unable to track the number of visits annually to the virtual library. Beginning July 1, 2011 ADOT will be able to track the number of page views for the Stormwater Library. Documents maintained in the Stormwater Library include:

- Stormwater Permit and Related Documents
  - ADOT Statewide Stormwater Discharge Permit
  - Statewide Stormwater Management Plan
  - Permit Annual Reports (2005 – 2010)
  - ADOT Statewide Stormwater Permit Application
- Manuals
  - Quality Assurance Manual
  - Erosion and Pollution Control Manual/BMP Detail Drawings
  - Post-Construction Best Management Practices Manual
  - Maintenance and Facilities Best Management Practices Manual
  - Stormwater Monitoring Guidance Manual for Construction Activities
  - Stormwater Monitoring Guidance Manual for MS4 Activities
  - Stormwater Monitoring Guidance Manual for Industrial Activities
  - Stormwater Enforcement Response Plan
- Maps
  - Outstanding, Impaired, and Not Attaining Waters Maps by County
  - Phase I & Phase II Stormwater System Maps
  - Projects in the Five Year Program Located Near Unique and Impaired Waters
- Other Resources
  - Construction Stormwater Pollution Prevention Plan (SWPPP) Template
  - Encroachment documents
  - ADOT-Licensed Material Sources Documents
  - Contact list
  - Useful links

3.4 Illicit Discharges

Permit Section 3.2.3.4(d): ADOT shall summarize the status of implementation procedures to track actions taken on illicit discharges and illegal dumping. Develop and implement a procedure to track the action taken on identified illicit discharges and illegal dumping.

ADOT has developed the following enforcement provisions for tracking illicit discharges:

1. *Written Warning* - If an inspection of the drainage system identifies an illegal connection/discharge to the ADOT system, ADOT will issue a "Notice of Illegal Discharge and Demand for Corrective Action" letter to the property owner where an illegal connection/discharge is discovered. The letter will request that the connection/discharge be ceased or removed within 30 days. A follow up inspection will be performed to ensure compliance. A *Notice of Illegal Discharge or Connection* letter is included in Appendix C.

2. *Removal of Connection/Discharge* - ADOT may remove the illegal connection/discharge if it has not been corrected within 30 days. If ADOT removes the illegal connection/discharge, the responsible party is subject to an action for damages by the state brought by the attorney general, or the county attorney of the county in which the act is committed on direction of the attorney general, pursuant to Arizona Revised Statute (A.R.S.) §28-7053 Misuse of Public Highway.

3. *Civil Action* - If the illegal connection/discharge is not corrected within 30 days, ADOT may forward this matter to the Arizona Office of the Attorney General so that a lawsuit may be filed.

4. *Other Enforcement Actions* – ADOT is not a typical MS4, such as a city or county, with its own enforcement branch such as police department or sheriff. Without its own enforcement branch, ADOT relies on other jurisdictions for enforcement assistance. ADOT may request the assistance of other government entities to assist with enforcement to include other MS4s, ADEQ and/or the U.S. Environmental Protection Agency (EPA).

Enforcement actions are tracked initially by the inspector/District Environmental Coordinator (DEC) that identifies an illicit discharge. The discharge is documented and includes the source, date/time, photo points, contact person (if any), description of the nature of the non-compliance or illicit discharge, and actions taken. This information is then forwarded to the OES and the action tracked. The OES coordinates/tracks enforcement action or requests the assistance of the Attorney General's office.

3.4.1 Illicit Discharges Eliminated

Permit Section 3.2.3.4(b)(ii): ADOT shall report the number of illicit discharges eliminated each year in the Annual Report

ADOT has identified and eliminated the following number of illicit discharges for the identified District:

- Phoenix District – 4 illicit discharges reported and 4 eliminated
- Prescott District – 1 illicit discharge reported and 1 eliminated
- Yuma District – 1 illicit discharge reported and 1 eliminated
- Holbrook District – 1 illicit discharge reported and 1 eliminated

3.4.2 Illicit Discharges Reported to Other Jurisdictions

Permit Section 3.2.3.4(c)(iii): ADOT shall present the number of illicit discharges reported to other jurisdictions for follow-up in the Annual Report

There has been one illicit discharge identified within the past reporting year that required reporting to other jurisdictions for follow-up. In November 2010, an illicit discharge was

reported as originating from an ADOT outfall. It was determined that no discharge was entering ADOT's drainageway from the surface and that it was likely coming from a City of Phoenix (COP) interconnect. ADOT notified COP personnel and worked closely with them in an attempt to identify the source. The source of the discharge was not identified and dissipated within several hours.

3.5 Erosion Abatement Projects

Permit Section 3.2.6.2(d): ADOT shall describe the tracking system used to identify, track and prioritize erosion abatement projects. Summarize erosion abatement projects conducted during each year.

ADOT has identified the existing Slope Management Program (SMP) database as a possible tool to identify, track and prioritize erosion abatement projects. The SMP is a Microsoft ACCESS database that allows ADOT to track and prioritize the severity of rock slopes, soil cuts and embankments throughout the state. In Permit Year 4, ADOT will investigate expansion of this database as a viable tool to track erosion abatement projects.

3.6 Spills and Other Releases

Permit Section 4.1.5.2(d): ADOT shall document that a system to track and record spills and other releases by ADOT staff and at ADOT maintenance facilities has been established.

ADOT has developed and implemented a system to track and record spills. The system requires ADOT personnel to report non-emergency spills to their respective DEC. Spills requiring an emergency response are reported to the ADOT Safety and Health Section and to the DEC. The DEC documents the following information when spills occur:

- Number of spills
- Location
- Date/time
- Extent of the spill
- Media impacted (if any)
- Circumstances of the release
- Names of parties involved
- Corrective actions taken
- Follow up required (if any)

Spill information is forwarded to the OES and assistance provided to the DEC if required. Records are maintained at the facility where a spill or release occurred and at the OES.

3.7 Maintenance Facility SWPPPs

Permit Section 4.2.1.1: ADOT shall document individually that the SWPPP required for each maintenance facility has been updated.

ADOT has been updating existing facility Stormwater Pollution Prevention Plans (SWPPPs) for the following maintenance facilities within the past reporting year:

- Avondale Maintenance Yard
- Broadway Maintenance Yard
- Douglas Maintenance Yard
- Durango Maintenance Yard
- Phoenix Equipment Services

- Flagstaff Maintenance Yard
- Grand Avenue Landscape Maintenance Yard
- Little Antelope Yard
- Mesa Country Club Maintenance Yard
- Mesa Recker Road Maintenance Yard
- Nogales Maintenance Yard
- North Phoenix Maintenance Yard
- Prescott Valley Maintenance Yard
- Statewide Striping Facility
- Superior Maintenance Yard
- Superior Storage and Fuel Yard
- Tucson Grant Road Maintenance Yard
- Yuma Maintenance Yard

In addition, it was discovered that the Camp Verde Maintenance Yard required a SWPPP due to its location within an MS4. The SWPPP was completed in December 2010.

In light of anticipated changes in federal regulations regarding Spill Prevention, Control, and Countermeasure, ADOT has embarked on an effort to expand the SWPPPs by incorporating SPCC regulations into a comprehensive Facility Pollution Prevention Plan (FPPP). FPPP preparation began at the end of the reporting year for 52 maintenance yards that house fueling stations.

3.8 Construction Site Issues

Permit Section 5.3.4: A list and description of all violations ADOT has determined at construction sites and their resolution, including any enforcement actions taken against ADOT contractors.

3.8.1 Construction Site Tracking System

ADOT is currently developing a system to adequately identify, track, and resolve violations at construction sites. Current State budget issues are restricting ADOT from fully developing and implementing this program. Once funded, the tracking will include the following elements:

- Track construction sites to include inspections and enforcement
- Prioritize sites for inspection based on risk to waterway, resources, and operator history
- Resolve violations as needed

3.8.2 Construction Violations

ADOT has received no Notice of Violations (NOVs) for construction sites from the ADEQ within the past reporting year.

3.9 Industrial Facilities

Permit Section 6.6.2 & 6.7.2: Provide a brief statement documenting that the SWPPPs for Grand Canyon National Park Airport and Durango Sign Factor were updated and on-site within 90 days of the effective date of the permit.

ADOT industrial facilities include the Grand Canyon Airport, Durango Sign Factory and the former Print Shop (closed 2010). These facilities are discussed below.

3.9.1 SWPPP Update

SWPPPs for the Grand Canyon National Park Airport and the Durango Sign Factory have been maintained and updated (if required) within the past reporting year for each facility. Additionally, personnel at each facility have been trained on SWPPP requirements and quarterly and annual inspections have been completed.

3.9.2 No Exposure Certification

Permit Requirement Section 6.9.2: C*onfirm the Print Shop has "no exposure" to stormwater*

Printing activities at the ADOT Print Shop (1655 W. Jackson Street, Phoenix, AZ) have been discontinued and the facility is no longer in operation. This requirement has been removed from ADOT's Permit.

3.10 Material Sources

Permit Section 6.8.3: Provide a map of material sources and provide a status summary of each site.

ADOT's Materials Group maintains an inventory of regulated material sources and stockpile sites in accordance with Permit Section 6.8.3. These sites are classified into the following four categories:

- Group A – Active Sites
- Group B – Inactive Sites
- Group C – Reclaimed Sites
- Group I – Non-mining Sites

A site map illustrating the locations of material sources identified within these four groups is provided in Appendix D and a status summary is in Appendix E. The following section summarizes the status of sites in each group.

3.10.1 Active Sites – Group A

Permit Section 6.8.3: Provide a status summary of each site.

ADOT has 17 sites within Group A, which is defined as active sites where work or other activities related to the extraction, processing, removal or recovery of minerals is being conducted. Group A is further defined by ADOT into the following two categories:

- Group A1 – sources used frequently for maintenance activities
- Group A2 – sources used infrequently for major construction projects

There are 12 sites within Group A1 as identified in Table-1. These sites are used frequently by ADOT Maintenance and are inspected on a quarterly basis.

Table 1 - Group A1 Sites

Material Sources Used Frequently and Inspected Quarterly			
Site No.	**Source Name**	**District**	**County**
1563	Pole Knoll	Globe	Apache
3512	Burnt Corral	Globe	Maricopa
5154	JMP Ranches Inc.	Globe	Apache
8763	Fish Creek	Globe	Maricopa
8109	BVD	Holbrook	Coconino
7810	Crabtree	Safford	Greenlee
5058	Picacho	Tucson	Pinal
6662	Val Vista	Tucson	Pinal
1662	Tanner	Yuma	Yuma
2979	Vicksburg	Yuma	La Paz
3547	Gila Bend North	Yuma	Maricopa
5474	Castle Dome	Yuma	Yuma

There are 5 sites within Group A2 as identified in Table-2. These sites are used infrequently by contractors (every three to five years) for major construction projects and are inspected annually. When Group A2 sites are utilized for a project, the contractor includes the material source in the project SWPPP or develops a site-specific SWPPP. The contractor submits a Notice of Intent under the Construction General Permit, implements and maintains BMPs, conducts routine inspections, and provides interim stabilization before filing a Notice of Termination.

Table 2 - Group A2 Sites

Material Sources Used Infrequently and Inspected Annually			
Site No.	**Source Name**	**District**	**County**
8706	Yucca	Kingman	Mohave
8569	Dugas	Prescott	Yavapai
6022	Bowie	Safford	Cochise
5643	Gila Bend South	Yuma	Maricopa
8268	Tiger Wash West	Yuma	Maricopa

Group A sites identified in previous Annual Reports not covered by an active mining license have been moved to Group B.

3.10.2 Inactive Sites – Group B

Group B includes sites or portions of sites where mining occurred in the past but is currently not an active facility.

ADOT has 7 sites in Group B, which is defined as inactive material sites being evaluated for mining license renewal, reclamation or disposal. ADOT may not hold a current mining license to some Group B sites and therefore ground disturbing activities at those facilities is not authorized. Sites will be maintained in Group B until funds are allocated and a reclamation plan approved. Table 3 below provides the goals to use or reclaim Group B sites during the permit term.

Table 3 - Reclamation or Utilization Schedule for Group B Sites

			Reclamation Schedule			
Site No.	District	County	Year 2	Year 3	Year 4	Year 5
3043	Globe	Gila	--	Permit Renewal	--	--
3044	Globe	Gila	--	Permit Renewal	--	--
7225	Globe	Gila	--	Permit Renewal	--	--
8135	Globe	Apache	--	Permit Renewal	--	--
6451	Safford	Graham	--	--	Further Evaluation	--
1318	Tucson	Pima	--	--	Reclamation Plan	Initiate/Achieve Stabilization
478	Yuma	Yuma	--	--	Further Evaluation	--

Other sites on the inventory that may be reclaimed and released to the land manager are listed in Group I. These sites were not used for mining and as a result do not fit into the definition of Group B. However, similar to sites in Group B, renewal or reclamation and disposal should be completed during the permit term (see Section 3.10.4 below for details regarding the specific sites).

3.10.3 Reclaimed Sites – Group C

Group C includes sites where activities are being conducted to return the land to its pre-mining state.

ADOT currently has no sites in Group C, which is defined as sites where activities are being conducted to return the land to its pre-mining condition. An update of sites previously identified in Group C is provided:

- MS 8223 - Reclamation of this site located in the Safford District was completed in 2009. Minor paperwork to officially document closure of the land use permit will be pursued in Permit Year 4.
- MS 769 - Reclamation and release from site in the Flagstaff District was documented in August 2010 and the site will be removed from future reporting.
- MS 8318 - Operations at this site in the Holbrook District concluded and the land owner released ADOT from reclamation in October 2010. This site will be removed from future reporting.

3.10.4 Non-Mining Sites – Group I

Group I includes non-mining sites (regulated stockpile sites).

ADOT has 16 sites in Group I, which is defined as sites used to store aggregate, dirt, and other supplies. ADOT Maintenance has access to import or export material 365 days a year; therefore, these sites are inspected quarterly. These sites currently fall under the administrative responsibility of the State Materials Engineer while roadside stockpiles are managed by individual Districts and are not part of this section.

Group I includes three inactive, unlicensed stockpile sites: MS 1546, MS 3562 and MS 8629. Because these sites are not prior mining sites, they do not conveniently fit into Group B. ADOT has addressed this issue by assigning appropriate site use code. Group I sites scheduled for reclamation or permit renewal are identified in Table 4.

Table 4 - Non-mining Sites

Site No.	District	County	Reclamation Schedule			
			Year 2	Year 3	Year 4	Year 5
3562	Flagstaff	Coconino	--	--	Reclamation Plan	Initiate/Achieve Stabilization
1546	Globe	Gila	--	--	Permit Renewal	
8629	Globe	Gila	--	NEPA Analysis	Reclamation Plan	Initiate/Achieve Stabilization

3.10.5 Inspection of Material Sources

Permit Section 6.8.4.2(d): ADOT shall create a summary for each Annual Report of all inspections conducted. The summary shall include the inspection findings, deficiencies, and corrections made to each site.

Group A, B, C and I sites were inspected as per Permit requirements throughout the reporting year (either quarterly, annually, or every 14 days). Reports are available from ADOT Materials Group or the appropriate ADOT District. In accordance with the Permit Section 6.8.4.2.d., the inspection findings, deficiencies, and corrective actions for non-compliant sites are provided in Table 5. Material sources not listed below and that appear in Appendix E have no deficiencies and require no corrective action.

Table 5 - Summary of Inspection Findings, Deficiencies, and Corrective Actions

Site No. & Name	Findings	Deficiencies	Corrective Action
MS 1245 – Sunset Pass	Perimeter berm has no freeboard.	Berm not adequately maintained.	Remove cinders from interior of berm on northwest corner (Permit Year 4).
MS 1662 – Tanner	Sediment discharge to wash in southwest corner of site.	No BMPs in place.	Relocated material stockpiles (March 2011) to another portion of the site (northwest corner) to eliminate sediment transport.
MS 3043 – Squaw Peak	Sediment discharge along eastern boundary.	Retention basin inadequately sized; no velocity control devices; blown out berm and ditch.	Increase storage capacity of retention basin. Install velocity reduction measures, such as slope roughening. Maintain drainage channels to convey flows to the retention basin. Mining permit authorization anticipated October 2011.
MS 3562 – Beaver Creek	Sediment discharge at haul road and southern boundary.	Berm along west side needs maintenance; implement check dams along haul road.	Will negotiate reclamation and closure of this site with the Forest Service.
MS 3591 – Carol Spring Mountain	Salt shed sump full of water; Berm along south breached.	Sump has inadequate storage volume; Need to install flow-velocity dissipaters.	Multiple corrections to the site have been made this year. Due to paving the haul road, runoff has increased. Installed retention area as primary defense with berm acting as final point of compliance. Requested facility modification for salt shed apron; need to obtain capital improvement funds to reconstruct apron or find alternate solution (e.g., add a tank to store pumped water).
MS 5002 – Fortuna Wash	Aggregate and reclaimed asphalt pavement mobilizing to floodplain; good housekeeping.	While some of the area is vegetated and provides a buffer to the wash, the north bank is sloughing.	ADOT is determining whether continued use of this ADOT-owned property is necessary. A prior excavated area (pit) is located between the upland area where material is stored and the ordinary high water mark of Fortuna Wash. Remedial action will be determined in Permit Year 4.
MS 5058 – Picacho	Non-compliance issues identified during use of this site by an ADOT contractor.	Secondary containment for fuel and used oil canisters not installed; rills along east side as a result of prior mining activities not maintained.	ADOT Contractor has corrected the items related to its operation and continues inspections as required by the AZPDES CGP. ADOT will address the slope erosion, as necessary, after the construction project is completed.

Site No. & Name	Findings	Deficiencies	Corrective Action
MS 5643 – Gila Bend South	Non-compliance was identified during use of this site by an ADOT contractor.	Secondary containment for fuel and used oil canisters not installed; check dams for haul roads not maintained; aggregate wash pond not properly lined.	Generally, these deficiencies were corrected by the Contractor prior to the next regular inspection. ADOT and the Contractor met onsite in May 2011 to ensure interim stabilization was performed satisfactorily.
MS 5781 – Blue Grade	Sediment and aggregate discharge along southwestern boundary.	Ditch and berm that convey sheet flow to a retention basin have not been maintained.	ADOT initiated partial reclamation of the site; scarified and hydroseeded in June 2011. ADOT will be moving stored materials to the confines of the pit by 2013.
MS 6022 – Bowie	Non-compliance issues identified during use of this site by an ADOT contractor.	Track out pad not maintained; fuel containment devices inadequate or not installed; good housekeeping not implemented.	Generally, these deficiencies were corrected by the Contractor before the next regular inspection. ADOT and the Contractor met onsite in June 2011 to ensure interim stabilization was performed satisfactorily.
MS 6451 – Slick Rock Wash	Inadequate reclamation.	Stockpiles of material remain onsite; two areas along the wash bank contain asphalt waste.	There is no evidence of asphalt transport into the wash. The site was utilized nearly 2 decades ago. Vegetated buffers provide interim stabilization until ADOT can fund site remediation.
MS 6662 – Val Vista	Run-on and disturbance by off road vehicles eroding slopes; heavy trash; accepting flows from county road.	Infrequent maintenance of slopes; lack of signage to preclude trespass.	ADOT is coordinating with an onsite Contractor to effect maintenance of rills. A 100-foot-wide buffer along the county road should be re-established to eliminate co-mingling of stormwater. Appropriate signage could curb illegal dumping and further slope erosion due to off road vehicles.
MS 7287 – Centennial Wash	Run-on causing headcutting.	Infrequent maintenance of slopes.	Erosion should be periodically backfilled. ADOT currently does not have a dedicated access to the site and is working with FHWA to obtain ingress/egress. Repairs will occur thereafter.
MS 7525 – Defiance	Sediment and aggregate discharge along western boundary.	Berm not maintained; no velocity control devices; good housekeeping.	ADOT performed partial reclamation of an adjacent mining area to preclude run-on and installed rock check dams on interior roads; need to reestablish the west-side berm and replace wattles at discharge points to an unnamed drainage that intersects the haul road. Scheduled August 2011.
MS 7885 – Sahuarita	Run-on is eroding slopes on the north and northwest boundaries.	Infrequent maintenance of slopes.	ADOT backfilled slopes in June 2011; ADOT is coordinating with adjacent private land owners and will investigate potential illicit discharges from private land.
MS 8109 – BVD	Sediment discharge at northwest and southeast boundaries.	Retention basins and velocity reduction are inadequate for the site.	ADOT reconstructed both retention basins, added check dams, repaired prior check dams; ADOT is evaluating the site activities for revegetation of unused, previously cleared/grubbed areas.
MS 8268 – Tiger Wash West	Sediment discharge southwest of processing area.	Berm breached.	Reconstruct and maintain berm; roughen processing area and direct sheet flows to pit via ditch and check dams.
MS 8541 – Red Bluff	Erosion of southern boundary and haul road intersection.	No BMPs installed.	ADOT has abandoned the plan to obtain a license for use of this site. The land manager notified ADOT that ground disturbing activities shall not occur.
MS 8569 – Dugas	Sediment and aggregate discharge to vegetated buffer from retention basin outfall.	Retention basin is adequately sized; erosion is attributed to lack of maintenance of the contributing ditch/swale.	While discharges of sediment and aggregate were not observed outside the ADOT permit area, maintenance of the ditch/swale and repair of the basin outfall should be prioritized.
MS 8763 – Fish Creek	Retention basin at 2/3 capacity; haul road eroded.	Inadequately sized retention basin; overflowing and eroding haul road.	In February 2011 ADOT commenced mining in an adjacent area and reconfigured the retention basin.

- *To the extent practicable, any off-site discharges will be collected and placed within the permitted boundary*

3.10.5.1 Sites Removed from Inspection List

Sites removed from inspection requirements within the reporting year include:

- MS 6125, MS 2330 and MS 3486 - Removed because no activities associated with mining or material storage are occurring onsite.
- MS 8595, MS 2507 and MS 3543 - Removed because no mining activities have commenced onsite and therefore no BMPs have been implemented that require inspection.
- MS 8541 - Removed because land reclamation will be part of a larger regional project to be administered by the U.S. Forest Service.
- MS 7021 - Removed because the U.S. Army Corps of Engineers (USCOE) has determined that runoff from the area does not discharge into Waters of the U.S.

3.10.5.2 Site Plans and Training

ADOT has implemented a program to develop Erosion and Pollution Control Plans (EPCPs) for sites on the inspection list and provide appropriate training to ADOT personnel regarding inspection requirements. Approximately 15 EPCPs were developed within the reporting year and 33 ADOT personnel received training. The training was conducted in the field and included District Environmental Coordinators, natural resources, maintenance, and construction staff that operate these sources.

4 NUMERIC SUMMARY OF SSWMP ACTIVITIES

Permit Appendix B, Part 4: Provide a numeric summary of BMPs and activities performed each year.

A numeric summary of BMPs and activities performed by ADOT during the reporting year is provided in Appendix F. The progress of BMPs without a numerical goal is described in Section 3, Narrative Summary of SSWMP Activities.

5 EVALUATION OF THE SSWMP

Permit Section 3.1.5: Provide an evaluation of the progress and success of the SSWMP each year, including an assessment of the effectiveness of stormwater management practices in reducing the discharge of pollutants to and from the municipal storm sewer system.

An evaluation of ADOT's SSWMP has been conducted utilizing EPA's January 2008 guidance entitled *Evaluating the Effectiveness of Municipal Stormwater Programs*. This guidance provides a set of methods to assess the success of a stormwater management program. The three EPA recommended approaches to evaluate program effectiveness were used:

- Assessing of program operations
- Evaluating social indicators
- Monitoring water quality

5.1 Assessment of Program Operations

The purpose of assessing ADOT's program operation and activities is to verify basic compliance with its Permit and document that tangible efforts have been made to reduce impacts to stormwater. The following progress has been made to its program within the past reporting year:

Update of the SSWMP

As reported in the previous Annual Report, ADOT completed an update to its SSWMP in March, 2010. The update consisted of re-structuring the previous SSWMP and documenting current ADOT practices to comply with Permit requirements.

Guidance Manuals/Technical Documents

ADOT updated the guidance manuals and technical documents during the reporting year:

- Erosion and Pollution Control Plan Template for ADOT-Licensed Material Sources
- Erosion and Pollution Control Manual (on-going), associated training module
- SWPPP Index Sheets and Stormwater Quality Protection BMPs to include:
    - Arizona Pollutant Discharge Elimination System (AZPDES) Stormwater Pollution Prevention Plan (SWPPP) Index Sheet
    - National Pollutant Discharge Elimination System (NPDES) SWPPP Index Sheet
    - Sediment Log
    - Rock Riprap/Rock Mulch
    - Sediment Wattle
    - Sediment Control Berm
    - Silt Fence
    - Mini Benching
    - Gravelbag
    - Rock Check Dams
    - Stabilized Construction Entrance / Exit Gravel Pad (New BMP Details)
    - Rock Protection for Cut/Fill Transition
    - Guardrail End Treatment Slope Protection (New BMP Details)
    - Erosion Control Blanket (New BMP Details)
    - Storm Drain Inlet Protection Combined BMPs (New BMP Details)
    - Median Storm Drain Inlet Protection (New BMP Details)
    - Class II Seeding specification updated from July 1, 2010 through June 30, 2011

BMP Tracking

ADOT tracked the following BMPs:

- 13 trainings were offered to ADOT employees specifically on stormwater issues (increase from 7 in 2009)
- 53 contractors were trained and certified in erosion control
- 119 miles of drainage canals, and approximately 5,500 roadway miles and associated storm drains, catch basin, outfall structures, and basins were inspected within the Phoenix metropolitan area

- 7 illicit discharges were identified and removed
- 11 FPPPs for ADOT facilities were in process

New or Revised Permits or Policies
ADOT has developed new and/or revised the following permits or policies associated with stormwater management:

- Erosion and Pollution Control Plan Template for ADOT-Licensed Material Sources
- Development and implementation of *404/401/402 Awareness* class (in conjunction with USACOE)
- Development and implementation of *ADOT Seeding Practices for Sustainable Revegetation and Erosion Control* class
- Development of policies (in progress):
  - Environmental Ethic
  - Environmental Communication
  - Environmental Risk and Liability
  - Stormwater Management
  - Facility Pollution Prevention Plans (FPPPs)

5.2 Assessment of Social Indicators

The assessment of social indicators is an important element that tracks knowledge and awareness. It is also an important tool in documenting behavioral changes. The following social indicators were tracked:

- 1,569 volunteer groups participated in the Adopt-a-Highway (AAH) Litter Initiative and is a decrease from 1,609 in 2010 (2.5% drop in participation from 2010 reporting year)
- 3,935 miles of highway were cleaned by AAH volunteers (94% increase from 2010 reporting year; increase due to more groups signing up for 2 mile segments)
- 224 tons of trash were removed from ADOT highways by AAH volunteers (6% increase from 2010 reporting year)
- 2,776 calls were received through the Litter Hotline (3% decrease from 2010 reporting year)
- 119 public events were attended by ADOT where educational materials were displayed (45% increase from 2010 reporting year)
- 8,000 (approximately) stormwater educational materials were distributed (23% increase from 2010 reporting year)

ADOT is also actively involved in four separate stormwater groups as summarized below:

- STormwater Outreach for Regional Municipalities (STORM) – STORM is a regional organization promoting stormwater quality education within the greater Phoenix metropolitan area. STORM was founded in 2002, in response to federal regulations requiring certain municipalities to implement measures to educate the public on protecting the quality of stormwater runoff. STORM educates the public on methods to keep pollutants out of the storm drain system by advertising via radio, television, theater ads, website (www.azstorm.org), and public events.

- Northern Arizona Stormwater Pollution Alliance (NASPA) – NASPA is a northern Arizona regional stormwater group consisting of nine regulated MS4s. NASPA was established in 2008 to open dialogue amongst the MS4s and address stormwater issues unique to the region.
- Pima Association of Governments - Stormwater Management Working Group (SWMWG) - SWMWG is a southern Arizona regional group that conducts stormwater outreach activities on behalf of PAG members, which are represented on the Stormwater Management Working Group. Members of the Working Group also include representatives from the building and construction industry, state government, the University of Arizona and Davis Monthan Air Force Base.
- American Association of State Highway and Transportation Officials (AASHTO) – AASHTO is a national organization that advocates transportation-related policies and provides technical services to support states in their efforts to efficiently and safely move people and goods. ADOT is a member of AASHTO's Standing Committee on the Environment (SCOE). The SCOE monitors federal environmental laws, regulations, procedures and guidance related to air quality, cultural resources, environmental process, and natural systems and ecological communities. As a member of SCOE, ADOT has participated in the National Stormwater Peer Exchange and Practitioners Meeting. The meeting brought together state transportation departments, regulators (including EPA), and research and technology experts from across the country in a collaborative environment. The purpose of the meeting was to increase stormwater understanding nationwide by learning from each other through collaboration, gaining insight from regulators and officials, increasing knowledge as to current research and new technologies and sharing information at all levels. ADOT viewed this meeting as a unique opportunity to understand and collaborate with others on a national level to address water quality issues. ADOT plans to attend future meeting of this SCOE subgroup.

5.3 Monitoring Water Quality

ADOT began installation of dedicated sampling equipment for its MS4 locations and conducted stormwater quality monitoring during the reporting year to include:

- 5 MS4 sampling sites identified for installation of sampling equipment
- 3 maintenance yards monitored near impaired waterways (Nogales and 2 in Superior)
- 2 construction sites monitored at outstanding/impaired waterway (Tucson and Payson)
- 1 industrial facility monitored (Phoenix – Durango Sign Factory)

ADOT has completed the installation of 3 MS4 sampling sites and is completing the remaining two. These 5 sites will provide ADOT with a statewide view of the stormwater quality from its roadways and assist with a more broad approach to BMP implementation.

The sampling from maintenance yards and its industrial facility have not identified an exceedance of any surface water quality standard (SWQS). No discharges were reported from construction sites located with ¼ mile of a unique or impaired waterway.

6 SSWMP MODIFICATIONS

Permit Section 3.1.6: Provide a description of modifications to the SSWMP each year:

There have been no SSWMP modifications within the last reporting year. However, ADOT will be reviewing its SSWMP in the next reporting cycle to determine necessary program changes as a result of the EPA audit conducted in October 2010.

6.1 Addition of New BMPs

Permit Section 3.1.6: Summarize the development and implementation of any new stormwater management practices or pollution controls each year.

ADOT has not developed or implemented any new BMPs during the reporting period.

6.2 Temporary or Experimental BMPs

Permit Section 3.1.6: Describe the initiation and cessation of such BMPs and the perceived success of the temporary or experimental stormwater control.

ADOT has not instituted any temporary or experimental BMPs during the reporting period.

6.3 Increase of Existing BMPs

Permit Section 3.1.6: Summarize modifications to existing stormwater management practices that increase the number of activities, increase the frequency of activities, or other increases in the level of implementation.

ADOT reports that no current BMPs have been modified that would cause increases in the number of activities, increase the frequency of activities, or otherwise cause an increases in the level of implementation during the reporting period.

6.4 Replacement of Existing BMPs

Permit Section 3.1.6: Describe modifications to replace an ineffective stormwater management practice with an alternate practice by demonstrating that the change will continue to achieve an equivalent reduction in pollutants and will not cause or contribute to a violation of any applicable water quality standard.

ADOT has not modified or replaced any of its current BMPs during the reporting period.

7 MONITORING LOCATION INFORMATION

Permit Appendix B, Part 4: Provide a brief description of each stormwater monitoring location (outfall), including the following information: 1. The outfall identification number or name; 2. Address or physical location of the site, including the latitude and longitude of the outfall; 3. Size of outfall's drainage area; 4. Land use(s) with an estimated percentage of each use; 5. Name and description of the receiving water; and 6. Type of monitoring equipment used.

ADOT received final approval from ADEQ in December 2010 for the five proposed monitoring locations. These five locations are identified in the table below:

Table 6: ADOT Stormwater Monitoring Locations

Outfall Name	Physical Location	Approximate Drainage Area	Land Use	Receiving Water / Designated Use	Monitoring Equipment
B40-196.14	Flagstaff: South side of intersection at Business 40 and SR180 Latitude: 35°11'53.39"N Longitude: 111°39'05.48"W	29.30 Acres	Rural Highway (80%) & Commercial Streets (20%)	Rio de Flag / A&Wedw PBC	ISCO Avalanche Full-Size Portable Sampler
101-13.68	Peoria: Loop 101	17.5 Acres	Urban	Skunk Creek /	ISCO 6712

Outfall Name	Physical Location	Approximate Drainage Area	Land Use	Receiving Water / Designated Use	Monitoring Equipment
	Latitude: 33°37'19.84"N Longitude: 112°14'21.61"W		Highway (90%) & Commercial Streets (10%)	None	Full-Size Portable Sampler
82.0.57	Nogales: Intersection of I19 and SR82 in NE quadrant Latitude: 31°21'02.10"N Longitude: 110°55'24.48"W	59.5 Acres	Urban Highway (80%) & Residential Streets (20%)	Nogales Wash (Impaired waterway) / A&Ww PBC	ISCO 6712 Full-Size Portable Sampler
179-313.3	Sedona: At SR179 bridge over Oak Creek Latitude: 34°51'43.93"N Longitude: 111°45'42.68"W	7.35 Acres	State Rout/Business Route (90%) & Commercial (10%)	Oak Creek (Outstanding waterway) / A&Wc FBC, FC, AgL	ISCO Avalanche Full-Size Portable Sampler
10-255.8	Tucson: I-10 & Grant Rd, within Grant Rd. Maintenance Yard Latitude: 32°15'17.19"N Longitude: 110°59'49.39"W	4.8 Acres	Urban Highway (90%) & ADOT Facility (10%)	Santa Cruz / A&Wedw PBC	ISCO 6712 Full-Size Portable Sampler

A&Wedw – Aquatic and Wildlife (effluent-dependent water)
A&Ww – Aquatic and Wildlife warmwater
A&Wc – Aquatic and Wildlife coldwater
AgL – Agricultural Livestock Watering
FBC – Full Body Contact
FC – Fish consumption
PBC – Partial Body Contact

Site maps for each MS4 monitoring location are provided in Appendix G and information concerning the ISCO stormwater monitoring equipment is included in Appendix H.

8 STORM EVENT RECORDS

Permit Requirement: For each MS4 outfall monitoring location, provide a summary of all subsequent representative storm events necessary to collect at least one representative stormwater sample (greater than 0.1 inch rainfall) occurring within the reporting period, including the date of each event, the amount of precipitation (inches) for each event, and whether a sample was collected, or if not collected, information on the conditions that prevented sampling.

ADEQ required review of the proposed monitoring locations prior to installation of equipment. ADEQ provided concurrence with the monitoring locations in December 2010; and ADOT purchased the appropriate sampling equipment in June 2011. By the end of Permit Year 3, ADOT had completed installation of 3 of the 5 monitoring locations. It is anticipated that the other two sites will be operational by the end of 2011.

9 SUMMARY OF MONITORING DATA

Permit Requirement (Appendix B, Part 9): Provide the outfall identification number, the receiving water, designated uses, and the lowest surface water quality standards applicable to the receiving water. Enter the analytical results for the stormwater samples collected for each season of the reporting period for each year. Include, as an attachment, the laboratory reports for stormwater samples.

ADEQ required review of the proposed monitoring locations prior to installation of equipment. ADEQ provided concurrence with the monitoring locations in December 2010; and ADOT purchased the appropriate sampling equipment in June 2011. By the end of Permit Year 3, ADOT had completed installation of 3 of the 5 monitoring locations. It is anticipated that the other two sites will be operational by the end of 2011. ADOT expects all five sampling stations to be fully operational by the end of 2011 and collecting the required samples in Permit Year 4.

A summary of stormwater monitoring data previously collected is provided in tabular form in Appendix I.

10 ASSESSMENT OF MONITORING RESULTS

10.1 MS4 Results

As previously stated in Sections 8 and 9, ADOT was unable to conduct stormwater monitoring. ADOT expects all five sampling stations to be fully operational by the end of 2011 and collecting the required samples in Permit Year 4.

10.2 Total Maximum Daily Loads

Permit Requirement (Appendix B, Part 11.D): Assess the effectiveness of BMPs meeting wasteload allocation associated with TMDL.

Total Maximum Daily Loads (TMDL) have not been established for receiving waters at the five approved MS4 stormwater sampling locations.

10.3 Industrial Results

Permit Requirement (Sections 8.3.3, 8.3.4.1, & 8.5.2.2): Provide a summary of monitoring performed at industrial and construction sites as required in the permit. Describe any adverse conditions that prevented sampling stormwater discharges. Where facility outfalls are essentially identical, justify the sampling of only one outfall.

An adequate volume of discharge was not received at the Durango Sign Factory during the reporting year to allow for stormwater analyses. A Discharge Monitoring Report (DMR) for the industrial monitoring is provided in Appendix J.

10.4 Construction Results

ADOT and its contractors conducted in-stream monitoring at two construction projects during the reporting year. DMRs for these in-stream monitoring activities are provided in Appendix K.

10.4.1 Marsh Station I-10 Construction Project

ADOT conducted in-stream monitoring from February to April, 2011 within Cienega Creek located approximately 18 miles south of Tucson along Interstate 10. This monitoring was associated with the realignment of the Union Pacific Railroad and the Marsh Station Road. No discharge occurred during the monitoring period.

10.4.2 Doubtful Canyon SR260 Construction Project

ADOT conducted in-stream monitoring from February 15–May 31, 2011 within Doubtful Canyon located approximately 19 miles east of Payson along State Route (SR) 260. This monitoring was associated with a road widening of SR 260. No discharge occurred during the monitoring period.

10.5 Maintenance Facilities

ADOT conducted monitoring at three maintenance yards during the reporting year. DMRs for the maintenance facilities are provided in Appendix L. The laboratory reports for maintenance facilities are included in Appendix M.

10.5.1 Nogales Maintenance Yard

A stormwater sample was collected at the Nogales Maintenance Yard on July 20, 2010 (summer season). Sampling was conducted by installing a Nalgene® Stormwater Sampler prior to the storm event. The Nalgene® is a passive-sample bottle with a floating ball valve that seals off the sample collection port once the bottle is full. The stormwater analysis indicates no applicable SWQS was exceeded. An adequate volume of discharge was not received during the winter season to allow for stormwater collection and analyses.

10.5.2 Superior Maintenance Yard

A stormwater sample was collected at the Superior Maintenance Yard on July 22, 2010 (summer season). Samples were collected manually from a retention basin located along the southwest portion of the yard. The retention basin discharges into Queen Creek Wash via an 18-inch corrugated metal pipe. Queen Creek is identified by the ADEQ as impaired for copper. The stormwater analysis indicates no applicable SWQS was exceeded for this sampling event. An adequate volume of discharge was not received during the winter season to allow for stormwater collection and analysis.

10.5.3 Superior Fuel Yard

A stormwater sample was collected at the Superior Maintenance Yard on July 22, 2010 (summer season). Samples were collected manually from a bermed area along the southwest portion of the yard. This facility has the potential to discharge to Queen Creek, which is identified by the ADEQ as impaired for copper. The stormwater analysis indicates no applicable SWQS was exceeded at this facility. An adequate volume of discharge was not received during the winter season to allow for stormwater collection and analysis.

11 ESTIMATE OF POLLUTANT LOADING

Permit Requirement (Section 8.7.7): Provide an estimate of the pollutant loadings each year from the storm sewer system to waters of the U.S. for each constituent detected by stormwater monitoring within the permit term.

ADOT was unable to estimate pollutant loading for the reporting year since stormwater monitoring could not be conducted. This is due to receiving final approval from ADEQ of the five sampling locations in late 2010, the time needed to order and receive the proper sampling equipment, completion of right-of-way permitting and the installation equipment. ADOT expects all five sampling stations to be fully operational by the end of 2011 and collecting the required stormwater samples in Permit Year 4.

12 ANNUAL EXPENDITURES

Permit Requirement (Appendix B, Part 13): Provide a summary of the expenditures incurred each reporting period (July 1-June 30) to implement and maintain the stormwater management program, including associated monitoring and reporting activities. Provide the estimated budget for implementing and maintaining the stormwater program in the subsequent reporting period. Include a brief description of the funding sources used to support program expenditures.

ADOT does not maintain a specific fund dedicated solely for its stormwater program. However, there are several potential sources available for funding of this program, including the Arizona

Department of Transportation Five-Year Construction Program, the Highway Maintenance Program, and the Administrative Budget.

12.1 Five-Year Construction Program

ADOT's Five-Year Construction Program is a source of funding utilized when a stormwater issue or concern is related to a construction project that is programmed. The Program is reviewed on an annual basis, and at that time, new projects are added and modifications to existing projects are made. There are several sources identified to fund this program. These include federal, state, local, and private sources. The approval process required for incorporation of stormwater issues into the program is the identification of the project and funding requirements and submittal to the Priority Planning Committee, and then in turn, to the Transportation Board for final approval. The program is adopted on July 1st of each year.

12.2 Highway Maintenance Program

Stormwater issues related to maintenance will be covered under the Highway Maintenance Program, which is funded by the State. Issues and costs are identified and submitted for approval to the legislature in August of each year. Funds for new issues are received on July 1st of the following year. Currently, there is approximately $107,000,000 allocated to this program.

12.3 Administrative Budget

The Administrative Budget is an additional source of funding for ADOT stormwater programs and is state-funded and appropriated by the Arizona Legislature. The process is similar to the Highway Maintenance Program. As part of the Administrative Budget, ADOT receives approximately $62,000,000 in state funds for administrative purposes.

12.4 Office of Environmental Services Budget

The OES was formed in 2006 and its budget has not been established. Currently, the OES operates under several budget accounts. Table 18 provides actual and estimated expenditures implemented under ADOT's Statewide Permit Number AZS000018-2008 requirements.

Table 7 - Estimated Stormwater Program Comprehensive Annual Budget

PROGRAM/ACTIVITY	FY 2010/2011 Actual	FY 2011/2012 Estimated
Street Sweeping – Phoenix and Tucson Area	$1,688,702	$105,058
Litter Pick-up and Removal – Phoenix and Tucson Area	$3,921,864	$508,318
Implement FIS	$375,000	$550,000
Preparation and Implementation of Statewide Permit	$11,341,329	$8,434,801
Implement/ Update of SWPPPs for ADOT yards	$616,790	$341,200
Dry Weather Sampling – 20% of Outfalls (includes training)	$5,778	$15,000
Stormwater Monitoring - Maintenance Yards and MS4	$33,639	$48,127
Stormwater Monitoring – Construction Related	$259,527	$48,127
Adopt-a-Highway Administration	0	20,000
Preparation of Annual Report	$29,500	$29,000
ANNUAL TOTALS	**$18,272,129**	**$10,099,631**

13 ADOT MS4 AUDIT

13.1 Overview of Audit

The EPA conducted an audit of ADOT's MS4 program between October 25 and 29, 2010. The purpose of the audit was to assess compliance with the Permit and to evaluate ADOT's current implementation of its SSWMP. The EPA evaluated four ADOT Districts: Phoenix, Flagstaff, Tucson and Prescott. The audit included document review, interviews, and field verification inspections at 57 ADOT construction sites and maintenance facilities. ADOT staff, including Headquarters and District program managers and construction and maintenance personnel, participated extensively throughout the entire audit process. An ADOT headquarters session was held to obtain information regarding overall program management, program evaluation and oversight, and the MS4-related monitoring program. In addition, the EPA Audit Team held a closing conference at ADOT Headquarters on October 29, 2010, with representatives from headquarters and several Districts. A summary of the audit findings is in Appendix N and the full audit report can be found on the EPA Region 9 website:
http://www.epa.gov/region9/water/npdes/ms4audits.html#azeval

13.2 Positive Attributes of MS4 Program

The EPA Audit Team observed several positive elements of the ADOT MS4 program, including:

- ADOT Environmental Management personnel demonstrated a thorough knowledge of Permit requirements and ADOT's SSWMP.
- ADOT had implemented sound monitoring and sampling practices at construction projects within ¼-mile of unique and sensitive waters.
- The District Environmental Coordinators were knowledgeable of local stormwater features and maintenance issues and effectively communicated stormwater maintenance needs to ADOT staff.
- EPCP program implementation

13.3 Deficiencies of MS4 Program

The EPA Audit Team also identified program deficiencies and potential Permit violations; however, the items noted are not a formal finding of violation. The following summarizes the most significant deficiencies:

- ADOT had not fully implemented its Employee Stormwater Training Program.
- ADOT had not conducted dry-weather outfall screening of its 71 major MS4 outfalls.
- ADOT had not implemented an adequate illicit connection and illicit discharge detection and elimination program.
- ADOT had not conducted inspections of post-construction BMPs and had not implemented a system to inspect and track conditions of its MS4 system.
- Inspections of ADOT facilities and construction sites revealed common housekeeping deficiencies, including improperly installed BMPs, inadequate containment of pollutant sources and uncertified or outdated SWPPPs.

13.4 Proposed ADOT Actions

ADOT has taken a proactive response to identified deficiencies and is using the audit results to improve its overall MS4 program. An official response to EPA concerning the deficiencies is

forthcoming from ADOT (by November 1, 2011) and will outline actions to the correct issues identified. In general, the proposed actions will include:

- Fully implement the stormwater training program
- Initiate dry-weather screening of major outfalls
- Implement an adequate illicit connect and illicit discharge detection and elimination program
- Conduct internal audits of its stormwater program as needed
- Provide dedicated support staff to ADOT stormwater manager
- Update of existing facility SWPPPs and/or modifying the plans into all inclusive FPPPs
- Perform, as needed, inspection of post-construction BMP controls
- Develop a system to inspect and track conditions of its MS4

ADOT is dedicated to improving its stormwater program and has already made significant changes as a result of the EPA audit.

APPENDIX A
Narrative Summary of SSWMP Activities

Requirement: Provide a brief description of the implementation and progress of every best management practice (BMP). Also, provide an explanation of any significant developments or changes to the number or type of activities, the frequency or schedule of activities, or the priorities or procedures for implementation of specific management practices			
New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
BEST MANAGEMENT PRACTICES	3.2.1.1, 3.2.1.2, and 3.2.1.3	4.0	Section 4.0 of the 2010 SSWMP details the Best Management Practices (BMPs) to improve operations and reduce pollution at or within ADOT facilities, Statewide and District Maintenance, MS4s, industrial facilities, and material sources. This includes: Measures to control discharges through education Illicit discharge/illegal dumping detection and elimination measures Measures to control discharges from new construction and land disturbances Measures to control discharges from new development and re-development Measures to control discharges from roadways
A. MEASURES TO CONTROL DISCHARGES THROUGH EDUCATION	3.2.2	4.1	ADOT's stormwater education program includes training, public education and outreach, public participation and involvement, and intra- and intergovernmental coordination.
1. ADOT Employee Training	3.2.2.1(a)	4.1.1	ADOT has developed training curricula, as well as a system for administering, tracking, and providing training to all appropriate personnel. New employees receive training within the first year of hire or within the first year of the change in their responsibilities. Refresher training is required at least once every three years.

Requirement: Provide a brief description of the implementation and progress of every best management practice (BMP). Also, provide an explanation of any significant developments or changes to the number or type of activities, the frequency or schedule of activities, or the priorities or procedures for implementation of specific management practices			
New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
a. Stormwater Awareness Training	3.2.2.1(a) (i)	4.1.1.2	General Stormwater Training is required to educate personnel at all levels of responsibility who are involved in activities that may impact stormwater quality and those staff who may come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system. Five awareness classes have been conducted within the past reporting year and 60 personnel trained.
b. Specific Stormwater Training	3.2.2.1(a) (ii)	4.1.1.3	Specific stormwater training is required to educate personnel who are directly involved in activities that may impact stormwater quality or that may generate or manage non-stormwater discharges. Eight specific stormwater training sessions to be offered are: illicit discharges and illegal dumping, non-stormwater discharges, new construction and land disturbances, new development and significant redevelopment, storm sewer system and highway maintenance, and good housekeeping. ADOT has conducted 12 stormwater specific training classes within the past reporting year and 52 personnel trained.

Requirement: Provide a brief description of the implementation and progress of every best management practice (BMP). Also, provide an explanation of any significant developments or changes to the number or type of activities, the frequency or schedule of activities, or the priorities or procedures for implementation of specific management practices			
New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
c. Stormwater Library	3.2.2.1(a) (iii)	3.3	This library is a virtual library available at: http://www.azdot.gov/inside_adot/OES/Water_Quality/Stormwater/Manuals.asp. The library contains the following documents: Quality Assurance Manual, Erosion and Pollution Control Manual, Maintenance and Facilities BMP Manual, Stormwater Monitoring Guidance Manual for MS4 Activities, Post-Construction Stormwater Control BMP Manual, Stormwater Enforcement Response Plan, Stormwater Monitoring Guidance Manual for Construction Activities, and Stormwater Guidance Manual for Industrial Activities. The SSWMP is available at http://www.azdot.gov/inside_adot/OES/Water_Quality/Stormwater/. Documents within the library have been updated as-needed throughout the past reporting year. Until recently, ADOT was not able to track specific hits to the stormwater library website. However, tracking will begin during the next permit term.
2. ADOT Construction Contractor Training and Certification	3.2.2.1(b)	4.1.2	ADOT requires all contractors' inspectors to participate in the Construction Contractor Training and Certification Course offered by the Arizona Association of General Contractors to become an Erosion Control Coordinator (ECC) on ADOT projects. The 16 hour ECC training course covers the erosion and sediment control BMP requirements in the AZPDES CGP and inspection and maintenance of these BMPs. Training includes the erosion and sediment control BMP requirements and inspection and maintenance of BMPs.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
3. Erosion and Pollution Control Manual	3.2.2.1(c)	4.1.3	The Erosion and Pollution Control Manual addresses the selection, design, installation and maintenance of effective erosion, sediment, and waste control BMPs that ADOT uses for stormwater and non-stormwater discharges. ADOT conducts annual updates to the Manual. A final update to this manual is estimated for completion in February 2011.
4. Public Education and Outreach	3.2.2.2	4.1.4	Public education and outreach are ongoing efforts by ADOT to inform members of the general public about actions individuals can take to reduce transportation-related pollutants and improve water quality.
a. Program Description	3.2.2.2(a)	4.1.4.1	The target audience is the construction industry and the public (highway users). Target pollutants include sedimentation from construction sites, litter, unsecured loads, and tire treads. There have been no changes to the program this reporting period.
b. Distribution of Materials through Public Places	3.2.2.2(b) (i)	4.1.4.2	ADOT distributes material through participation with Regional Stormwater Coalitions, Arizona Clean and Beautiful, and Don't Trash AZ. ADOT distributes educational material through pamphlets, posters, highway variable message boards, bus stop posters, TV advertisements, radio announcements, and booths at local events. ADOT has worked close with STORM and PAG to distribute educational materials.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
c. Distribution of Materials through ADOT's Stormwater Web Page	3.2.2.2(b) (ii)	4.1.4.3	ADOT maintains a webpage for its stormwater program. The webpage includes a variety of stormwater related documents such as program manuals, maps, document templates, and MS4 contacts. Also included on the webpage are a number of links to other organizations who play a role in stormwater management (ADEQ, EPA, FHWA, etc). The following is ADOT's stormwater webpage: http://www.azdot.gov/Inside_ADOT/OES/Water_Quality/Stormwater/Index.asp
5. Public Involvement and Participation	3.2.2.3	4.1.5	Public outreach and participation are ongoing efforts by ADOT to educate members of the general public about becoming involved in the stormwater program and improving water quality.
a. Public Availability of Stormwater Documents	3.2.2.3(a)	4.1.5.1	Distribution of materials is accomplished via the Stormwater webpage, STORM, and PAG.
b. Public Comments	3.2.2.3(b)	4.1.5.2	ADOT gathers public comments on the SSWMP via phone or the "Contact Us" link from the ADOT stormwater webpage. http://www.azdot.gov/Inside_ADOT/OES/Water_Quality/Stormwater/Index.asp
c. Public Reporting System	3.2.2.3(c)	4.1.5.3	ADOT implemented a public reporting system for illicit discharges and illegal dumping. This system consists of the ADOT hotline and an e-mail address on the Water Quality webpage. There has been no change to this system within the past reporting year.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
d. Adopt-A-Highway	3.2.2.3(d)	4.1.5.4	The Adopt-A-Highway program allows individuals to adopt a highway as a volunteer or through a maintenance provider as a sponsor. The program was updated to include a stormwater component.
e. Litter Hotline	3.2.2.3(e)	4.1.5.5	The litter hotline includes a toll free number and an online reporting form for Arizona citizens to report litterers. This is an ADOT program that is administered by Arizona Clean and Beautiful (ACB) through a procurement contract.
6. Intra and Inter-Governmental Coordination	3.2.2.4	4.1.6	Intra- and Intergovernmental coordination is a program that includes coordination mechanisms and program enforcement procedures among divisions, groups, sections and districts within ADOT to ensure compliance with the terms of the Permit.
a. Internal Coordination	3.2.2.3(a)	4.1.6.1	Various departments throughout ADOT work together to achieve the goals of the Permit. The OES oversees the stormwater components from each department.
b. Intergovernmental Coordination	3.2.2.3(b)	4.1.6.2	ADOT coordinates with outside agencies such as the Federal Highway Administration, Bureau of Land Management, and the Department of Agricultural Forest Service. ADOT also works with Metropolitan Planning Organizations, Councils of Governments, and Regional Stormwater Coalitions throughout the state. ADOT has maintained a working relationship with other government entities via STORM, PAG, NASPA, and AASHTO.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
B. ILLICIT DISCHARGE/ ILLEGAL DUMPING DETECTION AND ELIMINATION MEASURES	3.2.3 3.2.3.1(a)	--	The IDDE program serves to minimize, detect, investigate, and eliminate illicit discharges, including unauthorized non-stormwater discharges and spills, into ADOT MS4.
1. Minimizing Illicit Discharges and illegal Dumping	3.2.3.1	--	ADOT's field personnel and DEC's routinely perform visual inspections for illicit discharges and perform monitoring for illegal dumping.
a. Encroachment Permit Enforcement	3.2.3.1(b)	4.2.1.1	ADOT implements and enforces encroachment permits and external party requirements for activities within ADOT's jurisdiction. There have been no changes to the encroachment permit process within the past reporting year.
b. Maintenance and Facilities Best Management Practices (BMPs) Manual	3.2.3.1(c)	4.2.1.2	The Manual describes the selection criteria, design, installation and maintenance of effective BMPs to minimize pollutants in ADOT's non-stormwater discharges. This manual was updated in September 2010.
c. Authorized Non-Stormwater Discharges	3.2.3.1(d)	4.2.1.3	ADOT implements BMPs to minimize the authorized discharge of non-stormwater discharges and pollutants that may result from these flows. BMPs for reducing erosion, sedimentation, and stormwater contamination are contained within the Erosion and Pollution Control Manual and the Maintenance and Facilities BMP Manual.
d. Training	3.2.3.1(e)	See 4.1.1.2 and 4.1.1.3	Training is discussed in 4.1.1.2 and 4.1.1.3 above.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
2. Detecting Potential Illicit Discharges and Illicit Connections	3.2.3.2	--	Implement BMPs to detect illicit discharges and illicit connections.
a. Outfall Inventory	3.2.3.2 (a)	4.2.2.1	ADOT has been in the process of developing an outfall inventory including the 71 major outfalls. ADOT has also developed a proposal and schedule to identify all outfalls in the Phase II municipalities and all Priority Outfalls statewide. The inventory should be complete in 2013. Additionally, ADOT has implemented a Facilities Inventory System (FIS) to identify and track highway features using a GIS database. A pilot program has been initiated within the Kingman District using FIS to track and monitor drainage features.
b. Storm Sewer System Map	3.2.3.2 (b)	4.2.2.2	ADOT is in the process of developing a storm sewer map identifying the location of all ADOT's major outfalls identified to date and their receiving waters. The inventory should be complete in 2013. The FIS is being updated to include storm sewer mapping.
c. Stormwater Monitoring Guidance Manual for MS4 Activities	3.2.3.2(c)	3.3.7	This guidance manual provides the procedures used by ADOT personnel to conduct Permit-required monitoring associated with MS4 activities. This monitoring includes dry weather screening for illicit connections and illicit discharges and seasonal wet weather monitoring. This manual had no updates in the last reporting year.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
d. Dry Weather Screening	3.2.3.2(d), (e)	4.2.2.4	ADOT implements a dry weather outfall screening and discharge characterization program and inspects major and priority outfalls during the Permit term. Dry weather screening has occurred throughout each District within the past reporting period. However, documentation of the screening has not been properly maintained. ADOT is attempting to maintain better records for this activity.
e. Training	3.2.3.2(f)	See 4.1.1.3	Training is discussed in 4.1.1.3 above and has been on-going during the past reporting period.
3. Investigating Potential Illicit Discharges	3.2.3.3	--	Implement practices and procedures to investigate potential illicit discharges.
a. Establish illicit discharge investigation procedures	3.2.3.3 (a)	4.2.3.1	ADOT's 'Dry Weather Field Screening Sites' portion of the Stormwater Monitoring Guidance Manual for MS4 Activities describes procedures to investigate potential illicit discharges to identify possible sources. This manual had no updates in the last reporting year.
b. Investigate Illicit Discharges (Source Identification)	3.2.3.3 (b) 3.2.3.3 (c) and 3.2.3.4(d)	4.2.3.2 4.2.3.3 and 4.2.3.4	ADOT initiates investigations and responds to complaints within 15 days from the date of detection or report of an illicit discharge. ADOT also implements a system to receive and track reports of illicit discharges and illegal dumping as well as ADOT's response and follow-up actions. Seven illicit discharges were reported and subsequently removed within the past reporting year.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
c. Incidental Dry Weather Discharge Reporting	3.2.3.3(d)	4.2.3.4	ADOT reports dry weather discharges from any ADOT outfall. Within 15 days of detection ADOT initiates appropriate follow-up action to eliminate the discharge, including reporting the discharge to ADEQ as appropriate. There have been no dry weather discharges that required follow-up action within the past reporting year.
4. Eliminating Illicit Discharges and Illegal Dumping	3.2.3.4	--	Eliminate Illicit Discharges and Illegal Dumping.
a. Eliminate Existing Dry Weather Flows	3.2.3.4 (a)	4.2.4.1	This temporary BMP required ADOT to investigate and eliminate (if possible) the sources of existing dry weather flows from the six major outfalls in the July 21, 2005 Summary Report – Dry Weather Screening within the first 90 days of the Permit. ADOT completed this requirement in the first reporting year of the Permit.
b. Eliminate Sources of Illicit Discharges	3.2.3.4 (b)	4.2.4.2	ADOT takes action to eliminate source(s) of illicit discharges within 90 days of detection using ADOT's legal authority (Enforcement Response Plan) to terminate illicit discharges and illegal dumping. Seven illicit discharges were reported and subsequently removed within the past reporting year.
c. Coordinate with Local Jurisdictions for Complaint Response and Investigation	3.2.3.4 (c)	4.2.4.3	ADOT coordinates with other jurisdictions, including ADEQ, for assistance in enforcement where ADOT lacks legal authority to establish enforceable rules or if an illicit discharger fails to comply with procedures or policies established by ADOT. ADOT coordinates with other jurisdictions as described in the Enforcement Response Plan.
d. Record Actions	3.2.3.4(d)	See 4.2.3.4	Record keeping is discussed in 4.2.3.4.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
5. Responding to Spills	3.2.3.5	4.2.5	ADOT responds to spills as a result of highway accidents and emergencies and implements guidance from the Arizona Department of Emergency Management Plan, ESF-10 Oil and Hazardous Materials Annex. ADOT has maintained an emergency response team and responded to 156 incidents throughout the State.
C. MEASURES TO CONTROL DISCHARGES FROM NEW CONSTRUCTION AND LAND DISTURBANCES	3.2.4	--	Description of a program to reduce the discharge of pollutants from construction sites.
1. Applicability of Construction Requirements	5.1	4.3.1	This BMP contains the requirement for all construction sites and activities that are owned, operated, or contracted by ADOT to comply with provisions of the Permit. There have been no changes to construction requirements during the last reporting year.
2. Construction Site SWPPPs	5.2	4.3.2	ADOT requires all construction sites over 1-acre of disturbance to develop a Construction SWPPP. There have been no changes to construction requirements during the last reporting year.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
a. General Requirements	5.2.1	4.3.2	ADOT or its contractor(s) develop and implement construction site SWPPPs for certain construction sites. SWPPPs are maintained on the site, in accordance with the Construction General Permit, as well as the appropriate ADOT Office. There have been no changes to construction requirements during the last reporting year.
b. Site and Activity Description	5.2.2	4.3.2	ADOT outlines the required components of the SWPPP including a site description, map, receiving waters, monitoring program, potential pollutants sources, and off-site material storage areas. There have been no changes to construction requirements during the last reporting year.
c. BMPs to Reduce Pollutants	5.2.3	4.3.2	ADOT outlines the criteria for selection, installation, and maintenance of BMPs for inclusion in Construction SWPPPs. BMPs are contained in the Erosion and Pollution Control Manual, Maintenance and Facilities BMP Manual, Post-Construction Stormwater Control BMP Manual, Stormwater Monitoring Guidance Manual for Construction Activities, and Stormwater Monitoring Guidance Manual for MS4 Activities. There have been no changes to construction requirements during the last reporting year.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
d. Construction Inspections	5.2.5	4.3.2	ADOT requires routine inspections of construction sites to ensure BMPs are functional and effective and that the SWPPP is being properly implemented. Routine inspections are conducted jointly by the Resident Engineer (RE) and the Erosion Control Coordinator (ECC) and are conducted every 7-14 days or after a rain event. Following an inspection, a Construction Compliance Evaluation Report is filed documenting the findings of the inspection and basic inspection details. A more in-depth inspection is conducted by the Construction Site Inspector. Findings are documented and delivered to the RE who then has 14 days to address all deficiencies. Once the deficiencies are addressed, or within 14 days, the Resident Engineer sends a response to the Construction Site Inspector detailing the status of deficiencies. Responses are reviewed and scored for completeness by the Construction Site Inspector and a final report is sent to the District Engineer. Routine inspections have occurred as required throughout the last reporting year.
e. Construction BMP Maintenance	5.2.4	4.3.2	ADOT requires a maintenance plan for all erosion and sediment control BMPs. The ECC and/or RE are responsible for oversight of the requirements of this section, including maintaining all BMPs in effective operating condition, performing maintenance of ineffective BMPs within seven days of discovery and before the next anticipated storm event, and removing sediment from sediment traps when the design capacity has been reduced by 50%. There have been no changes to this construction requirement during the last reporting year.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
f. SWPPP Updates	5.2.6	4.3.2	ADOT requires updates to the construction site SWPPP to be conducted within 15 calendar days following an inspection. There are two copies of the SWPPP that are updated by the ECC throughout the course of the construction project. One copy of the SWPPP is located at the construction site while the second copy is maintained at the applicable District office. Construction Site Inspectors verify both SWPPPs are being updated before beginning each site inspection. Site construction SWPPPs have been updated as-needed.
3. Operators under Contract to ADOT for Performing Construction Activities	5.3	--	There have been no changes to this construction requirement during the last reporting year.
a. Compliance with Construction General Permit	5.3.1	4.3.3.1	ADOT requires its contractors to comply with the AZPDES CGP for regulated construction projects. This requirement includes the requirement to file an NOI for each construction project or site. For work on Tribal Land, NOIs are filed by both the contractor and ADOT to the EPA. For work on non-Tribal Land, an NOI is only filed by the contractor. There have been no changes to these construction requirements during the last reporting year.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
b. NOT - Transfer of Responsibility to ADOT	5.3.2	4.3.3.2	ADOT requires contractors to file a NOT to terminate their responsibility for site activities once a site and interim stabilization is in place. ADOT assumes responsibility for the site until final stabilization is achieved for the entire project. ADOT also removes all temporary sediment control BMPs that may impede stormwater flow as soon as practicable after final stabilization. If work is conducted on Tribal Land, ADOT files an NOT to the EPA as required. There have been no changes to this construction requirement during the last reporting year.
c. Completed Construction Site Inventory	5.3.3	4.3.3.3	Twice per year (by July 10 and January 10) ADOT provides ADEQ with an electronic list of all construction projects, including the name of the project and its associated AZCON number(s) that have achieved final stabilization and that ADOT considers to be complete. This list is compiled based on memos from the RLA who conducts the stabilization inspection. The inventory has been provided to the ADEQ as required during the last reporting year.
d. Enforcement Tracking and Reporting	5.3.4	4.3.3.4	ADOT maintains a list and description of all violations and their resolution, including any enforcement actions taken against its contractors. ADOT achieves enforcement actions through implementation of its stormwater Enforcement Response Plan. The list is generated from the inspection letters from Construction Site Inspectors. The RE is responsible for maintaining a file for all findings and reporting them to the Water Quality Group. ADOT has maintained a list and description of violations during the last reporting year.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
D. MEASURES TO CONTROL DISCHARGES FROM NEW DEVELOPMENT AND REDEVELOPMENT	3.2.5	4.4	Develop and implement a comprehensive planning procedure and BMPs to prevent or minimize water quality impacts from new highway development and re-development.
1. Post-Construction Stormwater Control BMP Manual	3.2.5.1	4.4.1	These guidance manual details the post-construction BMPs ADOT uses to comply with the Permit. The manual identifies factors for consideration during selection of BMPs and provides BMP design guidance. This manual had no updates in the last reporting year.
2. Install Post-construction Stormwater Control BMPs	3.2.5.2	4.4.2	ADOT requires post-construction stormwater control BMPs be installed for all newly developed or redeveloped roadways that discharge stormwater runoff to impaired or unique waters. This manual had no updates in the last reporting year.
3. Inventory, Inspect, and Maintain all Post-construction Stormwater Pollution Control BMPs	3.2.5.3 and 3.2.6.1(a)	4.4.2	The Maintenance Group inventories, inspects, and maintains all post-construction BMPs. ADOT has hired a consultant to inventory all stormwater assets for which ADOT is responsible throughout the State. This survey is not anticipated to be completed until 2013. The Maintenance/Facilities SWAT is in the process of developing a uniform system to implement for conducting regular maintenance in each district.
4. Training	3.2.5.4	See 4.1.1.3	Training is discussed in Permit reference 4.1.1.3 (Page 2 of this table).
E. MEASURES TO CONTROL DISCHARGES FROM ROADWAYS	3.2.6	--	Previously discussed in Permit reference 4.1.1.3 (Page 2 of this table).

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
1. Maintenance and Facilities Best Management Practices Manual	3.2.6 (a) and (b)	See 4.2.1.2	The Maintenance and Facilities BMP Manual is discussed in 4.2.1.2 above.
2. Storm Sewer System and Highway Maintenance	3.2.6.1	--	ADOT shall implement BMPs for operating and maintaining roadways and drainage ways to minimize discharges to and from the storm sewer system in all MS4 Compliance Areas.
a. Inventory Post-Construction Stormwater Pollution Control BMPs	3.2.6.1(a)	4.5.2.1	ADOT is in the process of developing an inventory of post-construction stormwater pollution control BMPs. See 4.4.2 above.
b. Inspect Storm Sewer System	3.2.6.1 (b)	4.5.2.2	ADOT has implemented a system to inspect and record the condition of the storm sewer system. The District Engineer maintains a record of inspections and conditions found and forwards the list to the Water Quality Group annually. ADOT is in the process of populating the FIS, a geographic information system capable of tracking and maintaining an inventory of ADOT's highway features, including drainage features. The FIS allows for attribute data to be stored and tracked for each feature identified and will be a useful tool in assisting with outfall inspections. It is ADOT's intent to eventually use the FIS throughout the State.

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
c. Develop Maintenance Schedules and Priorities	3.2.6.1 (c)	4.5.2.3	Each year ADOT conducts routine maintenance of its storm sewer system. Maintenance schedules and priorities are evaluated annually by District. The MSLT has developed a standard method for developing a routine maintenance schedule that includes prioritization, implementation and recordkeeping. Each year the maintenance schedule is reviewed and revised as necessary. A maintenance schedule will be included with ADOT's implementation of the FIS as previously described.
d. Stormwater System Repair, Maintenance, and Cleaning	3.2.6.1(d), (e), and (f)	4.5.2.4	ADOT conducts repairs, maintains, and cleans its roadways and storm sewer system to minimize the discharge of pollutants from the storm sewer system. During maintenance activities, each storm drain inlet is assessed for evidence of illicit discharges or illegal dumping in accordance with the Maintenance and Facilities BMP Manual. If evidence is discovered, illicit discharges or illegal dumping are reported and followed up according to 4.2.4.2 above. While conducting maintenance and cleaning activities ADOT implements BMPs to reduce the discharge of pollutants from unpaved roads, shoulders, parking lots, unpaved roads, and unpaved parking lots. ADOT properly disposes of all waste removed from its storm sewer system and facilities. ADOT has conducted system repair, maintenance and cleaning of its stormwater conveyance system on an as-needed basis throughout Permit Year 3.
3. Training	3.2.6.1 (g)	See 4.1.1.3	Training is discussed in 4.1.1.3 above.
3. Roadside Maintenance Program	3.2.6.2	--	Training is discussed in Permit reference 4.1.1.3 (Page 2 of this table).

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
a. Pesticide and Fertilizer Application	3.2.6.2(c)	--	BMPs have been maintained to manage vegetation along ADOT roadway throughout Permit Year 3.
i. Optimize Chemical Applications	3.2.6.1 (c)(i)	4.5.3.1	ADOT requires its employees and commercial applicators to implement practices and procedures in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) at ADOT facilities and within right-of-ways. ADOT BMPs address the timing of applications in relation to precipitation events and require applicators to use only pesticides approved for aquatic use in areas within or adjacent to a water of the U.S.. The Stormwater Monitoring Guidance Manual for Construction Activities and the Arizona Office of Pest Management licensing requirements contain the guidelines governing pesticide, herbicide, and fertilizer application. Stormwater Monitoring Guidance Manual for Construction Activities and the Arizona Office of Pest Management licensing requirements contain the guidelines for FIFRA applications; however, the existing text in this box stated: Maintenance and Facilities Best Management Practices Manual and the Vegetation Management Plan regarding insecticide, fungicide, and rodenticide applications are what ADOT follows.
ii. FIFRA Certification	3.2.6.1 (c)(ii)	4.5.3.2	ADOT personnel have maintained their FIFRA certification as required.
iii. Training	3.2.6.2 (c)(iii)	See 4.1.1.3	Training is discussed in Permit reference 4.1.1.3 (Page 2 of this table).

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New Table of Contents	**Permit Reference**	**2010 SSWMP Reference or Other Source**	**Description and Implementation of BMPs**
b. Erosion Abatement Projects	3.2.6.2(d)	4.5.3.4	ADOT has a system to identify, track, and prioritize erosion abatement projects in areas where slopes are 3:1 or greater and actively eroding with sediment leaving ADOT's right of way. The Erosion and Pollution Control Manual contains BMPs guiding site stabilization and erosion control. ADOT has identified the existing Slope Management Program (SMP) database as a potential tool to identify, track and prioritize erosion abatement projects. The SMP is a Microsoft ACCESS database that allows ADOT to track and prioritize the severity of rock slopes, soil cuts and embankments throughout the state. Additional potential mechanisms may be investigated in Permit Year 4.
4. Winter Storm Policies	3.2.6.3	4.5.4	ADOT implements BMPs to minimize stormwater impacts from application of salt, de-icing and anti-icing chemicals, abrasives for snow and ice removal, salt and sand storage, and snow disposal areas. These BMPs are described in the Winter Storm Management of Arizona State Highways Environmental Overview, Winter Storm Management of Arizona State Highways Operations Manual, and Maintenance and Facilities BMP Manual. These manuals have been updated as-needed throughout Permit Year 3.

APPENDIX B
Outfall Inspection and Tracking

Appendix B - Major Outfalls
Inspection Database

Route No-Mile Post	Outfall Location	Outfall Description	Receiving Water	Potential Sources of Flow	Inspection Date	Inspector	Outfall Condition	Maintenance Need	Dry Weather Flow Present	Follow up actions (if any)
Phoenix Area										
101-6.05	Loop 101 Agua Fria Freeway 300' W of 107th Ave.	Trapezoidal Open Channel, Concrete TW=102' D=12'	New River	None	8/28/2008	PM	Good	None	No	None
101-7.76	Loop 101 Agua Fria Freeway ¼ mile S. of Northern Ave. and 1000' W. of 99th Ave.	Trapezoidal Open Channel, Concrete TW=82' D=8'	New River	Irrigation tail water	6/30/2005	JB	Good	Remove some vegatiaon	No	Remove some excess vegetation
101-10.84	Loop 101 Agua Fria Freeway ½ mile N. of Peoria Ave. along E. Bank of New River	Trapezoidal Open Channel, Concrete & Soil Cement TW=65' D=12'	New River	None	8/16/2005	JB	Good	None	No	None
101-11.85	Loop 101 Agua Fria Freeway ½ Mile S. of Thunderbird Rd. and 300' West	Trapezoidal Open Channel, Concrete TW=45' D=8'	New River	None	8/16/2005	JB	Good	None	No	None
101-13.44	Loop 101 Agua Fria Freeway 200' S. of S.B. Bridge over Skunk Creek and 80' East	Dual Circular Pipe, Concrete DIA=42"	Skunk Creek	None	8/28/2008	JB	Good	None	No	None
101-13.68	Loop 101 Agua Fria Freeway 30 ' N of NB Bridge over Skunk Creek and 80' E	Trapezoidal Open Channel, Concrete TW=22' D=4'	Skunk Creek	None	8/16/2005	JB	Good	None	No	None
101-14.38	Loop 101 Agua Fria Freeway 1200' S. of Bell Road Traffic Interchange & 300' West	Open Channel, Concrete TW=28' D=10'	New River	None	8/23/2006	JB	Good	None	No	None
101-15.18	Loop 101 Agua Fria Freeway 4/10 Mile N of Bell Rd. & 500' West	Circular Pipe, Concrete DIA=48"	New River	None	8/23/2006	JB	Good	None	No	None
101-16.31	Loop 101 Agua Fria Freeway 4/10 of a mile S. of Beardsley Rd. and 300' W.	Circular Pipe, Concrete DIA=48"	New River	None	8/30/2007	SL	Good	None	No	None
101-16.62	Loop 101 Agua Fria Freeway 2/10 of a mile S. of Beardsley Rd. and 500' W	Circular Pipe, Concrete DIA=48"	New River	None	8/30/2007	SL	Good	None	No	None
101-16.74	Loop 101 Agua Fria Freeway 150' S of Beardsley Rd. & 2800' W. of 75 Ave	Trapezoidal Open Channel, Concrete TW=56' D=11'	New River	None	8/30/2007	SL	Good	None	No	None
101-20.19	Loop 101 Agua Fria Freeway ½ Mile S. of Beardsley Rd. at 51st Ave	Circular Pipe, Concrete DIA=36"	Skunk Creek	None	8/30/2007	SL	Good	None	No	None
101-21.23 B	Loop 101 Agua Fria Freeway 245' E of 43rd Ave & N. Side of Beardsley	Circular Pipe, Concrete DIA=42"	Skunk Creek	None	8/30/2007	SL	Good	None	No	None

Appendix B - Major Outfalls
Inspection Database

Route No-Mile Post	Outfall Location	Outfall Description	Receiving Water	Potential Sources of Flow	Inspection Date	Inspector	Outfall Condition	Maintenance Need	Dry Weather Flow Present	Follow up actions (if any)
101-21.23 A	Loop 101 Agua Fria Freeway 260' E of 43rd Ave & N side of N Frontage Rd.	Trapezoidal Open Channel, Concrete TW=20' D=2'	Skunk Creek	None	8/30/2007	SL	Good	None	No	None
101-21.83	Loop 101 Agua Fria Freeway 2000' W. of 35th Ave. & S. side of S. Frontage Rd.	Circular Pipe, Concrete DIA=96"	Scatter Wash	None	8/30/2007	SL	Good	None	No	None
101-21.87A	Loop 101 Agua Fria Freeway 1500' W of 35th Ave & N side of N Frontage Rd.	Trapezoidal Open Channel, Concrete TW=32' D=8'	Scatter Wash	None	8/30/2007	SL	Good	None	No	None
101-21.87B	Loop 101 Agua Fria Freeway 1600' W. of 35th Ave & N side of N. Frontage Rd.	Circular Pipe, Concrete DIA=42"	Scatter Wash	None	8/30/2007	SL	Good	None	No	None
101 - 25.92	Loop 101 Pima Freeway S. of 101, 1/4 mile west of 7th St into east bank of Cave Creek	2 Barrel Box Culvert, Concrete 2 - 8' x 6'	Cave Creek	None	8/28/2008	PM	Good	None	No	None
101 - 50.87	Loop 101 Pima Freeway N bank of Salt River in NE quadrant of 101 / 202 interchange	2 Barrel Box Culvert, Concrete 2 - 10' x 10'	Salt River	None	2008	JB	Good	None	No	None
101-51.07	Loop 101 Pima Freeway S bank of Salt River, E of 101 under 202 interchange	3 Barrel Box Culvert, Concrete 3 - 12' x 12'	Salt River	Irrigation	6/29/2005	JB	Good	Remove some vegetation	Yes	Remove excess vegatation
10-130.2	I-10 Papago Freeway W. bank of Agua Fria River under Van Buren St.	Circular Pipe, Concrete DIA=48"	Salt River	None	2006	JB	Good	None	No	None
10-130.3 Papago Channel	I-10 Papago Freeway ½ Mile W. of El Mirage Rd. & 100' N. of I-10	Trapezoidal Open Channel, Concrete TW=80' D=10'	Agua Fria River	Irrigation water	6/30/2005	SL	Good	None	Yes - irrigation water	None
10-145.17 West Tunnel	I-10 Papago Freeway Central Ave. W side @ N. Bank of Salt River	Circular Tunnel, Concrete DIA=21"	Salt River	Irrigation water	6/29/2005	JB	Good	None	Yes - irrigation water	None
10-149.18 East Tunnel	I-10 Papago Freeway 20th St. E. side@ N. Bank of Salt River	Circular Tunnel, Concrete DIA=21"	Salt River	Irrigation water/Interconnects	6/29/2005	JB	Good	None	Yes - irrigation and intefconnects	None
10-150.44	I-10 Maricopa Freeway N. Bank of Salt River @ W side of I-10	Circular Pipe, Concrete D=36"	Salt River	None	2008	JB	Good	None	No	None
10-150.45	I-10 Maricopa Freeway N. Bank of Salt River @ E. side of I-10	Dual Circular Pipe, Concrete D=72"	Salt River	None	2008	JB	Good	None	No	None
10-151.06	I-10 Maricopa Freeway NW Quadrant of I-10 & University Traffic Interchange	Circular Pipe, Concrete D=66"	Tempe Drain	None	8/30/2006	SL	Good	None	No	None

Appendix B - Major Outfalls
Inspection Database

Route No-Mile Post	Outfall Location	Outfall Description	Receiving Water	Potential Sources of Flow	Inspection Date	Inspector	Outfall Condition	Maintenance Need	Dry Weather Flow Present	Follow up actions (if any)
10-162.44	I-10 Maricopa Freeway NW quadrant of I-10 / Maricopa Road Interchange	Dual Box Culverts, Concrete 2 - 10' x 8'	Gila Floodway	None	2008	JB	Good	None	No	None
143-2.90	S.R. 143 Hohokam Expressway 600' N. of Van Buren & 350' E of S.R. 143 at west bank of Old Cross Cut Canal	Circular Pipe, Concrete D=66"	Old Cross Cut Canal	None	8/30/2006	SL	Good	None	No	None
153 - 1.64	S.R. 153 Sky Harbor Expressway S. bank of Salt River west of expressway	Circular Pipe, Concrete D=72"	Salt River	Irrigation water/Interconnects	6/29/2005	JB	Good	Remove some vegetation	Yes	Remove excess vegatation
17 - 198.48	I-17 Black Canyon Freeway 2200' S. of Buckeye Rd. & 1700' E. of 27th Ave.	Circular Pipe, Concrete D=102"	Salt River	None	2008	JB	Good	None	No	None
17-208.2	I-17 Black Canyon Freeway ¼ mile north of Dunlap, west of I-17 into Az Canal	Circular Pipe, Concrete D=36"	Arizona Canal Diversion Channel	None	2008	JB	Good	None	No	None
202-3.57	Loop 202 East Papago Freeway Directly under Loop 202/SR143 interchange at E. bank of Relocated Old Cross Cut Canal	Dual Box Culverts, Concrete 2 - 3' x 4'	Old Cross Cut Canal	None	6/30/2005	JB	Good	None	No	None
202-5.14	Loop 202 East Papago Freeway N of north side levee on Salt River ¼ mile west of 202 and E of 143	Open Channel, Earthen TW=60' D=5'	Salt River	None	8/30/2006	SL	Good	None	No	None
202-5.90	Loop 202 East Papago Freeway 1000' E. of Priest Dr. and 2200' N. of 1st St.	Circular Pipe, Concrete DIA=36"	Salt River	None	8/30/2006	SL	Good	None	No	None
202-7.44	Loop 202 East Papago Freeway 1100' W. of Rural Rd. @ N Bank of Salt River	Circular Pipe, Concrete DIA=48"	Salt River	None	9/6/2007	JB	Good	Note - outfall within Tempe Town Lake	Unk	None
202-7.98	Loop 202 East Papago Freeway 1100' E. of Rural Rd. @ N. Bank of Salt River	Dual Box Culvert, Concrete 2 - 8' x 8'	Salt River	None	9/6/2007	JB	Good	Note - outfall within Tempe Town Lake	Unk	None
202-8.28	Loop 202 East Papago Freeway 2300' E. of Rural Rd. @ N. Bank of Salt River	Circular Pipe, Concrete D=48"	Salt River	None	8/28/2008	PM	Good	None	Yes - Rainfall <96 hrs	None
202-8.65	Loop 202 East Papago Freeway 4000' E. of Rural Rd. @ N. Bank of Salt River	Circular Pipe, Concrete D=36"	Salt River	None	2008	JB	Good	None	No	None

Appendix B - Major Outfalls
Inspection Database

Route No-Mile Post	Outfall Location	Outfall Description	Receiving Water	Potential Sources of Flow	Inspection Date	Inspector	Outfall Condition	Maintenance Need	Dry Weather Flow Present	Follow up actions (if any)
202 - 14.22	Loop 202 East Papago Freeway S bank of Salt River, 1000' W of Mesa Dr, 2200' N of 202	Trapezoidal Open Channel, Concrete TW=43' D=11'	Salt River	None	8/28/2008	PM	Good	None	No	None
51-5.45	S.R. 51 Squaw Peak Parkway 300' N & W of Intersection @ 18th St. and Ocotillo	Circular Pipe, Concrete D=48"	Arizona Canal Diversion Channel	None	2008	JB	Good	None	No	None
51 -7.04	S.R. 51 Squaw Peak Parkway 400' S and E of Intersection @ Northern and Squaw Peak Freeway	Circular Pipe, Concrete D=48"	Dreamy Draw Wash	None	8/28/2008	PM	Good	Tree trimming	No	Remove vegation
51-8.22	S.R. 51 Squaw Peak Parkway 500' E of Northern, 400' S of 51 @ Dreamy Draw	Concrete Box Culvert, Concrete 10' x 6'	Dreamy Draw Wash	None	2008	JB	Good	None	No	None
51 - 10.91	S.R. 51 Squaw Peak Parkway ¼ mile east of 51, 250' S of Sweetwater into Indian Bend Wash	Trap Channel, Concrete TW=86' D=8'	Indian Bend Wash	None	2008	JB	Good	None	No	None
51 - 11.62	S.R. 51 Squaw Peak Parkway 400' N of Thunderbird into Indian Bend Wash	Circular Pipe and Box Culvert, Concrete 84" pipe, 10' x 6' CBC	Indian Bend Wash	None	8/28/2008	PM	Good	None	No	None
87-178.55	S.R. 87 Mesa-Payson Hwy S. of S.R.87 east of McDowell Rd intersection	Open Channel, Concrete	Salt River	None	8/28/2006	JB	Good	None	No	None
60-187.43	S.R. 60 Superstition Freeway ½ mile E of Higley Rd. & S.R. 60 Traffic Interchange north side	Trapezoidal Open Channel, Concrete TW=44' D=8'	East Maricopa Floodway		2008	JB	Good	None	No	None
60-189.65	S.R. 60 Superstition Freeway ¼ mile E of Sossman & S.R. 60 Traffic Interchange	Trapezoidal Open Channel, Concrete TW=48' D=9'	Sossoman Chanel	None	9/3/2008	PM	Good	None	No	None
Tucson Area										
10-260.7	I-10 N. Side of Julian Wash at 10th Ave, S. of I-10	Circular Pipe, Concrete DIA = 72"	Julian Wash	None	8/22/2005	JB	Good	None	No	None
10-261.5	I-10 1400' W. of S. Park Ave., 1300' N. of Ajo Way- E. of SPRR	Circular Pipe, Concrete Dia = 78"	Julian Wash	None	8/22/2005	JB	Good	None	No	None
10-264.6	I-10 1200' S. of I-10 & Palo Verde Rd. Interchange, W. side of Palo Verde & N. Bank Julian Wash	Oval Pipe, CM 56" x 42"	Julian Wash	None	8/23/2005	JB	Good	None	No	None
19-59.0	I-19 Nogales Freeway 1200' S. of I-19 & Valencia Interchange S. of Valencia & E. bank Santa Cruz River	Circular Pipe, CM Dia = 36"	Santa Cruz River	None	6/21/2006	JB	Good	None	No	None
19-61.7	I-19 Nogales Freeway 900' S. of I-19 & Ajo Way Interchange E. side of I-19 & S. Bank of rodeo Wash	Trapezoidal Open Channel TW=10' D=2'	Rodeo Wash	None	6/21/2006	JB	Good	None	No	None

Appendix B - Major Outfalls
Inspection Database

Route No-Mile Post	Outfall Location	Outfall Description	Receiving Water	Potential Sources of Flow	Inspection Date	Inspector	Outfall Condition	Maintenance Need	Dry Weather Flow Present	Follow up actions (if any)
86-171.1	S.R. 86 Ajo Highway 1600' S. of I-19 & Ajo Way Interchange @ W. bank of Santa Cruz River S. of Ajo Way	Circular Pipe, CM Dia = 36"	Santa Cruz River	None	6/21/2006	JB	Good	None	No	None
77-71.74	U.S. 77 Tucson Florence Highway S. Bank of Rillito River E. of Oracle Road	Circular Pipe, CM Dia = 72"	Rillito River	Irrigation	8/29/2008	GH	Good	None	Yes - irrigation water	None
77-71.8	U.S. 77 Tucson Florence Highway N. Bank of Rillito River E. of Oracle Road	Open Channel, Concrete TW=40' D=7'	Rillito River	None	optional	JB	Good	None	No	None
77-78.7	U.S. 77 Tucson Florence Highway S.E. Quadrant of U.S. 77 & Greenock Dr	Circular Pipe, Concrete 2 Dia = 36"	Tributary of Canada Del Oro	None	8/27/2008	GH	Good	None	No	None
77-78.9	U.S. 77 Tucson Florence Highway N.E. Quadrant of U.S. 77 & Greenock Dr	Circular Pipe, Concrete Dia = 42"	Tributary of Canada Del Oro	None	8/27/2008	GH	Good	None	No	None
77-79.9	U.S. 77 Tucson Florence Highway S.E. Quadrant of U.S. 77 & Hanley Road	Open Channel, Concrete TW=25' D=8'	Tributary of Canada Del Oro	None	8/29/2007	SL	Good	None	No	None
77-80.8	U.S. 77 Tucson Florence Highway N.W. Quadrant of U.S. 77 & Canada Del Oro	Open Channel, Concrete TW=30' D=10'	Canada Del Oro	None	2003	JB	Good	None	No	None
210-1.2	S.R. 210 Aviation Parkway S.E. of Intersection of 10th Street & 3rd Ave.	Circular Pipe, Concrete Dia = 96"	Arroyo Chico	Irrigation	8/29/2007	JB	Good	None	Yes	None
210-2.7	S.R. 210 Aviation Parkway N.W. Quadrant @ Intersection of Campbell Ave. & Aviation Parkway	Circular Pipe, Concrete Dia = 108"	Railroad Wash	Irrigation	8/29/2007	JB	Good	None	Yes	None

APPENDIX C
Notice of Illegal Discharge Letter

Arizona Department of Transportation
Intermodal Transportation Division
206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janice K. Brewer
Governor

John S. Halikowski
Director

Floyd Roehrich Jr.
State Engineer

DATE

NOTICE OF ILLEGAL DISCHARGE OR CONNECTION

Person or Business Name
Address
Phoenix, AZ

Dear Property Owner:

The Arizona Department of Transportation (ADOT) is responsible for maintaining not only roadways, but also the extensive storm drain network located within the State rights-of-way. The Arizona Pollutant Discharge Elimination System (AZPDES) Program, which is a component of the Clean Water Act of 1972, requires ADOT to control the amount of pollutants entering the drainage system. Part of this charge is the detection and elimination of illegal discharges or connections to the system that may contain pollutants or are otherwise not allowed. Left uncorrected, any pollutants entering the system will ultimately impact nearby streams, as storm drainage is not treated at any sort of treatment facility. In addition, neighboring property owners are not allowed to occupy, use or interfere with public right of way without permission. Any discharge/connection without permission is an illegal encroachment on ADOT right of way.

An inspection of the drainage system has occurred in the vicinity of your property and an illegal connection/discharge was discovered entering into the ADOT system. The discharge/connection was discovered on date at business name and address.

Indicators or Source include piping and staining.

Photographs of this discharge/connection are enclosed with this letter. In addition, I have enclosed an aerial photograph showing the location of this discharge/connection.

This discharge or connection must be ceased or removed within 30 days. A follow-up investigation will be conducted after that time to ensure compliance. If the situation is not corrected, ADOT will take corrective measures, including but not limited to sending this matter to the Arizona Office of the Attorney General so that a lawsuit may be filed. In the alternative, ADOT may remove the discharge/connection and bill you directly pursuant to A.R.S. § 28-7053.

If the illegal discharge/connection cannot be removed within 30 days, you do not understand this notice, or you disagree that an illegal discharge/connection exists at your property, please contact me with further details or explanation by calling 602.712.8353 or by email at wterlizzi@azdot.gov.

Sincerely,

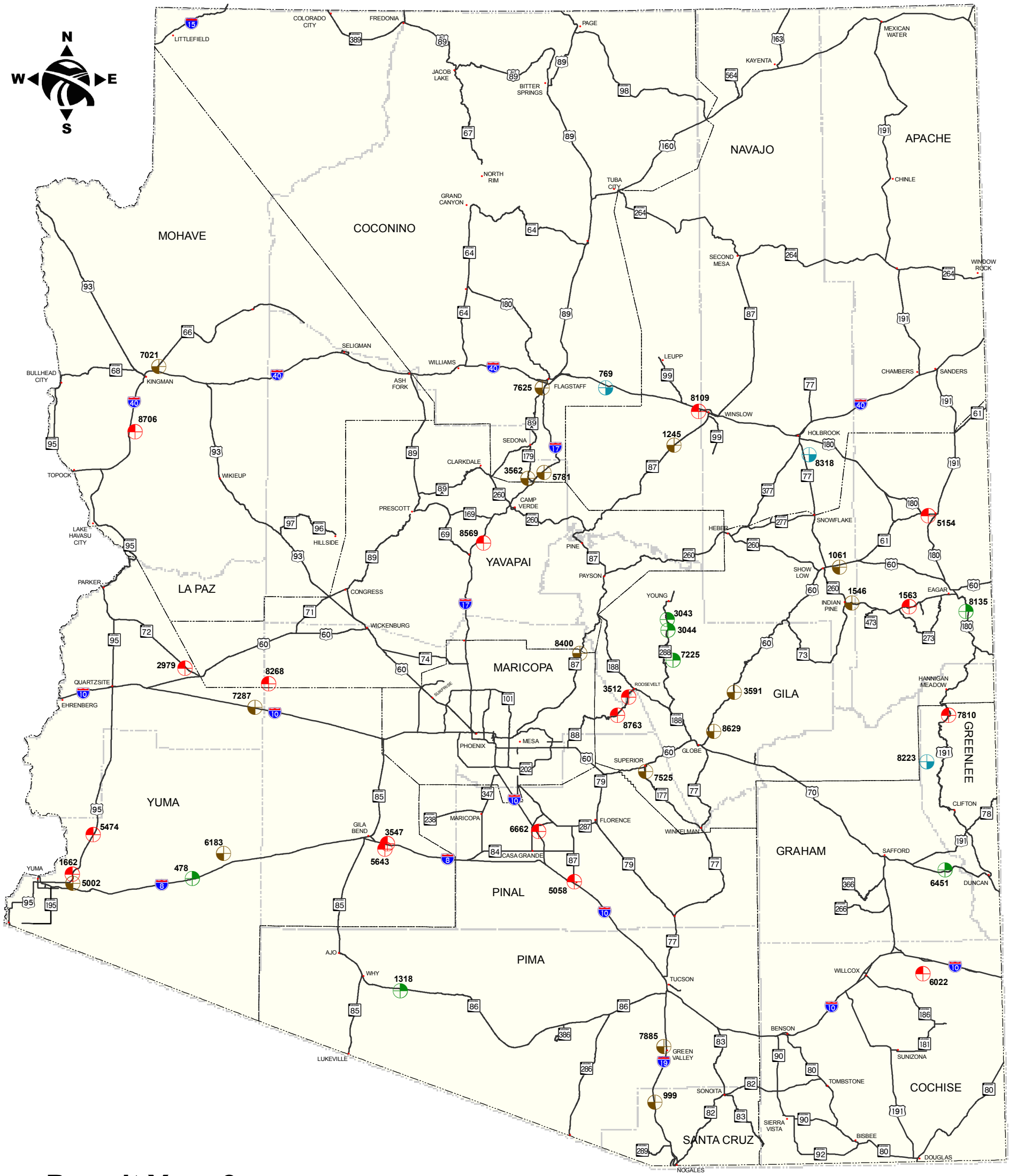
Wendy Terlizzi
ADOT Office of Environmental Services Water Quality Manager
1611 W Jackson Street, MD EM02
Phoenix, Arizona 85383

Enclosure (photographs)

cc: Todd G. Williams, M.Sc, ADOT Office of Environmental Services Director
District Engineer
District Environmental Coordinator

APPENDIX D
Map of ADOT Licensed Materials Sources and Stockpile Sites

Arizona Department of Transportation
Licensed Material Sources and Stockpile Sites



Permit Year 3

- GROUP A
- GROUP B
- GROUP C
- GROUP I

Legend

- Cities
- State Highway System
- District Boundary
- County Boundary

Prepared by:
Arizona Department of Transportation
Environmental Planning Group - GIS Team
602.920.3662

August 2011

APPENDIX E
Material Sources Inventory (Group A, B, C, and I)

Appendix E
ADOT- Licensed Material Source Inventory

Material Source (MS) No.	Source Name	ADOT District	County	Owner Code	Town-ship	Range	Sec	Hwy	MP	Latitude ° - ' - " N	Longitude ° - ' - " W	Total Acres	SIC Code	Site Use	Non-Exclusive Use	Potential Non-SW Discharge	Stockpiled Material	Water of US	Distance to Waters (miles)	U / I Waters
GROUP A : A materials source in this group will include a place where work or other activities related to the extraction, processing, removal or recovery of minerals is being conducted. Group A may also include a site or portion of site where mining has occurred in the past, yet currently mining is not being actively undertaken and the facility may or may not be covered by an active mining permit issued by the landowner(s), applicable State or Federal government agency.																				
A1. These sources are expected to be used at least annually. Inspections are conducted at least quarterly.																				
1563	Pole Knoll	Globe	Apache	3	08 N	27 E	30	260	381	34-03-24.83	109-31-55.04	5	1429	20,22	No	HH,LL	Yes	Yes	0.25	No
3512	Burnt Corral	Globe	Maricopa	3	03 N	11 E	1	88	237	33-38-04.52	111-11-18.65	11	1499	20	Yes	HH	Yes	Yes	0.25	No
5154	JMP Ranches Inc.	Globe	Apache	7	13 N	28 E	30	180	366	34-30-04.52	109-24-18.65	80	1499	22	No	HH	Yes	Yes	<0.25	No
8763	Fish Creek	Globe	Maricopa	3	02 N	11 E	5	88	227	33-32-39.06	111-15-15.76	4	1429	20	Yes	HH,JJ	Yes	Yes	0.25	No
8109	BVD	Holbrook	Coconino	1,5	19 N	15 E	21	I-40	250	35-01-54.56	110-45-32.79	80	1499	20,22,23	No	HH,MM,NN	Yes	Yes	>0.50	No
7810	Crabtree	Safford	Greenlee	3	02 N	29 E	14	191	216	33-31-04.55	109-18-59.02	10	1429	20,22	Yes	HH	Yes	Yes	0.25	No
5058	Picacho	Tucson	Pinal	1	08 S	08 E	15	87	195	32-43-49.69	111-30-43.93	52	1429	20	Yes	HH,MM	Yes	Yes	On-site	No
6662	Val Vista	Tucson	Pinal	4	05 S	06 E	23	I-10	187	32-58-35.18	111-43-04.41	120	1499	22,23	Yes	HH	Yes	Yes	On-site	No
1662	Tanner	Yuma	Yuma	4	08 S	21 W	9	95	38	32-44-35.30	114-25-33.55	25	1442	20,22,24	Yes	HH,II,JJ	Yes	Yes	On-site	No
2979	Vicksburg	Yuma	La Paz	4	05 N	15 W	23	72	44	33-45-45.94	113-47-39.44	60	1499	20	Yes	HH	Yes	Yes	<0.25	No
3547	Gila Bend North	Yuma	Maricopa	4	06 S	03 W	7	I-8	124	32-54-55.14	112-35-51.77	19	1499	20,22	Yes	HH	Yes	Yes	On-site	No
5474	Castle Dome	Yuma	Yuma	9	06 S	20 W	3	95	53	32-56-15.13	114-18-32.26	14	1442	20,22	No	HH	Yes	Yes	0.25	No
A2. These sources are used less than annually. Inspections are conducted at least annually.																				
8706	Yucca	Kingman	Mohave	1,2,4,7	18 N	17 W	30	I-40	29	34-55-04.24	114-07-02.16	133	1442	20,23	Yes	HH,MM	Yes	Yes	On-site	No
8569	Dugas	Prescott	Yavapai	3	12 N	03 E	27	I-17	270	34-23-29.20	112-02-26.61	40	1429	20	Yes	HH	Yes	Yes	<0.25	No
6022	Bowie	Safford	Cochise	2,4	13 S	28 E	32	I-10	365	32-15-20.64	109-30-02.93	134	1442	20,23	Yes	HH,MM	Yes	Yes	On-site	No
5643	Gila Bend South	Yuma	Maricopa	4	06 S	03 W	19	I-8	123	32-53-16.92	112-36-42.77	256	1442	20,23	Yes	HH,MM	Yes	Yes	On-site	No
8268	Tiger Wash West	Yuma	Maricopa	4	04 N	10 W	16	I-10	73	33-41-29.35	113-18-02.48	74	1442	20,23	Yes	HH	Yes	Yes	On-site	No
TOTAL SITES IN GROUP A =		**17**																		
GROUP B : A material source in this group will include a site or portion of a site where mining occurred in the past but is not an active facility. A site that is no longer being used will remain in this group until it can be reclaimed, at which time it would be moved to Group C.																				
3043	Squaw Peak	Globe	Gila	3	08 N	14 E	30	288	299	34-00-44.09	110-57-23.93	4	1499	1,20	Yes	HH	Yes	Yes	0.25	No
3044	Board Tree Saddle	Globe	Gila	3	07 N	14 E	7	288	295	33-57-37.32	110-57-11.80	3	1499	1,20	Yes	HH	Yes	Yes	<0.25	No
7225	Connor Canyon	Globe	Gila	3	06 N	13 E	36	288	281	33-48-43.43	110-55-30.94	9	1499	1,20	Yes	HH	Yes	Yes	< 0.25	No
8135	Warm Springs	Globe	Apache	3	07 N	30 E	5	180	411	34-01-33.25	109-11-53.27	42	1429	1,20,24	Yes	HH	Yes	Yes	On-site	No
6451	Slick Rock Wash	Safford	Graham	4	08 S	29 E	10	70	361	32-45-32.29	109-21-28.43	25	1442	20,26	Yes	N/A	Yes	Yes	On-site	No
1318	Quijotoa	Tucson	Pima	5	14 S	02 W	19	86	68	32-11-36.32	112-31-03.30	10	1499	1,26	Yes	N/A	No	Yes	<0.25	No
478	Mohawk	Yuma	Yuma	4	08 S	14 W	17	I-8	55	32-43-57.44	113-43-41.55	20	1499	26	Yes	N/A	No	Yes	On-site	No
TOTAL SITES IN GROUP B =		**7**																		
GROUP C : Includes activities intended to return the land to its pre-mining state. (Once a site is reclaimed, it will be removed from this Group)																				
769	Twin Arrows	Flagstaff	Coconino	3	20 N	10 E	2	I-40	217	35-09-04.61	111-18-45.07	32	1429	21	Yes	N/A	No	Yes	<0.25	No
8318	Aztec	Holbrook	Navajo	2,7	16 N	21 E	3	77	381	34-48-33.75	110-06-18.35	45	1499	21	No	N/A	No	Yes	<0.25	No
8223	Upper Sheep Wash	Safford	Greenlee	3	02 S	28 E	2	191	190	33-17-39.07	109-26-54.60	7	Not 14XX	1	Yes	N/A	No	Yes	On-site	No
TOTAL SITES IN GROUP C =		**3**																		
GROUP I : Non-Mining Sites. These regulated stockpile sites will be inspected at least quarterly.																				
3562	Beaver Creek	Flagstaff	Yavapai	3	15 N	05 E	12	179	302	34-42-35.03	111-46-45.18	2	Not 14XX	1,19,20	Yes	HH,MM	Yes	Yes	<0.25	No
5781	Blue Grade	Flagstaff	Yavapai	3	16 N	06 E	35	I-17	304	34-44-16.12	111-40-58.62	17	Not 14XX	20,22	Yes	HH,LL,MM	Yes	Yes	0.25	No
7625	Fort Tuthill	Flagstaff	Coconino	1,3	21 N	07 E	31	89A	400	35-09-11.40	111-41-31.75	80	Not 14XX	20,22	No	HH,LL,MM	Yes	Yes	On-site	No
1061	Second Knoll	Globe	Navajo	3	10 N	23 E	18	60	347	34-15-25.88	109-56-19.91	16	Not 14XX	20,22	Yes	HH,LL	Yes	Yes	0.25	No
1546	Kinney Mountain	Globe	Navajo	5	08 N	23 E	24	260	360	34-04-53.85	109-52-15.06	22	Not 14XX	1,20	Yes	HH,LL,MM	Yes	Yes	<0.25	No
3591	Carol Spring Mountain	Globe	Gila	3	04 N	17 E	33	60	278	33-39-05.12	110-34-06.08	6	Not 14XX	20,22	No	HH,LL,MM	Yes	Yes	<0.25	No
7525	Defiance	Globe	Pinal	3	2 S	12 E	11	177	167	33-16-04.92	111-05-38.06	7	Not 14XX	20	Yes	HH,MM	Yes	Yes	< 0.25	No
8629	Seven Mile Wash	Globe	Gila	3	03 N	16 E	23	60	268	33-35-13.16	110-38-47.23	1	Not 14XX	1,20	Yes	HH,MM	Yes	Yes	On-site	No
1245	Sunset Pass	Holbrook	Coconino	2,7	17 N	13 E	13	87	327	34-51-59.87	110-54-29.34	10	Not 14XX	20,22	No	HH,LL,MM	Yes	Yes	On-site	No
7021	Gordon Drive	Kingman	Mohave	1	22 N	16 W	33	66	59	35-14-26.71	113-59-04.02	15	Not 14XX	20	No	HH,MM	Yes	No	N/A	No
8400	Sunflower	Phoenix	Maricopa	3	06 N	09 E	19	87	217	33-51-03.28	111-28-30.29	2	Not 14XX	20	Yes	HH	Yes	Yes	<0.25	No
999	Tubac	Tucson	Santa Cruz	1	20 S	13 E	31	I-19	24	31-38-42.19	111-03-19.16	14	Not 14XX	20,22	No	HH,MM	Yes	Yes	On-site	No
7885	Sahuarita	Tucson	Pima	1	17 S	13 E	27	I-19	44	31-55-09.96	111-00-01.88	37	Not 14XX	20,22	No	HH,MM	Yes	Yes	<0.25	No
5002	Fortuna/Blaisedell	Yuma	Yuma	1	08 S	21 W	33	95	33	32-41-49.57	114-25-19.78	40	Not 14XX	20,26	No	HH,MM	Yes	Yes	On-site	No
6183	Dateland	Yuma	Yuma	2	06 S	13 W	36	I-8	67	32-51-32.30	113-33-07.68	60	Not 14XX	20,22	Yes	HH,MM	Yes	Yes	On-site	No
7287	Centennial	Yuma	La Paz	1	03 N	11 W	27	I-10	68	33-34-34.62	113-22-48.65	40	Not 14XX	20	No	HH,MM	Yes	Yes	On-site	No
TOTAL SITES IN GROUP I =		**16**																		

Appendix E
ADOT - Licensed Material Source Inventory (continued)

Definitions:

Group A : A materials source in this group will include a place where work or other activities related to the extraction, processing, removal or recovery of minerals is being conducted. Group A may also include a site or portion of a site where mining has occurred in the past, yet currently mining is not being actively undertaken and the facility may or may not be covered by an active mining permit issued by the landowner(s), applicable State or Federal government agency.

Group B : A material source in this group will include a site or portion of a site where mining occurred in the past but is not an active facility. A site that is no longer being used will remain in this group until it can be reclaimed, at which time it would be moved to Group C.

Group C : Includes activities intended to return the land to its pre-mining state. (Once a site is reclaimed, it will be removed from this Group).

Group I : Non-mining sites.These regulated stockpile sites will be inspected at least quarterly.

Waters of the US: **Based on review of topographic maps and/or on-site review**

Latitude/Longitude: **Latitude/Longitude are expressed in NAD 83**

N/A: **Not Applicable**

Site Use Codes:

1	Expired permit or license
2	Never used - will not be inspected until pit is developed
18	Undergoing reclamation
19	Requires revegetation or contouring
20	Stockpiles present
21	Released from site by land owner/manager
22	Maintenance only
23	Construction only
24	Multiple permitees
25	To be sold
26	Requires further evaluation

Standard Industrial Classification (SIC) Codes:

1429	Crushed and broken stone (basalt and volcanic rock)
1442	Sand and gravel
1499	Borrow or fill dirt
Not 14XX	Non-mining sites; material storage area only

Ownership Codes:

1	ADOT
2	Arizona State Land Department
3	USDA Forest Service
4	Bureau of Land Management
5	Tribal
7	Private
9	Department of the Army

Non-Stormwater Discharge Codes:

HH	Water for dust control (not wastewater)
II	Uncontaminated groundwater
JJ	Diverted stream flow
KK	Coring and drilling water - without additives
LL	Deicing chemicals or products
MM	Petroleum-containing materials
NN	Fertilizers - herbicide application to invasives

ADOT Districts:	Address:	District Engineers:	Phone:	E - Mail:
Flagstaff District	1801 S. Milton Road, Flagstaff, AZ 86001	John Harper	928-774-1491	jharper@azdot.gov
Globe District	P.O. Box 2717, Globe, AZ 85502-2717	Roderick Lane	928-402-5600	rlane@azdot.gov
Holbrook District	2407 E. Navajo Blvd., Holbrook, AZ 86025	Lynn Johnson	928-524-5408	ljohnson@azdot.gov
Kingman District	3660 E. Andy Devine, Kingman, AZ 86401	Mike Kondelis	928-681-6010	mkondelis@azdot.gov
Phoenix Construction	4550 N. Black Canyon Hwy., Phoenix, AZ 85017	Robert Samour	602-712-8965	rsamour@azdot.gov
Phoenix Maintenance	2140 W. Hilton Ave., Phoenix, AZ 85009-3740	Tim Wolfe	602-712-6550	twolfe@azdot.gov
Prescott District	1109 Commerce Drive, Prescott, AZ 86305	Greg Gentsch	928-777-5862	ggentsch@azdot.gov
Safford District	2082 U.S. Hwy. 70, Safford, AZ 85546	Bill Harmon	928-428-5470	bharmon@azdot.gov
Tucson District	1221 South 2nd Ave., Tucson, AZ 85713-1602	Todd Emery	520-388-4210	temery@azdot.gov
Yuma District	2243 East Gila Ridge Road, Yuma, AZ 85365-2101	Alvin Stump	928-317-2156	astump@azdot.gov

APPENDIX F
Numeric Summary of BMPs

Section Number	Stormwater BMP or Activity	Annual Reporting Year (July1 - June 30)				
		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
MEASURES TO CONTROL DISCHARGES THROUGH EDUCATION						
3.2.2.1(a)(ii)(1)	Train ADOT Employees - Illicit discharges and illegal dumping					
	Number of trainings offered	7	17	13		
	Number of employees trained	35	112	33		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		
3.2.2.1(a)(ii)(2)	Train ADOT Employees - Non-stormwater discharges					
	Number of trainings offered	7	17	13		
	Number of employees trained	35	112	33		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		
3.2.2.1(a)(ii)(3)	Train ADOT Employees - New Construction and land disturbances					
	Number of trainings offered	7	17	13		
	Number of employees trained	35	112	33		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		
3.2.2.1(a)(ii)(4)	Train ADOT Employees - New development and significant redevelopment					
	Number of trainings offered	7	17	13		
	Number of employees trained	35	112	33		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		
3.2.2.1(a)(ii)(5)	Train ADOT Employees - Storm sewer system and highway maintenance					
	Number of trainings offered	7	17	13		
	Number of employees trained	35	112	33		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		
3.2.2.1(a)(ii)(6)	Train ADOT Employees - Good housekeeping and material BMPs					
	Spill Prevention and Response - Number of trainings offered	7	17	1		
	Spill Prevention and Response - Number of employees trained	35	112	36		
	Pesticides, Herbicides, and Fertilizer Application - Number of trainings offered	7	17	1		
	Pesticides, Herbicides, and Fertilizer Application - Number of employees trained	35	112	36		
	Industrial Sites - Number of trainings offered	7	17	1		
	Industrial Sites - Number of employees trained	35	112	36		
	(Other numeric measurable goals(s))	NA	NA	NA		

NA - Not Available

Numeric Summary of BMPs

Section Number	Stormwater BMP or Activity	Annual Reporting Year (July1 - June 30)				
		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
3.2.2.1(a)(iii)	Develop Stormwater Library					
	Number of times accessed or visited	NA	NA	NA		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		
3.2.2.1(b)	ADOT Construction Contractor Training and Certification					
	Number of trainings offered	7	6	8		
	Number of ADOT employees trained/certified	35	22	34		
	Number of ADOT employees recertified	5	28	5		
	Number of ADOT contractors trained	NA	129	53		
3.2.2.2(b)(i)	Distribution of Educational Materials Through Public Places					
	Number of materials (posters, brochures, signs, etc.) distributed	2600	4,577	5200		
	Number of public events ADOT attended with displays	5	65	119		
	Est'd Audience from tv, movie, radio, billboard, bus shelter PSAs	NA	13,534,800	4,268,300		
	Educational items (coloring books, wrist bands, magnets, etc). distributed	NA	6,129	8,000		
	Construction seminar provided	NA	NA	80		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		
3.2.2.2(b)(ii)	Distribution of Educational Materials Through ADOT's Stormwater Webpage					
	Number of hits on webpage	NA	NA	NA		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		
3.2.2.3 (b)	Record and Consider Public Comments					
	Number of public comments received	0	0	0		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		
3.2.2.3(c)	Implement a Public Reporting System					
	Number of reports received from public	0	0	0		
	Number of reports investigated	0	0	0		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		
3.2.2.3(d)	Develop a Stormwater Component of the Adopt-a-Highway Litter Initiative					
	Number of volunteer groups participating	1,835	1,609	1,569		
	Number of miles cleaned	2,291	2,026	3935.4		
	Amount of trash collected (tons)	246	211	224		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		
3.2.2.3(e)	Continue Implementation of Litter Hotline					
	Number of calls received	3,389	2864	2776		
	(*Other numeric measurable goals(s)*)	NA	NA	NA		

NA - Not Available

Section Number	Stormwater BMP or Activity	Annual Reporting Year (July1 - June 30)				
		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
ILLICIT DISCHARGE/ILLEGAL DUMPING DETECTION AND ELIMINATION MEASURES						
3.2.3.1(a)	Maintain Illicit Discharge Authority					
	(*Numeric Measurable goal(s)*)	0	0	0		
3.2.3.1(b)	Enforce Standard Encroachment Permit					
	Number of enforcement actions	0	0	0		
	(Other numeric measurable goal(s))	0	0	0		
3.2.3.1(c)	Implement Non-Stormwater BMPs					
	(*Numeric Measurable goal(s)*)	NA	NA	NA		
3.2.3.1(d)	Inspect Outfalls for Dry Weather Discharges					
	Number of major outfalls inspected	35	35	0		
	Number of 71 identified major outfalls inspected	35	35	0		
	Number of priority outfalls inspected	7	0	0		
	Number of storm drain cross connection detected	0	0	0		
	Number of illicit discharges detected	1	1	0		
	Number of other dry weather flows detected	0	0	0		
	(*Other numeric measurable goal(s)*)	NA	NA	NA		
3.2.3.3(b)	Investigate Illicit Discharges (Source Identification)					
	Number of storm drain cross connection investigated	0	0	0		
	Number of illicit discharges investigated	0	0	7		
	Number of other dry weather flows investigated	0	0	0		
	(*Other numeric measurable goal(s)*)	NA	NA	0		

NA - Not Available

Section Number	Stormwater BMP or Activity	Annual Reporting Year (July1 - June 30)				
		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
3.2.3.3(c)	Respond to Complaints					
	Number of complaints received	0	0	0		
	Number of complaints responded to	0	0	0		
	Average response time (in days)	0	0	0		
	(*Other numeric measurable goal(s)*)	NA	NA	NA		
3.2.3.3(d)	Report Incidental Dry Weather Discharges					
	Number of discharges reported to ADEQ	1	1	0		
	(*Other numeric measurable goal(s)*)	NA	NA	0		
3.2.3.4(a)	Take Action to Eliminate Existing Dry Weather Flows					
	Number of existing dry weather discharges eliminated	0	0	0		
	(*Other numeric measurable goal(s)*)	NA	NA	NA		
3.2.3.4(b)	Take Action to Eliminate Sources of Illicit Discharges					
	Number of storm drain cross connection eliminated	0	0	0		
	Number of illicit discharges eliminated	1	1	7		
	Number of dry weather discharges eliminated	1	1	0		
	(*Other numeric measurable goal(s)*)	NA	NA	NA		
3.2.3.4(c)	Coordinate with Local Jurisdictions for Complaint Response and Investigation					
	Number of illicit discharges reported to other jurisdictions for follow-up	1	0	0		
	(*Other numeric measurable goal(s)*)	NA	NA	NA		
3.2.3.5	Responding to Spills					
	Number of highway accident spills responded to	0	156	180		
	Number of highway accident spills prioritized (potential for discharge)	0	156	10		
	Hazardous material released	NA	NA	50		

NA - Not Available

Section Number	Stormwater BMP or Activity	Annual Reporting Year (July1 - June 30)				
		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
MEASURES TO CONTROL DISCHARGES FROM NEW DEVELOPMENT AND REDEVELOPMENT						
3.2.5.2	Install Post-Construction Stormwater Control BMPs					
	Number of new post-construction stormwater control BMPs installed	NA	0	0		
	(*Other numeric measurable goal(s)*)	NA	NA	NA		
MEASURES TO CONTROL DISCHARGES FROM ROADWAYS						
3.2.6.1(b)	Inspect Storm Sewer System					
	Number of inspections performed	0	54	54		
	(*Other numeric measurable goal(s)*)	NA	NA	NA		
3.2.6.1(c)	Develop Maintenance Schedules and Priorities					
	(*Numeric measurable goal(s)*)	NA	NA	NA		
3.2.6.1(d)	Perform Repair, Maintenance, and Cleaning					
	Number of miles of roadways repaired/maintained	0*	0*	0*		
	Number of inlets cleaned	0*	0*	0*		
	Number of drain inlets containing significant materials	0*	0*	0*		
	(*Other numeric measurable goal(s)*)	NA	NA	NA		
3.2.6.2(c)(ii)	Require Certification/License					
	Number of licensed ADOT applicators	41	41	40		
3.2.6.2(d)	Stabilize Roadway Slopes (attach summary of tracking & prioritization)					
	Acres of roadway slopes stabilized	0	0	0		
* In accordance with 3.2.6.1(b), ADOT has 24 months to implement a system to inspect and record conditions of its storm sewer system						
MEASURES TO CONTROL DISCHARGES FROM ADOT MAINTENANCE FACILITIES						
4.1.5.3	Stencil Drain Inlets at ADOT Facilities					
	Number of new catch basins installed	0	0	0		
	Number of catch basins marked or stenciled	15	0	0		
	(*Other numeric measurable goal(s)*)	NA	NA	NA		

NA - Not Available

APPENDIX G
Approved MS4 Monitoring Locations

0 400 800 1600 Feet

N

W E

S

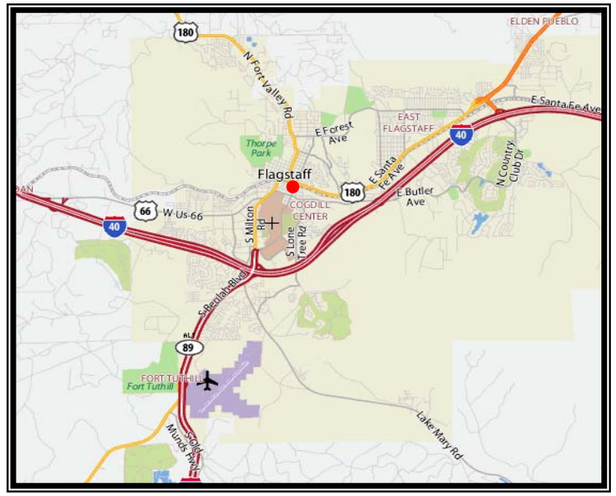
ADOT

Legend

● Stormwater Sample Location

Vicinity Map

NTS



Photograph: Outlet from Roadway looking North

Figure 1
Approved MS4 Sampling Location
Flagstaff, Arizona

ARIZONA DEPARTMENT OF TRANSPORTATION
AZPDES STORM WATER MONITORING SITE

eec Engineering and Environmental Consultants, Inc.
7878 North 16th Street, Suite 140, Phoenix, AZ 85020

V:\308032.05 Annual Report_Sampling 2009\700 Deliverables\710 - 2009 Annual Report\Potential MS4 Sampling Location Maps\Figure 2_Nogales Proposed MS4 Site Map

0 300 600 1200 Feet

N
W E
S

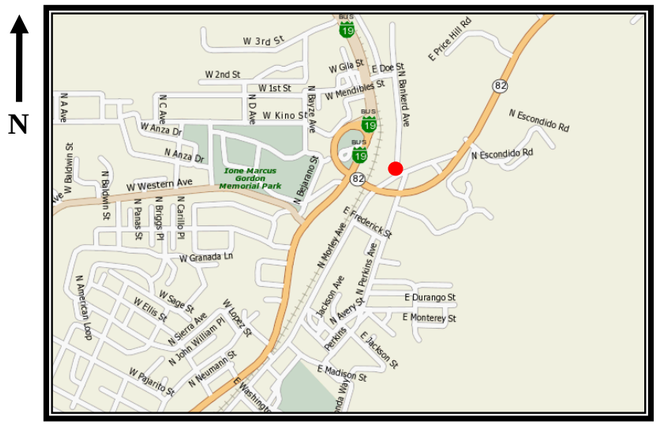
ADOT

Legend

- Stormwater Sample Location

Vicinity Map

NTS

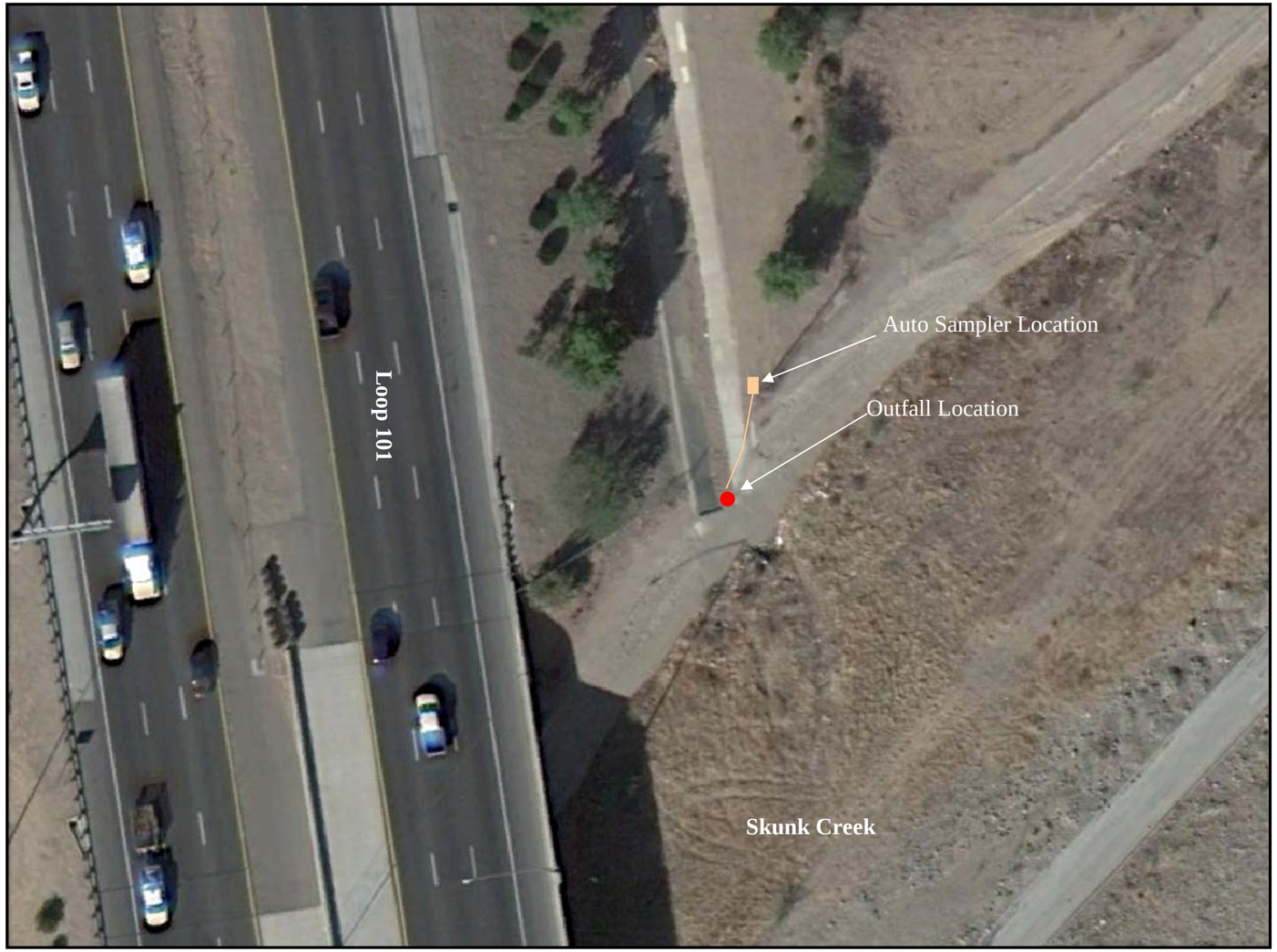


Photograph: Outlet looking Northeast

Figure 2
Approved MS4 Sampling Location
Nogales, Arizona

ARIZONA DEPARTMENT OF TRANSPORTATION
AZPDES STORM WATER MONITORING SITE

Engineering and Environmental Consultants, Inc.
7878 North 16th Street, Suite 140, Phoenix, AZ 85020



0 50

ADOT Outfall 101-13.68
Northeast Corner of Loop 101 and Skunk Creek Bridge, Peoria, Arizona

N

Vicinity Map

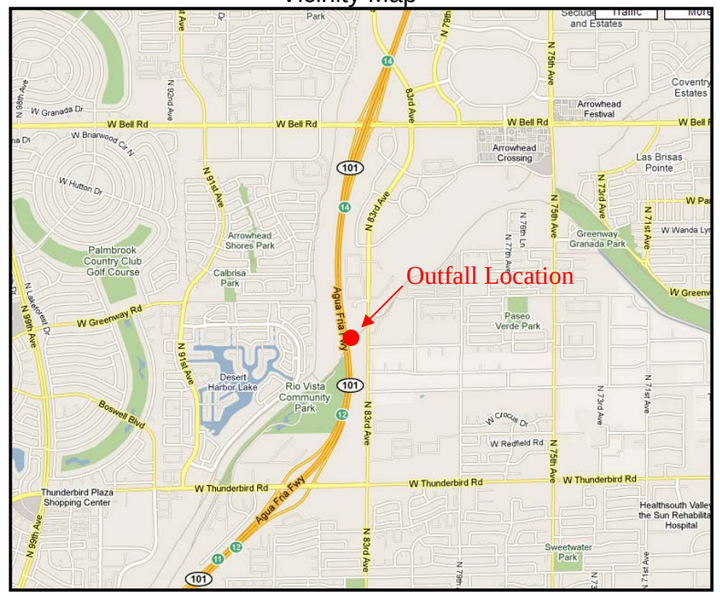


Figure 3
Approved MS4 Sampling Location
Phoenix, Arizona

ARIZONA DEPARTMENT OF TRANSPORTATION
AZPDES STORM WATER MONITORING SITE

eec Engineering and Environmental Consultants, Inc.
7878 North 16th Street, Suite 140, Phoenix, AZ 85020

N W E S

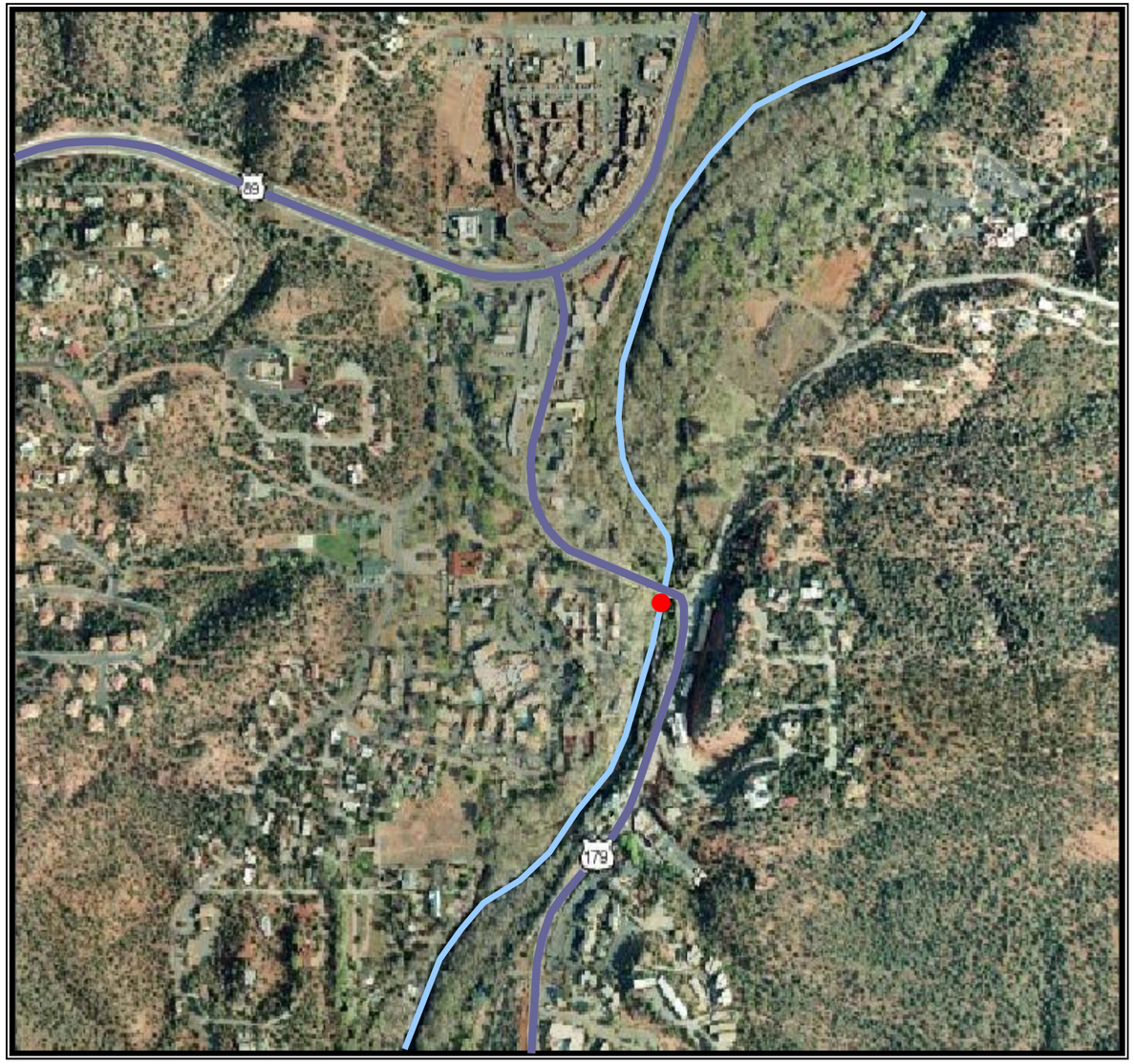
ADOT

eec Engineering and Environmental Consultants, Inc.
7878 North 16th Street, Suite 140, Phoenix, AZ 85020

Legend

- Stormwater Sample Location

V:\308032.05 Annual Report_Sampling 2009\700 Deliverables\710 - 2009 Annual Report\Potential MS4 Sampling Location Maps\Figure 4_Sedona Proposed MS4 Site Map



0 600 1,200 Feet

N W E S

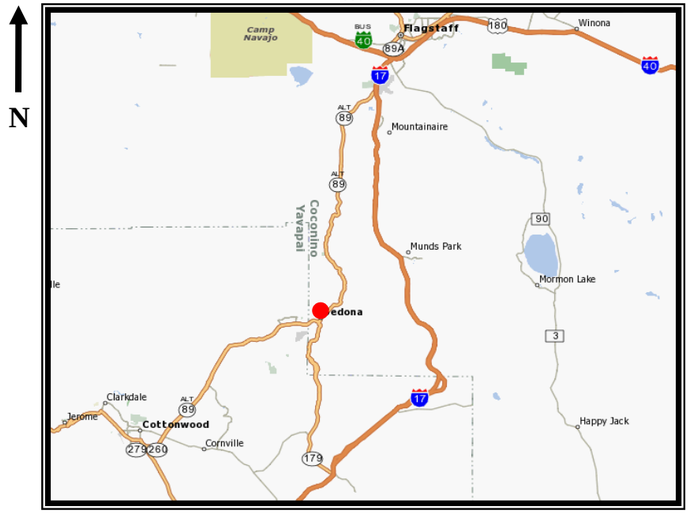
ADOT

Legend

- Stormwater Sample Location
- Oak Creek
- State Routes 89 & 179

Vicinity Map

NTS



Photograph: Outfall from 179 to Oak Creek looking South

Figure 4
Approved MS4 Sampling Location
Sedona, Arizona

ARIZONA DEPARTMENT OF TRANSPORTATION
AZPDES STORM WATER MONITORING SITE

eec Engineering and Environmental Consultants, Inc.
7878 North 16th Street, Suite 140, Phoenix, AZ 85020

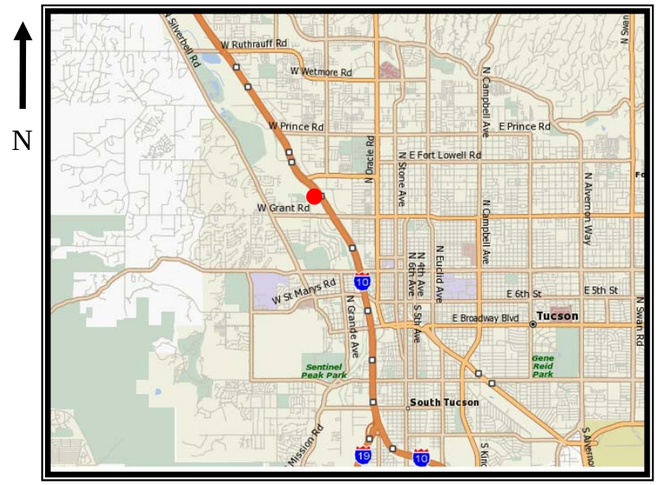
0 300 600 1200 Feet

Legend

- Stormwater Sample Location
- Contributing Drainage Area for Monitoring Site
- ADOT Grant Road Maintenance Yard

Vicinity Map

NTS



Photograph: Outfall from Roadway looking East

Figure 5
Approved MS4 Sampling Location
Tucson, Arizona

ARIZONA DEPARTMENT OF TRANSPORTATION
AZPDES STORM WATER MONITORING SITE

eec Engineering and Environmental Consultants, Inc.
7878 North 16th Street, Suite 140, Phoenix, AZ 85020

V:\308032.05 Annual Report_Sampling 2009\700 Deliverables\710 - 2009 Annual Report\Potential MS4 Sampling Location Maps\Figure 5_Tucson Proposed MS4 Site Map

APPENDIX H
ISCO Stormwater Sampling Equipment

Isco Product Data

Isco 6712 Full-size Portable Sampler

Isco's 6700 Series Portable Samplers have set the industry standard, providing the most comprehensive and durable performance available. With the introduction of our new 6712, Isco takes another step toward the ultimate by including SDI-12 interface capabilities.

The 6712 uses Isco's advanced 6700 Series Controller, a device that allows you to select from a variety of programming modes, assuring the most suitable routine for your application. Programming is fast and simple, with on-line help just a key stroke away.

The environmentally-sealed 6712 controller delivers maximum accuracy and easily handles all of your sampling applications, including:

- wastewater effluent
- stormwater monitoring
- CSO monitoring
- permit compliance
- pretreatment compliance

In the Standard Programming Mode, the controller walks you through the sampling sequence step-by-step, allowing you to choose all parameters specific to your application. Selecting the Extended Programming Mode lets you enter more detailed programs.

An optional telephone modem allows programming changes and data collection to be performed remotely, from a touch-tone phone. It also has dial-out alarm features.

Bottle options are available for practically any sequential or composite application.

Versatile and Convenient

With eleven bottle choices, Isco's 6712 Sampler lets you quickly adapt for simple or intricate sampling routines. Up to 30 pounds (13.5 kg) of ice fits in the insulated base, preserving samples for extended periods, even in extreme conditions. A convenient drain plug aids removal of water from melted ice.

Tough and Reliable

The 6712 Portable Sampler features a vacuum-formed ABS plastic shell to withstand exposure and abuse. Its tapered design and trim 20-inch (50.8 cm) diameter result in easy manhole installation and removal. Large, comfortable handles make transporting safe and convenient—even when wearing gloves.

Isco's 6712 Portable Sampler carries a NEMA 4X, 6 (IP67) enclosure rating. It's submersible, watertight, dust-tight, and resistant to sleet and corrosion.

Superior capability, rugged construction, and unmatched reliability make the 6712 the ideal choice for portable sampling in just about any application.

All 6712 Samplers share the following features:

Advanced Delivery System

The 6712's peristaltic pump delivers samples at the EPA-recommended velocity of 2 ft/sec., even at head heights of 26 feet. At a head height of 3 feet, line velocity is 3 ft/sec. No other automatic sampler achieves this level of performance!

Our patented* pump revolution counter tells you when tubing should be replaced. Changing tubing is a snap; there are no pump covers, collars or tools to slow you down. An exclusive safety interlock removes power from the pump when it's opened.

Step-by-Step Programming

This feature walks you through the sampling sequence and allows you to choose all parameters specific to your application:

- When to start
- What volume to collect
- How to distribute samples
- If samples are to be time- or flow-paced.

You can easily enter complex programs to suit your unique needs. Available routines include:

- Pause and resume for intermittent discharge flow monitoring
- Sampler pacing by time, non-uniform time, flow or external event
- Random interval sample collection

Convenient Data Retrieval

Every 6712 Sampler is also a powerful data logger. Sampling, flow, rainfall, and other water quality data can be stored in its 512 KB memory.

Data may be retrieved directly into a Flowlink® 4 equipped PC in three ways:

- Via cable connection
- Remotely, via Isco's 2102 Wireless Communication System
- By phone, using our optional built-in modem

SDI-12 Interfacing

The 6712 functions as a SDI-12 logger and connects to any sensor that fully implements the protocol standard.

Display window showing SDI-12 connection status.

In addition, Isco has defined extended commands to enable "plug and play" communications and ease of programming. These commands are implemented by the sensor manufacturer. Data are identified and logged by their specific type.

Expand your monitoring capabilities with these products and accessories.

Contact Isco or your Isco Representative to receive specific literature and prices on the following items.

Telephone Modem

A factory-installed option that lets you set up and make programming changes, or collect data from your 6712 sampler from the comfort of your office.

581 RTD (Rapid Transfer Device)

Slim enough to fit in your shirt pocket, yet rugged enough to withstand submersion, the 581 RTD lets you quickly retrieve and transfer data without taking your laptop computer into the field.

ProPak™ Disposable Sample Bags

Isco's patented ProPak bags eliminate the expense of washing and storing bottles, while taking away worries about contamination from previous samples. The bags are available with a 1000 ml capacity, or in a 2-gallon version for composite sampling.

Flowlink Software

Isco's advanced Flowlink® 4 for Windows Data Management Software harnesses the power of Microsoft Windows® to retrieve, import, compare, and analyze data, generate advanced charts and graphs, create comprehensive reports, and more.

700 Series Modules

Our interchangeable 700 Series Modules let you adapt your 6712 sampler for a variety of jobs. These compact modules are environmentally sealed and may be added to your 6712 system at any time.

701 – pH and Temperature Module
Combines accurate pH and temperature monitoring in one module. It will also activate your 6712 Sampler at a user-elected pH or temperature range.

710 – Ultrasonic Flow Module
Uses our field-proven ultrasonic level sensor that doesn't require submersion in the flow stream.

720 – Submerged Probe Flow Module
Provides accurate measurement at sites where wind, steam, foam, turbulence, or air temperature fluctuations exist. Suitable for small channels, it accurately senses pressure even when covered with silt and sand.

730 – Bubbler Flow Module
Get the dependability and accuracy of Isco bubbler flow meters in a miniaturized package. The 730 is unaffected by changing stream conditions, and level measurement remains accurate despite temperature fluctuations or exposure to harsh chemicals.

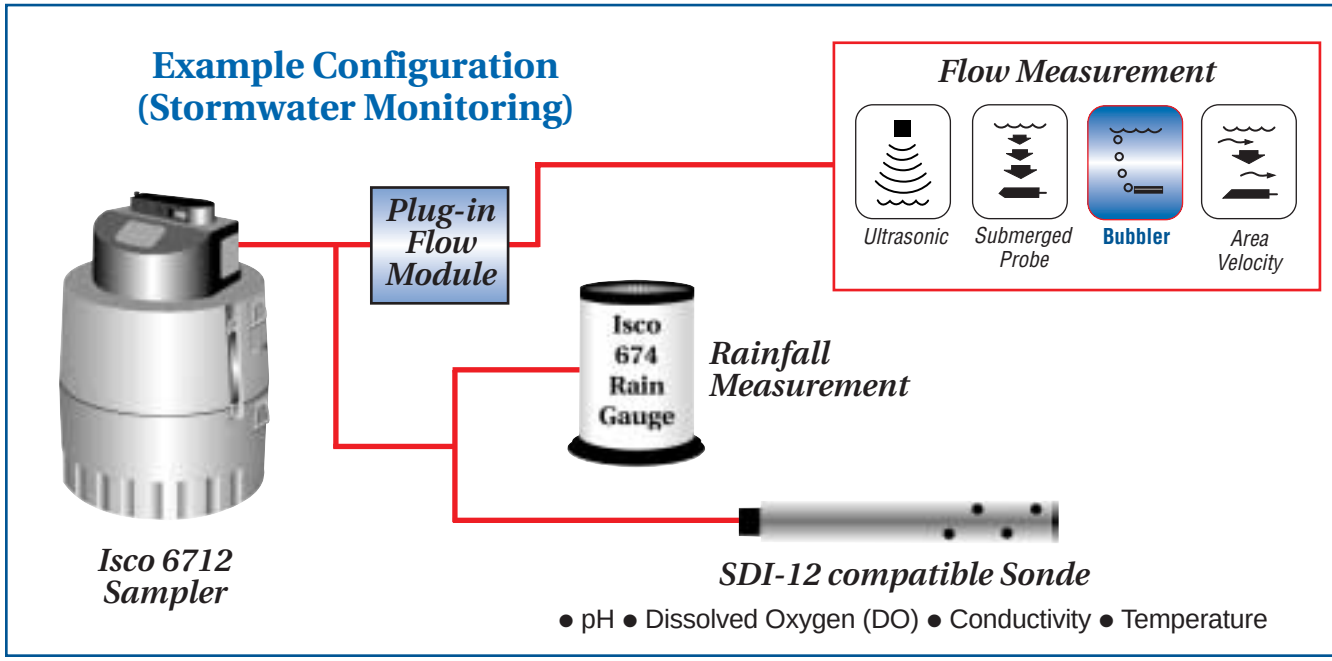
750 – Area Velocity Flow Module
Gives greater accuracy where weirs and flumes are not practical, and where submerged, full pipe, surcharged, and reverse flow conditions may occur. And, you don't have to estimate the slope and roughness of the channel.

780 – Smart 4-20 Module
Add intelligence to a simple analog signal. Flow rates are displayed in actual volume units, not merely a percent of full scale. Any linear 4-20 mA input can be characterized by using the 780. The information can be stored and retrieved for later analysis.

Integrated Water Monitoring

Isco 6712 Samplers feature "plug and play" connection with SDI-12 compatible measuring devices - including multi-parameter sondes from leading manufacturers. Combined with the 6712's standard 512 KB of memory, enough for more than 200,000 stored readings. SDI-12 networking gives you great flexibility for logging environmental data, and for "smart sampling" event notification, triggered on any combination of up to 16 inputs.

Example Configuration (Stormwater Monitoring)



Isco 6712 Full-size Portable Sampler Specifications

Sampler

Height	27.0 in.	68.6 cm
Diameter	20 in.	50.7 cm
Weight (Dry/Less Battery)	32 lbs.	15 kg
Material	High-strength ABS plastic outer shell Stainless steel hardware	
Power Requirements	12 VDC	

Pump

Intake Purge	Adjustable air purge before and after each sample.	
Tubing Life Indicator	Provides a warning to change pump tubing.	
Intake Suction Tubing		
Length	3 to 99 ft.	1 to 30 m
Material	Vinyl or Teflon® lined	
Inside Dimension	⅜ in.	1 cm
Pump Tubing Life	Typically 1,000,000 pump counts	
Maximum Suction Lift	28 ft.	8.5 m
Typical Repeatability	±5 ml or ±5% of the average volume in a set	
Typical Line Transport Velocity at head heights of:		
3 ft. (0.9 m)	3.0 ft./s	0.91 m/s
10 ft. (3.1 m)	2.9 ft./s	0.87 m/s
15 ft. (4.6 m)	2.7 ft./s	0.83 m/s
Liquid Presence Detector	Non-wetted, non-conductive sensor detects when liquid sample reaches the pump to automatically compensate for changes in head heights.	

Controller

Weight	13 lbs.	5.9 kg
Dimensions	10.3 x 12.5 x 10 in.	26 x 31.7 x 25.4 cm
Operational Temperature	32° to 120°F	0° to 49°C
Enclosure Rating	NEMA 4X, 6	IP67
Program Memory	Non-volatile flash memory	
Flow Meter Signal Requirements	5 to 15 volt DC pulse or 25 millisecond isolated contact closure.	
Number of Programmable Composite Samples	1 to 999 samples or continuous sampling	
Real Time Clock Accuracy	1 minute per month, typical	

Software

Sample Frequency Selection	1 minute to 99 hours 59 minutes, in 1 minute increments. Non-uniform times in minutes or clock times 1 to 9,999 flow pulses
Sampling Modes	Uniform time, non-uniform time, flow. *(Flow mode is controlled by external flow meter pulses.)*
Programmable Sample Volumes	10 to 9,990 ml in 1 ml increments
Sample Retries	If no sample is detected, up to 3 attempts; user selectable
Rinse Cycles	Automatic rinsing of suction line up to 3 rinses for each sample collection
Program Storage	5 sampling programs
Sampling Stop/Resume	Up to 24 real time/date sample stop/resume commands
Controller Diagnostics	Tests for RAM, ROM, pump display, and distributor

Ordering Information

Description	Part Number
6712 Portable Sampler, Full-size Includes controller with 512 KB RAM, top cover, center section, base, distributor arm, instruction manual, pocket guide.	**68-6710-070**
6712 Portable Sampler with Jumbo Base (as described above)	**68-6710-082**

Note: *Power source, bottle configuration, suction line, and strainer must be ordered separately. Other options and accessories are also available. Contact Isco or your Isco Representative for complete information.*

The 6712 Controller is an SDI-12 logger. Manual pump operations are now located on the front panel keys.

www.isco.com

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Lincoln, NE 68504 USA
Phone: (402) 464-0231
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E-Mail: info@isco.com

Isco Product Data

Isco Avalanche® Multi-bottle, Refrigerated Portable Sampler

Multi-function sampling and data logging with dual-power cooling

Avalanche® is based on Isco's industry-leading 6712 controller. You get all the advanced control, data logging, and communication features of the 6712, with cooling from either AC or battery power.

Bottle options include 5- and 2.5 gallon composites as well as 4 x 1-gallon and 14 x 950 ml sequentials.

A 12V deep-cycle battery delivers 48 hours - or more- of refrigeration. The power-saving cooling system remains on standby until the first sample is drawn, and only then switches on to preserve the collected samples for pickup.

Available routines include: pause-and-resume for intermittent-discharge flow monitoring; sampler pacing by time, non-uniform time, flow or external event; and random interval sample collection.

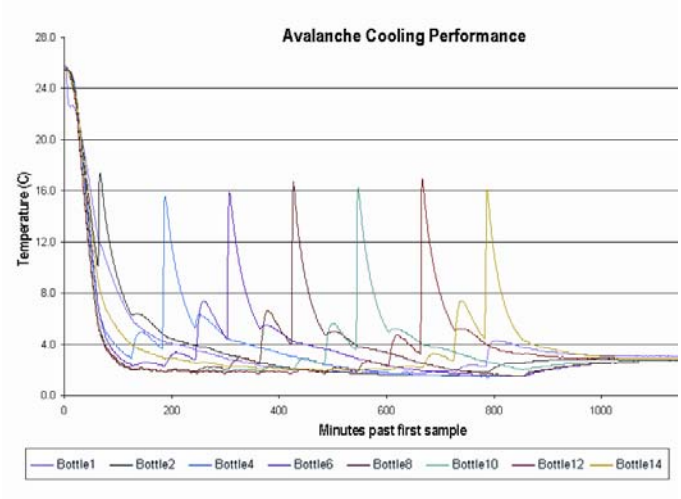
Standard Features

- Standard and extended programming keeps setup simple when you don't need advanced features.
- NEMA 4x, 6 (IP67) controller enclosure.
- SDI-12 interface provides "plug and play" connection with multi-parameter water-quality sondes and other compatible devices.
- 512kB memory gives you great flexibility for logging environmental data.
- Sample delivery at the EPA-recommended velocity of 2 ft/sec. at head heights up to 26 feet.
- Patented pump revolution counter ensures accurate sample volumes - and tells you when tubing should be replaced.

Optional mobility kit includes pneumatic tires for ease of transport over rough terrain, and a convenient battery platform.

Applications

- Stormwater runoff compliance
- TMDL and watershed monitoring
- Enforcement monitoring
- Advanced sampling combined with data logging and communications for flow, rainfall, and water quality parameters.



Isco temperature control technology accurately preserves samples at 3°C – even under difficult conditions shown above (40°C ambient, 20°C sample temperature).

Specifications

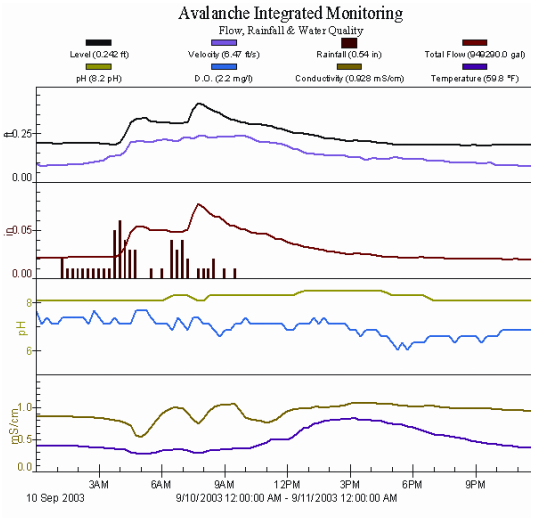
Isco Avalanche Sampler	
Size (H x W x D):	30.5 x 14 x 24 inches (78 x 36 x 60 cm)
Weight:	Dry, less battery - 76 lbs (35 kg)
Bottle configurations:	5-gallon poly bottle 2.5-gallon glass bottle configuration 2.5-gallon poly bottle configuration 1-gallon poly bottle configuration (4 bottles 950 ml poly bottle configuration (14 bottles)
Power Requirements:	12V DC (Supplied by battery or AC power converter.)
Pump	
Intake suction tubing: Length Material Inside dimension	 3 to 99 feet (1 to 30 m) Vinyl or Teflon 3/8 inch (1 cm)
Pump tubing life:	Typically 1,000,000 pump counts
Maximum lift:	28 feet (8.5 m)
Typical Repeatability	±5 ml or ±5% of the average volume in a set
Typical line velocity at Head height: of 3 ft. (0.9 m) 10 ft. (3.1 m) 15 ft. (4.6 m)	 3.0 ft./s (0.91 m/s) 2.9 ft./s (0.87 m/s) 2.7 ft./s (0.83 m/s)
Liquid presence detector:	Non-wetted, non-conductive sensor detects when liquid sample reaches the pump to automatically compensate for changes in head heights.

Controller	
Weight:	13 lbs. (5.9 kg)
Size (HxWxD)	10.3 x 12.5 x 10 inches (26 x 31.7 x 25.4 cm)
Operational temperature:	32° to 120°F (0° to 49°C)
Enclosure rating:	NEMA 4X, 6 (IP67)
Program memory:	Non-volatile ROM
Flow meter signal input:	5 to 15 volt DC pulse or 25 millisecond isolated contact closure.
No. of composite samples:	Programmable from 1 to 999 samples.
Clock Accuracy:	1 minute per month, typical, for real time clock
Software	
Sample frequency:	1 minute to 99 hours 59 minutes, in 1 minute increments. Non-uniform times in minutes or clock times 1 to 9,999 flow pulses
Sampling modes:	Uniform time, non-uniform time, flow, event. (Flow mode is controlled by external flow meter pulses.)
Programmable sample volumes:	10 to 9,990 ml in 1 ml increments
Sample retries:	If no sample is detected, up to 3 attempts; user selectable
Rinse cycles:	Automatic rinsing of suction line up to 3 rinses for each sample collection
Program storage:	5 sampling programs
Sampling Stop/Resume:	Up to 24 real time/date sample stop/resume commands
Controller diagnostics:	Tests for RAM, ROM, pump, display, and distributor

Ordering Information

Note: *Bottle configuration, suction line, and strainer must be ordered separately. 12 VDC operation requires external battery. Contact Isco or your Isco Representative for complete information.*

Description	Part Number
Isco Avalanche Sampler (115-230 VAC/12V DC) Includes controller, distributor arm, instruction manual, pocket guide. Standard power cord.*	68-2970-003
5-gallon poly bottle	68-2970-008
2.5-gallon glass bottle configuration	68-2970-006
2.5-gallon poly bottle configuration	68-2970-009
1-gallon poly bottle configuration (4 bottles	68-2970-002
950 ml poly bottle configuration (14 bottles)	68-2970-001
Mobility Kit	68-2960-004



The Avalanche controller is a powerful SDI-12 data logger, designed to work directly with Isco's advanced Flowlink® Software.

Data for flow, rainfall, and water quality can be transferred from the Avalanche controller into a Flowlink-equipped PC in three ways: via cable connection, via Isco's 2102 Wireless Communication System, or by phone, using Avalanche's optional built-in modem

Flowlink Software lets you quickly retrieve, import, compare, and analyze data, generate charts and graphs,and create comprehensive reports.

ISCO®
Water is life. Protect it.

Teledyne Isco, Inc.

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APPENDIX I
Summary of MS4 Monitoring Data

Appendix I
Monitoring Data

OUTFALL ID: 202-2.36 RECEIVING WATER: Retention Basin DESIGNATED USES: Water Retention		MONITORING SEASONS Summer: June 1- October 31 Winter: November 1- May 31							
		Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		12/17/08	7/21/09	2/28/10	NS	NS			
MONITORING PARAMETERS	WQS								
Flow	NNS	1.7gpm	1.4gpm	-	NS	NS			
pH	5.0-9.0	7.75	7.21	8.52	NS	NS			
Temperature (F°)	NNS	54.4	96.9	56.5	NS	NS			
Hardness	NNS	180	-	60	NS	NS			
Specific conductance (mg/L)	NNS	550	900	1500	NS	NS			
Total Dissolved Solids (TDS) (mg/L)	500.00	290	720*	97	NS	NS			
Total Suspended Solids (TSS) (mg/L)	NNS	85	-	76	NS	NS			
Turbidity (NTU)	NNS	49	21	100	NS	NS			
Biochemical Oxygen Demand (BOD) (mg/L)	NNS	13	40	<5.0	NS	NS			
Chemical Oxygen Demand (COD) (mg/L)	NNS	110	350	70	NS	NS			
Inorganics									
Cyanide (mg/L)	0.20	<0.0050	<0.0050	<0.0050	NS	NS			
Sulfates (mg/L)	250.00	56	69	7.6	NS	NS			
Nutrients									
Nitrate (mg/L)	10.00	3.3	4	1.1	NS	NS			
Nitrite (mg/L)	1.00	0.19	0.77	<0.10	NS	NS			
Total Kjeldahl Nitrogen (TKN) (mg/L)	NNS	3	12	1.5	NS	NS			
Total Phosphorous (mg/L)	NNS	-	1.1	0.25	NS	NS			
Phosphate, Ortho (mg/L)	NNS	<0.12	0.46	0.48	NS	NS			
Total Nitrogen (mg/L)	NNS	-	-	1.2	NS	NS			
Total Amonia (mg/L)	NNS	0.66	2.6	0.48	NS	NS			
Sodium (mg/L)	NNS	49	85	1.3	NS	NS			
Calcium (mg/L)	NNS	46	64	150	NS	NS			
Chloride (mg/L)	NNS	69	130	6.9	NS	NS			

Appendix I
Monitoring Data

OUTFALL ID: 202-2.36 RECEIVING WATER: Retention Basin DESIGNATED USES: Water Retention		MONITORING SEASONS Summer: June 1- October 31 Winter: November 1- May 31							
		Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		12/17/08	7/21/09	2/28/10	NS	NS			
Microbiological									
Coliform, fecal (col/100 ml)	NNS	>1,200	-	>200	NS	NS			
E.Coli (cfu/100 ml)	100.00	>24,200	-	-	NS	NS			
Total Metals									
Antimony (mg/L)	0.006	<0.020	0.0037	<0.020	NS	NS			
Arsenic (mg/L)	0.050	<0.021	0.0064	<0.020	NS	NS			
Barium (mg/L)	2.000	0.098	0.14	0.074	NS	NS			
Beryllium (mg/L)	0.004	<0.0020	<0.0020	<0.0020	NS	NS			
Cadmium (mg/L)	0.005	<0.0050	<0.0050	<0.0050	NS	NS			
Chromium (mg/L)	0.100	<0.010	<0.010	<0.010	NS	NS			
Copper (mg/L)	1.300	0.023	0.073	<0.020	NS	NS			
Lead (mg/L)	0.015	0.0084	0.006	0.0064	NS	NS			
Mercury (mg/L)	0.002	<0.00020	<0.00020	<0.0002	NS	NS			
Nickel (mg/L)	0.140	<0.020	<0.020	<0.020	NS	NS			
Selenium (mg/L)	0.020	<0.020	<0.020	<0.020	NS	NS			
Silver (mg/L)	NNS	<0.010	<0.010	<0.010	NS	NS			
Zinc (mg/L)	2.10	0.053	0.14	4.7	NS	NS			
Organic Toxic Pollutants									
Total Petroleum Hydrocarbons (TPH) (mg/L)	NNS	0.73	2.7	0.32	NS	NS			
Oil & Greese (Hexane Extr) (mg/L)	NNS	<5.0	<5.9	<5.3	NS	NS			
Chlorine, residual (mg/L)	0.70000	0.2	<0.10	<0.10	NS	NS			

Appendix I
Monitoring Data

OUTFALL ID: 202-2.36 RECEIVING WATER: Retention Basin DESIGNATED USES: Water Retention		MONITORING SEASONS Summer: June 1- October 31 Winter: November 1- May 31 Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		**12/17/08**	**7/21/09**	**2/28/10**	**NS**	**NS**			
VOCs, Semi-VOCs and Pesticides									
Benzene (mg/L)	0.0050	<0.00050	<0.00050	<0.0010	NS	NS			
Ethylbenzene (mg/L)	0.0050	0.00068	<0.00050	<0.0010	NS	NS			
Toluene (mg/L)	1.00	<0.0050	<0.0050	<0.0050	NS	NS			
Total Xylene (mg/L)	10.00	0.0039	<0.0015	<0.0030	NS	NS			
Chromium, Trivalent (mg/L)	NNS	<0.010	<0.010	-	NS	NS			
MBAS (mg/L)	NNS	0.3	1.1	<1.0	NS	NS			
Endrin ketone (mg/L)	NNS	<0.00050	<0.000050	<0.000050	NS	NS			
Hexachlorobenzene (mg/L)	0.001	<0.00050	<0.000050	<0.000050	NS	NS			
Methoxychlor (mg/L)	0.004	<0.00050	<0.000050	<0.000050	NS	NS			
Benzidine (mg/L)	0.000	<0.050	<0.050	<0.010	NS	NS			
Bis(2-chlorethoxy)methane (mg/L)	NNS	<0.010	<0.010	<0.010	NS	NS			
Bis(2-chloroethyl)ether (mg/L)	0.030	<0.010	<0.010	<0.010	NS	NS			
Bis(2-chloroisopropyl)ether (mg/L)	0.280	<0.010	<0.010	<0.010	NS	NS			
4-Bromophenyl-phenylether (mg/L)	NNS	<0.010	<0.010	<0.010	NS	NS			
2-Chloronaphthalene (mg/L)	NNS	<0.010	<0.010	<0.0010	NS	NS			
4-Chlorophenyl-phenylether (mg/L)	NNS	<0.010	<0.010	<0.010	NS	NS			
3,3-Dichlorobenzidine (mg/L)	0.0031	<0.010	<0.010	<0.010	NS	NS			
2,4-Dinitrotoluene (mg/L)	0.0140	<0.010	<0.010	<0.010	NS	NS			
2,6-Dinitrotoluene (mg/L)	0.0001	<0.010	<0.010	<0.010	NS	NS			

Appendix I
Monitoring Data

OUTFALL ID: 202-2.36 RECEIVING WATER: Retention Basin DESIGNATED USES: Water Retention		MONITORING SEASONS Summer: June 1- October 31 Winter: November 1- May 31 Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		**12/17/08**	**7/21/09**	**2/28/10**	**NS**	**NS**			
Hexachlorobenzene (mg/L)	0.0010	<0.010	<0.010	<0.010	NS	NS			
Hexachloro-1,3-butadiene (mg/L)	NNS	<0.010	<0.010	<0.010	NS	NS			
Hexachlorocyclopentadiene (mg/L)	0.0500	<0.010	<0.010	<0.010	NS	NS			
Hexachloroethane (mg/L)	0.0025	<0.010	<0.010	<0.010	NS	NS			
Indeno(1,2,3-cd)pyrene (mg/L)	0.0005	<0.0010	<0.010	<0.0010	NS	NS			
Isophorone (mg/L)	0.0370	<0.010	<0.010	<0.010	NS	NS			
Nitrobenzene (mg/L)	0.0035	<0.010	<0.010	<0.010	NS	NS			
n-Nitrosodimethylamine (mg/L)	0.0080	<0.050	<0.050	<0.010	NS	NS			
n-Nitrosodiphenylamine (mg/L)	0.0071	<0.010	<0.010	<0.010	NS	NS			
n-Nitrosodi-n-propylamine (mg/L)	0.0050	<0.010	<0.010	<0.010	NS	NS			
Benzylbutyl phthalate (mg/L)	NNS	<0.010	<0.010	<0.0010	NS	NS			
Bis(2-ethylhexyl)phthalate (mg/L)	NNS	<0.010	<0.010	<0.0010	NS	NS			
1,2,4-Trichlorobenzene (mg/L)	0.070	<0.010	<0.010	<0.010	NS	NS			
4-Chloro-3-methylphenol (mg/L)	NNS	<0.010	<0.010	<0.010	NS	NS			
4,6-Dinitro-2-methylphenol (mg/L)	NNS	<0.010	<0.010	<0.010	NS	NS			

Appendix I
Monitoring Data

OUTFALL ID: 202-2.36 RECEIVING WATER: Retention Basin DESIGNATED USES: Water Retention		MONITORING SEASONS Summer: June 1- October 31 Winter: November 1- May 31 Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		12/17/08	7/21/09	2/28/10	NS	NS			
Acid Compounds									
2-Chlorophenol (mg/L)	0.035	<0.010	<0.010	<0.010	NS	NS			
2,4-Dichlorophenol (mg/L)	0.021	<0.010	<0.010	<0.010	NS	NS			
2,4-Dimethylphenol (mg/L)	0.140	<0.010	<0.010	<0.010	NS	NS			
2,4-Dinitrophenol (mg/L)	0.014	<0.010	<0.010	<0.010	NS	NS			
2-Nitrophenol (mg/L)	NNS	<0.010	<0.010	<0.010	NS	NS			
4-Nitrophenol (mg/L)	NNS	<0.010	<0.010	<0.010	NS	NS			
Pentachlorophenol (mg/L)	0.001	<0.010	<0.010	<0.010	NS	NS			
Phenol (mg/L)	4.20	<0.010	<0.010	<0.010	NS	NS			
2,4,6-Trichlorophenol (mg/L)	0.00320	<0.010	<0.010	<0.010	NS	NS			
Bases/Neutrals									
Acenaphthene (mg/L)	0.42	<0.0010	<0.010	<0.0010	NS	NS			
Acenaphthylene (mg/L)	NNS	<0.0010	<0.010	<0.0010	NS	NS			
Anthracene (mg/L)	2.10	<0.0010	<0.010	<0.0010	NS	NS			
Benzo(a)anthracene (mg/L)	0.00190	<0.0010	<0.010	<0.0010	NS	NS			
Benzo(a)pyrene (mg/L)	0.00020	<0.0010	<0.010	<0.0010	NS	NS			
Benzo(b)fluoranthene (mg/L)	NNS	<0.0010	<0.010	<0.0010	NS	NS			
Benzo(g,h,i)perylene (mg/L)	NNS	<0.0010	<0.010	<0.0010	NS	NS			
Benzo(k)fluoranthene (mg/L)	0.0480	<0.0010	<0.010	<0.0010	NS	NS			
Chrysene (mg/L)	0.00479	<0.0010	<0.010	<0.0010	NS	NS			
Dibenzo(a,h)anthracene (mg/L)	0.00190	<0.0010	<0.010	<0.0010	NS	NS			
Diethyl phthalate (mg/L)	5.60	<0.010	<0.010	<0.0010	NS	NS			
Dimethyl phthalate (mg/L)	NNS	<0.010	<0.010	<0.0010	NS	NS			
Di-n-butyl phthalate (mg/L)	NNS	<0.010	<0.010	<0.0010	NS	NS			
Di-n-octyl phthalate (mg/L)	2.80	<0.010	<0.010	<0.0010	NS	NS			
Fluoranthene (mg/L)	0.28	<0.0010	<0.010	<0.0010	NS	NS			
Fluorene (mg/L)	0.28	<0.0010	<0.010	<0.0010	NS	NS			
Naphthalene (mg/L)	0.14	<0.0010	<0.010	<0.0010	NS	NS			
Phenanthrene (mg/L)	NNS	<0.0010	<0.010	<0.0010	NS	NS			
Pyrene (mg/L)	0.21	<0.0010	<0.010	<0.0010	NS	NS			

Appendix I
Monitoring Data

OUTFALL ID: 202-2.36 RECEIVING WATER: Retention Basin DESIGNATED USES: Water Retention		MONITORING SEASONS Summer: June 1- October 31 Winter: November 1- May 31 Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		**12/17/08**	**7/21/09**	**2/28/10**	**NS**	**NS**			
Pesticides									
Aldrin (mg/L)	0.0020	<0.00050	<0.00051	<0.000050	NS	NS			
Alpha BHC (mg/L)	NNS	<0.00050	<0.000050	<0.000050	NS	NS			
Beta BHC (mg/L)	NNS	<0.00050	<0.000050	<0.000050	NS	NS			
Delta BHC (mg/L)	NNS	<0.00050	<0.000050	<0.000050	NS	NS			
Gamma BHC (mg/L)	NNS	<0.00050	<0.000050	<0.000050	NS	NS			
Chlordane (mg/L)	0.0020	<0.0050	<0.00050	<0.00050	NS	NS			
4,4-DDD (mg/L)	NNS	<0.00050	<0.000050	<0.000050	NS	NS			
4,4-DDE (mg/L)	NNS	<0.00050	<0.000050	<0.000050	NS	NS			
4,4-DDT (mg/L)	NNS	<0.00050	<0.000050	<0.000050	NS	NS			
Dieldrin (mg/L)	0.0020	<0.00050	<0.000050	<0.000050	NS	NS			
Endosulfan I (mg/L)	NNS	<0.00050	<0.000050	<0.000050	NS	NS			
Endosulfan II (mg/L)	NNS	<0.00050	<0.000050	<0.000050	NS	NS			
Endosulfan sulfate (mg/L)	NNS	<0.00050	<0.000050	<0.000050	NS	NS			
Endrin (mg/L)	0.0020	<0.00050	<0.000050	<0.000050	NS	NS			
Endrin aldehyde (mg/L)	NNS	<0.00050	0.000088	<0.000050	NS	NS			
Heptachlor (mg/L)	0.00040	<0.00050	<0.000050	<0.000050	NS	NS			
Heptachlor epoxide (mg/L)	0.00020	<0.00050	<0.000050	<0.000050	NS	NS			
Toxaphene (mg/L)	NNS	<0.010	<0.00050	<0.00050	NS	NS			

NS - Not Sampled

Appendix I
Monitoring Data

OUTFALL ID: Tucson MS4 Grant Road RECEIVING WATER: Santa Cruz DESIGNATED USES: ADOT Facility		MONITORING SEASONS Summer: June 1 - October 31 Winter: November 1 - May 31							
		Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		12/1/08	6/30/09	4/23/10	NS	NS			
MONITORING PARAMETERS	WQS								
Flow	NNS	-	-	-	NS	NS			
pH	6.5-8.5	-	-	7.3	NS	NS			
Temperature (F°)	NNS	62.3	88.1	64.4	NS	NS			
Hardness	NNS	250		470	NS	NS			
Total Dissolved Solids (TDS) (mg/L)	500	680*	680*	910	NS	NS			
Total Suspended Solids (TSS) (mg/L)	NNS	110	160	130	NS	NS			
Turbidity (NTU)	NNS	94	-	58	NS	NS			
Biochemical Oxygen Demand (BOD) (mg/L)	NNS	65	44	90	NS	NS			
Chemical Oxygen Demand (COD) (mg/L)	NNS	560	640	490	NS	NS			
Inorganics									
Cyanide, total (mg/L)	0.2	0.0059	<0.0050	<0.10	NS	NS			
Sulfates (mg/L)	250	110	68	-	NS	NS			
Nutriants									
Nitrate (mg/L)	1	<0.10	0.21	9.9	NS	NS			
Nitrite (mg/L)	10	<0.10	<0.10	1.9	NS	NS			
Total Ammonia (mg/L)	NNS	6.2	6.7	<0.50	NS	NS			
Total Kjeldahl Nitrogen (TKN) (mg/L)	NNS	12	14	7.8	NS	NS			
Total Phosphorous (mg/L)	NNS	0.42	0.36	0.58	NS	NS			
Phosphate, Ortho (mg/L)	NNS	0.62	<0.12	310	NS	NS			
Sodium (mg/L)	NNS	-	18	18	NS	NS			
Calcium (mg/L)	NNS	-	100	150	NS	NS			
Chloride (mg/L)	10	26	19	14	NS	NS			

Appendix I
Monitoring Data

OUTFALL ID: Tucson MS4 Grant Road RECEIVING WATER: Santa Cruz DESIGNATED USES: ADOT Facility		MONITORING SEASONS Summer: June 1 - October 31 Winter: November 1 - May 31							
		Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		12/1/08	6/30/09	4/23/10	NS	NS			
Microbiological									
Coliform, fecal (col/100 ml)	NNS	-	-	2400*	NS	NS			
E.Coli (cfu/100 ml)	100.00	-	-	390	NS	NS			
Total Metals									
Antimony (mg/L)	0.00600	-	0.0046	<0.20	NS	NS			
Arsenic (mg/L)	0.05000	<0.020	0.003	<0.040	NS	NS			
Barium (mg/L)	2.0T	0.2	0.2	0.2	NS	NS			
Beryllium (mg/L)	0.00400	<0.0050	<0.0020	<0.0020	NS	NS			
Cadmium (mg/L)	0.00500	-	<0.0050	<0.0020	NS	NS			
Chromium (mg/L)	0.1T	<0.010	<0.010	<0.030	NS	NS			
Copper (mg/L)	1.3T	-	0.033	0.13	NS	NS			
Lead (mg/L)	0.015T	0.015	<0.0050	<0.040	NS	NS			
Mercury (mg/L)	0.00200	<0.00020	<0.00020	<0.0010	NS	NS			
Nickel (mg/L)	0.14000	-	<0.020	<0.050	NS	NS			
Selenium (mg/L)	0.02000	<0.020	0.02	<0.040	NS	NS			
Silver (mg/L)	NNS	<0.010	<0.010	<0.010	NS	NS			
Zinc (mg/L)	2.1T	-	0.18	0.41	NS	NS			
Organic Toxic Pollutnats									
Total Petroleum Hydrobarbons (TPH) (mg/L)	NNS	6.2	-	-	NS	NS			
Oil & Greese (Hexane Extr) (mg/L)	NNS	<5.6	<6.7	9.2	NS	NS			
Chlorine, residual (mg/L)	0.7	<0.10	-	<0.10	NS	NS			

Appendix I
Monitoring Data

OUTFALL ID: Tucson MS4 Grant Road RECEIVING WATER: Santa Cruz DESIGNATED USES: ADOT Facility		MONITORING SEASONS Summer: June 1 - October 31 Winter: November 1 - May 31							
		Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		12/1/08	6/30/09	4/23/10	NS	NS			
VOCs, Semi-VOCs and Pesticides									
Benzene (mg/L)	0.005	<0.0010	<0.00050	<0.50	NS	NS			
Ethylbenzene (mg/L)	0.70000	<0.0010	<0.00050	<0.50	NS	NS			
Toluene (mg/L)	1.00000	<0.0050	<0.0050	<0.50	NS	NS			
Total Xylene (mg/L)	10.00000	<0.0030	<0.0015	<0.50	NS	NS			
Chromium, Hexavalent (mg/L)	NNS	-	<0.010	-	NS	NS			
Chromium, Trivalent (mg/L)	NNS	-	<0.010	-	NS	NS			
MBAS (mg/L)	NNS	-	11	-	NS	NS			
Specific conductance (mg/L)	NNS	720	690	1000	NS	NS			
Total Nitrogen (mg/L)	NNS	12	-	11.8	NS	NS			
Toluene - d8 (mg/L)	NNS	99	-	<0.50	NS	NS			
Dibromofluoromethane (mg/L)	TTHM	100	-	-	NS	NS			
Endrin ketone (mg/L)	NNS	-	<0.000050	<0.96	NS	NS			
Hexachlorobenzene (mg/L)	0.00100	-	<0.000050	<96	NS	NS			
Methoxychlor (mg/L)	0.00400	-	<0.000050	<96	NS	NS			
Benzidine (mg/L)	0.00020	-	<0.050	<96	NS	NS			
Bis(2-chlorethoxy)methane (mg/L)	NNS	-	<0.010	<96	NS	NS			
Bis(2-chloroethyl)ether (mg/L)	0.03000	-	<0.010	<96	NS	NS			
Bis(2-chloroisopropyl)ether (mg/L)	0.28000	-	<0.010	<96	NS	NS			
4-Bromophenyl-phenylether (mg/L)	NNS	-	<0.010	<96	NS	NS			
2-Chloronaphthalene (mg/L)	NNS	-	<0.010	<96	NS	NS			
4-Chlorophenyl-phenylether (mg/L)	NNS	-	<0.010	<96	NS	NS			
3,3-Dichlorobenzidine (mg/L)	0.00310	-	<0.010	<190	NS	NS			
2,4-Dinitrotoluene (mg/L)	0.01400	-	<0.010	<96	NS	NS			
2,6-Dinitrotoluene (mg/L)	0.00005	-	<0.010	<96	NS	NS			

OUTFALL ID: Tucson MS4 Grant Road RECEIVING WATER: Santa Cruz DESIGNATED USES: ADOT Facility		MONITORING SEASONS Summer: June 1 - October 31 Winter: November 1 - May 31							
		Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		12/1/08	6/30/09	4/23/10	NS	NS			
Hexachlorobenzene (mg/L)	0.00100	-	<0.010	<96	NS	NS			
Hexachloro-1,3-butadiene (mg/L)	NNS	-	<0.010	<96	NS	NS			
Hexachlorocyclopentadiene (mg/L)	0.05000	-	<0.010	<96	NS	NS			
Hexachloroethane (mg/L)	0.00250	-	<0.010	<96	NS	NS			
Isophorone (mg/L)	0.03700	-	<0.010	<96	NS	NS			
Nitrobenzene (mg/L)	0.00350	-	<0.010	<96	NS	NS			
n-Nitrosodimethylamine (mg/L)	0.00800	-	<0.050	<96	NS	NS			
n-Nitrosodiphenylamine (mg/L)	0.00710	-	<0.010	<96	NS	NS			
n-Nitrosodi-n-propylamine (mg/L)	0.00500	-	<0.010	<96	NS	NS			
Benzylbutyl phthalate (mg/L)	NNS	-	<0.010	<96	NS	NS			
Bis(2-ethylhexyl)phthalate (mg/L)	NNS	-	<0.010	<96	NS	NS			
1,2,4-Trichlorobenzene (mg/L)	0.07000	-	<0.010	<96	NS	NS			
4-Chloro-3-methylphenol (mg/L)	NNS	-	<0.010	<96	NS	NS			
4,6-Dinitro-2-methylphenol (mg/L)	NNS	-	<0.010	<190	NS	NS			
Acid Compounds									
2-Chlorophenol (mg/L)	0.03500	-	<0.010	<96	NS	NS			
2,4-Dichlorophenol (mg/L)	0.02100	-	<0.010	<96	NS	NS			
2,4-Dimethylphenol (mg/L)	0.14000	-	<0.010	<96	NS	NS			
2,4-Dinitrophenol (mg/L)	0.01400	-	<0.010	<480	NS	NS			
2-Nitrophenol (mg/L)	NNS	-	<0.010	<96	NS	NS			
4-Nitrophenol (mg/L)	NNS	-	<0.010	<480	NS	NS			
Pentachlorophenol (mg/L)	0.00100	-	<0.010	<290	NS	NS			
Phenol (mg/L)	4.20000	-	<0.010	<96	NS	NS			
2,4,6-Trichlorophenol (mg/L)	0.00320	-	<0.010	<96	NS	NS			

OUTFALL ID: Tucson MS4 Grant Road RECEIVING WATER: Santa Cruz DESIGNATED USES: ADOT Facility		MONITORING SEASONS Summer: June 1 - October 31 Winter: November 1 - May 31							
		Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		12/1/08	6/30/09	4/23/10	NS	NS			
Bases/Neutrals									
Acenaphthene (mg/L)	0.42000	-	<0.010	<48	NS	NS			
Acenaphthylene (mg/L)	NNS	-	<0.010	<48	NS	NS			
Anthracene (mg/L)	2.10000	-	<0.010	<48	NS	NS			
Benzo(a)anthracene (mg/L)	0.00190	-	<0.010	<48	NS	NS			
Benzo(a)pyrene (mg/L)	0.00020	-	<0.010	<48	NS	NS			
Benzo(b)fluoranthene (mg/L)	NNS	-	<0.010	<96	NS	NS			
Benzo(g,h,i)perylene (mg/L)	NNS	-	<0.010	<48	NS	NS			
Benzo(k)fluoranthene (mg/L)	0.04800	-	<0.010	<96	NS	NS			
Chrysene (mg/L)	0.00479	-	<0.010	<48	NS	NS			
Dibenz(a,h)anthracene (mg/L)	0.00190	-	<0.010	<48	NS	NS			
Diethyl phthalate (mg/L)	5.60000	-	<0.010	<96	NS	NS			
Dimethyl phthalate (mg/L)	NNS	-	<0.010	<96	NS	NS			
Di-n-butyl phthalate (mg/L)	NNS	-	<0.010	<96	NS	NS			
Di-n-octyl phthalate (mg/L)	2.80000	-	<0.010	<96	NS	NS			
Fluoranthene (mg/L)	0.28000	-	<0.010	<48	NS	NS			
Fluorene (mg/L)	0.28000	-	<0.010	<48	NS	NS			
Indeno(1,2,3-cd)pyrene (mg/L)	0.00048	-	<0.010	<48	NS	NS			
Naphthalene (mg/L)	0.14000	-	<0.010	<48	NS	NS			
Phenanthrene (mg/L)	NNS	-	<0.010	<48	NS	NS			
Pyrene (mg/L)	0.21000	-	<0.010	<48	NS	NS			

Appendix I
Monitoring Data

OUTFALL ID: Tucson MS4 Grant Road RECEIVING WATER: Santa Cruz DESIGNATED USES: ADOT Facility		MONITORING SEASONS Summer: June 1 - October 31 Winter: November 1 - May 31							
		Winter 2008-09	Summer 2009	Winter 2009-10	Summer 2010	Winter 2010-11	Summer 2011	Winter 2011-12	Summer 2012
SAMPLING DATE		12/1/08	6/30/09	4/23/10	NS	NS			
Pesticides									
Aldrin (mg/L)	0.00200	-	<0.000050	<96	NS	NS			
Alpha BHC (mg/L)	NNS	-	<0.000050	<96	NS	NS			
Beta BHC (mg/L)	NNS	-	<0.000050	<96	NS	NS			
Delta BHC (mg/L)	NNS	-	<0.000050	<96	NS	NS			
Gamma BHC (mg/L)	NNS	-	<0.000050	<96	NS	NS			
Chlordane (mg/L)	0.00200	-	<0.00050	<96	NS	NS			
4,4-DDD (mg/L)	NNS	-	<0.000050	<96	NS	NS			
4,4-DDE (mg/L)	NNS	-	<0.000050	<96	NS	NS			
4,4-DDT (mg/L)	NNS	-	<0.000050	<96	NS	NS			
Dieldrin (mg/L)	0.00200	-	<0.000050	<96	NS	NS			
Endosulfan I (mg/L)	NNS	-	<0.000050	<96	NS	NS			
Endosulfan II (mg/L)	NNS	-	<0.000050	<96	NS	NS			
Endosulfan sulfate (mg/L)	NNS	-	<0.000050	<96	NS	NS			
Endrin (mg/L)	0.00200	-	<0.000050	<96	NS	NS			
Endrin aldehyde (mg/L)	NNS	-	<0.000050	<96	NS	NS			
Heptachlor (mg/L)	0.00040	-	<0.000050	<96	NS	NS			
Heptachlor epoxide (mg/L)	0.00020	-	<0.000050	<96	NS	NS			
Toxaphene (mg/L)	NNS	-	<0.00050	<0.00096	NS	NS			

NS - Not Sampled

APPENDIX J
Industrial Discharge Monitoring Reports

AZS000018
DISCHARGE MONITORING REPORT (DMR)

(Complete a separate form for each monitoring point)

Facility Name: Durango Sign Factory		**Monitoring Point (Outfall):** Storm drain located approximately south-central in the parking lot
Facility Address: 2104 South 22nd Avenue, Phoenix, Arizona 85009		**Year:** 2010/11 Reporting Year – Summer/Winter Storm Event
Monitoring Personnel Name(s): NA		**Date/Time Collected:** NA
Time Rainfall Began: NA	**Duration of Rainfall Event:** NA	**Rainfall Amount (inches):** NA
Runoff Source: ☐ Rainfall ☐ Snowmelt	**Time Elapsed Since Last 0.1 inch Rainfall Event:** NA	**Qualifying Rainfall Event:** ☐ YES ☐ NO
Estimated Total Volume of Discharge (Include units; gal, ft^3, etc.): **32,700 ft^2 X ___NA__ of rain = NA X 75% runoff =NA (7.2827) = NA**		**NO DISCHARGE** ☒

Parameter	Quantity or Loading			Quality or Concentration			No Ex	Frequency of Analysis	Sample Type
	Average	Maximum	Units	Minimum	Average	Units			
Nitrate + Nitrite						mg/L		Once each season	Grab
TSS						mg/L		Once each season	Grab
Total Nitrogen						mg/L		Once each season	Grab
TKN						mg/L		Once each season	Grab

Adequate volume of discharge was not received to conduct analyses

APPENDIX K
Construction Discharge Monitoring Reports

ARIZONA DEPARTMENT OF TRANSPORTATION

Monthly Discharge Monitoring Report (DMR) Form
for the ADOT Statewide Permit #AZS000018-2008

☒ NO DISCHARGE THIS MONTH

PROJECT NAME AND ADDRESS:
I-10 Marsh Station to Cienega Creek
ARRA-010-E(201)A & 010-E-NFA

COMPLETE AND SUBMIT ONE COPY PER MONITORING POINT

Mail to: ADOT Office of Environmental Services
Water Quality Group
1611 W Jackson Street, MD EM02
Phoenix, AZ 85007

AZS000018-2008
PERMIT NUMBER

#1
MONITORING POINT ID

02	11
MONTH	YEAR

PARAMETERS		TURBIDITY					Streamflow	
ANALYSIS TYPE: (Field, Lab, Calculation*)		Field					Field	Calc.*
UNITS		NTUs					ft³/sec	kg/day
PERMIT LIMITS	Min.							TMDL Info Only
	Mean							
	Max.							
DAY OF THE MONTH	1							
	2							
	3							
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	28							
	29							
	30							
	31							
Monthly Mean								
Highest Value								
Lowest Value								
Number of Exceedances								

* TMDL Loading Calculations in kg/day: mg/L x Streamflow x 2.4465 :g/L x Streamflow x 0.0024465

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 assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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.

Sean Sebsela
NAME OF PRINCIPAL EXECUTIVE OFFICER

2/18/11
DATE

ECC
TITLE OF PRINCIPAL EXECUTIVE OFFICER

602-920-9264
TELEPHONE

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER

for Sean Sebsela

ARIZONA DEPARTMENT OF TRANSPORTATION

Monthly Discharge Monitoring Report (DMR) Form
for the ADOT Statewide Permit #AZS000018-2008

X NO DISCHARGE THIS MONTH

PROJECT NAME AND ADDRESS:
I-10 Marsh Station to Cienega Creek
ARRA-010-E(201)A & 010-E-NFA

COMPLETE AND SUBMIT ONE COPY PER MONITORING POINT

Mail to: ADOT Office of Environmental Services
Water Quality Group
1611 W Jackson Street, MD EM02
Phoenix, AZ 85007

AZS000018-2008	#2	02	18	11
PERMIT NUMBER	MONITORING POINT ID	MONTH	YEAR	

PARAMETERS		TURBIDITY					Streamflow	
ANALYSIS TYPE: (Field, Lab, Calculation*)		Field					Field	Calc.*
UNITS		NTUs					ft³/sec	kg/day
PERMIT LIMITS	Min.							TMDL Info Only
	Mean							
	Max.							
DAY OF THE MONTH	1							
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Monthly Mean								
Highest Value								
Lowest Value								
Number of Exceedances								

* TMDL Loading Calculations in kg/day: mg/L x Streamflow x 2.4465 :g/L x Streamflow x 0.0024465

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 assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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.

Sean Sebela
NAME OF PRINCIPAL EXECUTIVE OFFICER

2/18/11
DATE

ECC
TITLE OF PRINCIPAL EXECUTIVE OFFICER

602-820-9264
TELEPHONE

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER

for Sean Sebela

ARIZONA DEPARTMENT OF TRANSPORTATION

Monthly Discharge Monitoring Report (DMR) Form
for the ADOT Statewide Permit #AZS000018-2008

☒ NO DISCHARGE THIS MONTH

PROJECT NAME AND ADDRESS:
I-10 Marsh Station to Cienega Creek
ARRA-010-E(201)A & 010-E-NFA

COMPLETE AND SUBMIT ONE COPY PER MONITORING POINT

Mail to: ADOT Office of Environmental Services
Water Quality Group
1611 W Jackson Street, MD EM02
Phoenix, AZ 85007

AZS000018-2008	#3	02	11
PERMIT NUMBER	MONITORING POINT ID	MONTH	YEAR

PARAMETERS		TURBIDITY					Streamflow	
ANALYSIS TYPE: (Field, Lab, Calculation*)		Field					Field	Calc.*
UNITS		NTUs					ft³/sec	kg/day
PERMIT LIMITS	Min.							TMDL Info Only
	Mean							
	Max.							
DAY OF THE MONTH	1							
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Monthly Mean								
Highest Value								
Lowest Value								
Number of Exceedances								

* TMDL Loading Calculations in kg/day: mg/L x Streamflow x 2.4465 :g/L x Streamflow x 0.0024465

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 assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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.

Sean Sebela
NAME OF PRINCIPAL EXECUTIVE OFFICER

2/18/11
DATE

ECC
TITLE OF PRINCIPAL EXECUTIVE OFFICER

602-920-9264
TELEPHONE

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER

for
Sean Sebela

ARIZONA DEPARTMENT OF TRANSPORTATION

Monthly Discharge Monitoring Report (DMR) Form
for the ADOT Statewide Permit #AZS000018-2008

☐ NO DISCHARGE THIS MONTH

PROJECT NAME AND ADDRESS:
I-10 Marsh Station to Cienega Creek
ARFA-010-E(201)A & 010-E-NFA

COMPLETE AND SUBMIT ONE COPY PER MONITORING POINT

Mail to: ADOT Office of Environmental Services
Water Quality Group
1611 W Jackson Street, MD EM02
Phoenix, AZ 85007

AZS000018-2008	#1	03	25	11
PERMIT NUMBER	MONITORING POINT ID	MONTH	YEAR	

PARAMETERS		TURBIDITY					Streamflow	
ANALYSIS TYPE: (Field, Lab, Calculation*)		Field					Field	Calc.*
UNITS		NTUs					ft³/sec	kg/day
PERMIT LIMITS	Min.							TMDL Info Only
	Mean							
	Max.							
DAY OF THE MONTH	1							
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	30							
	31							
Monthly Mean								
Highest Value								
Lowest Value								
Number of Exceedances								

* TMDL Loading Calculations in kg/day: mg/L x Streamflow x 2.4465 :g/L x Streamflow x 0.0024465

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 assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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.

Tom Billings
NAME OF PRINCIPAL EXECUTIVE OFFICER

3/25/11
DATE

ECC
TITLE OF PRINCIPAL EXECUTIVE OFFICER

602-619-8454
TELEPHONE

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER

ARIZONA DEPARTMENT OF TRANSPORTATION

Monthly Discharge Monitoring Report (DMR) Form
for the ADOT Statewide Permit #AZS000018-2008

☒ NO DISCHARGE THIS MONTH

PROJECT NAME AND ADDRESS:
I-10 Marsh Station to Cienega Creek
ARRA-010-E(201)A & 010-E-NFA

COMPLETE AND SUBMIT ONE COPY PER MONITORING POINT

Mail to: ADOT Office of Environmental Services
Water Quality Group
1611 W Jackson Street, MD EM02
Phoenix, AZ 85007

AZS000018-2008	#2	03	25	11
PERMIT NUMBER	MONITORING POINT ID	MONTH	YEAR	

PARAMETERS		TURBIDITY					Streamflow	
ANALYSIS TYPE: (Field, Lab, Calculation*)		Field					Field	Calc.*
UNITS		NTUs					ft^3/sec	kg/day
PERMIT LIMITS	Min.							TMDL Info Only
	Mean							
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DAY OF THE MONTH	1							
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Lowest Value								
Number of Exceedances								

* TMDL Loading Calculations in kg/day: mg/L x Streamflow x 2.4465 :g/L x Streamflow x 0.0024465

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Tom Billings
NAME OF PRINCIPAL EXECUTIVE OFFICER

3/25/11
DATE

ECC
TITLE OF PRINCIPAL EXECUTIVE OFFICER

602-619-8454
TELEPHONE

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER

ARIZONA DEPARTMENT OF TRANSPORTATION

Monthly Discharge Monitoring Report (DMR) Form
for the ADOT Statewide Permit #AZS000018-2008

☒ NO DISCHARGE THIS MONTH

PROJECT NAME AND ADDRESS:
I-10 Marsh Station to Genega Creek
ARRA-010-E(201)A & 010-E-NFA

COMPLETE AND SUBMIT ONE COPY PER MONITORING POINT

Mail to: ADOT Office of Environmental Services
Water Quality Group
1611 W Jackson Street, MD EM02
Phoenix, AZ 85007

AZS000018-2008	#3	03	25	11
PERMIT NUMBER	MONITORING POINT ID	MONTH	YEAR	

PARAMETERS		TURBIDITY					Streamflow	
ANALYSIS TYPE: (Field, Lab, Calculation*)		Field					Field	Calc.*
UNITS		NTUs					ft³/sec	kg/day
PERMIT LIMITS	Min.							TMDL Info Only
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	Max.							
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Lowest Value								
Number of Exceedances								

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Tom Billings
NAME OF PRINCIPAL EXECUTIVE OFFICER

3/25/11
DATE

ECC
TITLE OF PRINCIPAL EXECUTIVE OFFICER

602-619-8454
TELEPHONE

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER

ARIZONA DEPARTMENT OF TRANSPORTATION

Monthly Discharge Monitoring Report (DMR) Form
for the ADOT Statewide Permit #AZS000018-2008

☒ NO DISCHARGE THIS MONTH

PROJECT NAME AND ADDRESS:
I-10 Marsh Station to Cienega Creek
ARRA-010-E(201)A & 010-E-NFA

COMPLETE AND SUBMIT ONE COPY PER MONITORING POINT

Mail to: ADOT Office of Environmental Services
Water Quality Group
1611 W Jackson Street, MD EM02
Phoenix, AZ 85007

AZS000018-2008	#1	04	11
PERMIT NUMBER	MONITORING POINT ID	MONTH	YEAR

PARAMETERS		TURBIDITY					Streamflow	
ANALYSIS TYPE: (Field, Lab, Calculation*)		Field					Field	Calc.*
UNITS		NTUs					ft^3/sec	kg/day
PERMIT LIMITS	Min.							TMDL Info Only
	Mean							
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Lowest Value								
Number of Exceedances								

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Tom Billings
NAME OF PRINCIPAL EXECUTIVE OFFICER

ECC
TITLE OF PRINCIPAL EXECUTIVE OFFICER

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER

4/21/11
DATE

602-619-8454
TELEPHONE

ARIZONA DEPARTMENT OF TRANSPORTATION

Monthly Discharge Monitoring Report (DMR) Form
for the ADOT Statewide Permit #AZS000018-2008

☐ NO DISCHARGE THIS MONTH

PROJECT NAME AND ADDRESS:
I-10 Marsh Station to Cienega Creek
ARRA-010-E(201)A & 010-E-NFA

COMPLETE AND SUBMIT ONE COPY PER MONITORING POINT

Mail to: ADOT Office of Environmental Services
Water Quality Group
1611 W Jackson Street, MD EM02
Phoenix, AZ 85007

AZS000018-2008
PERMIT NUMBER

#2
MONITORING POINT ID

0 4	2 1 1 1
MONTH	YEAR

PARAMETERS		TURBIDITY					Streamflow	
ANALYSIS TYPE: (Field, Lab, Calculation*)		Field					Field	Calc.*
UNITS		NTUs					ft³/sec	kg/day
PERMIT LIMITS	Min.							TMDL Info Only
	Mean							
	Max.							
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Tom Billings
NAME OF PRINCIPAL EXECUTIVE OFFICER

4/21/11
DATE

ECC
TITLE OF PRINCIPAL EXECUTIVE OFFICER

602-619-8454
TELEPHONE

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER

ARIZONA DEPARTMENT OF TRANSPORTATION

Monthly Discharge Monitoring Report (DMR) Form
for the ADOT Statewide Permit #AZS000018-2008

☑ NO DISCHARGE THIS MONTH

PROJECT NAME AND ADDRESS:
I-10 Marsh Station to Cienega Creek
ARRA-010-E(201)A & 010-E-NFA

COMPLETE AND SUBMIT ONE COPY PER MONITORING POINT

Mail to: ADOT Office of Environmental Services
Water Quality Group
1611 W Jackson Street, MD EM02
Phoenix, AZ 85007

AZS000018-2008
PERMIT NUMBER

#3
MONITORING POINT ID

0 4	2 0 1 1
MONTH	YEAR

PARAMETERS		TURBIDITY					Streamflow	
ANALYSIS TYPE: (Field, Lab, Calculation*)		Field					Field	Calc.*
UNITS		NTUs					ft^3/sec	kg/day
PERMIT LIMITS	Min.							TMDL Info Only
	Mean							
	Max.							
DAY OF THE MONTH	1							
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Number of Exceedances								

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Tom Billings
NAME OF PRINCIPAL EXECUTIVE OFFICER

ECC
TITLE OF PRINCIPAL EXECUTIVE OFFICER

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER

4/21/11
DATE

602-619-8454
TELEPHONE

LETTER OF TRANSMITTAL

AMES CONSTRUCTION, INC
8333 East Hartford Drive
Scottsdale, AZ 85255
TELEPHONE (602) 431-2111
FAX (602) 431-5952

TO: Arizona Department of Transportation
200 North Colcord, Suite C
Payson, AZ 85541

DATE: 6/2/2011

PROJECT NO. 260 GI 269/AC-NH-053-2(043)N
TRACS NO. H469801C

ATTN: **Tom Goodman**
RE: DMR submittal

TRANSMITTAL NO. 100303-AC-ADOT-T114

WE ARE SENDING YOU:

- [x] Submittal
- [ ] Reports
- [ ] Shop Drawings
- [ ] Samples
- [ ] OTHER _____
- [ ] Specifications/Plans
- [ ] Data
- [ ] Copy of Letter
- [ ] Change Order/Request

Copies	Spec. Section	Description	Manufacturer	Action

THESE ARE TRANSMITTED:

- [ ] For Approval
- [ ] (A) Approved as Submitted
- [ ] (E) Not Approved
- [ ] Resubmittal
- [ ] (B) Approved as Noted
- [x] For Your Use/Files/Information
- [ ] For Color Selection
- [ ] (C) For Revision & Resubmittal
- [ ] Final Distribution
- [ ] As Requested
- [ ] See Comments
- [ ] OTHER: _____

YOU ARE REQUESTED TO:

- [ ] Return____Copies
- [ ] Resubmit____Copies for Approval
- [ ] Submit____Copies for Final Distribution

YOUR RESPONSE IS REQUESTED BY: _____
COMMENTS: _____

DISTRIBUTION:

Trans.	Copy	

As Transmitted/Submitted by:

Curtis Bilow, Project Manager

Ames Construction, Inc.
8333 East Hartford Drive
Scottsdale, AZ 85255
(602) 431-2111 Fax: (602) 431-5952
AZ ROC Lic# 074995-002 CLASS A

Since 1934

June 2, 2011

Serial # 100303-AC-AD-L029

Arizona Department of Transportation
200 North Colcord, Suite C
Payson, AZ 85541

Attention: Tom Goodman

SUBJECT: Discharge Monitoring Report submittal

REFERENCE: SR-260 Doubtful Canyon

Mr. Goodman,

Ames Construction, Inc. (Ames) respectfully transmits a copy of the Discharge Monitoring Report for the period November 1 through May 31st pursuant to Part V.F.1.of the Construction General Permit AZG2008-001. Ames faxed a copy to the Arizona Department of Environmental Quality on June 2, 2011. Please note that no discharge occurred during this monitoring period.

If there are any questions or comments, please do not hesitate to contact me at 602.540.7981 (cell) or at the number listed above.

Sincerely,
Ames Construction, Inc.

Curtis Bilow
Project Manager

Cc: File
Attachments

Construction General Permit AZG2008-001
Discharge Monitoring Report Form

ADEQ Arizona Department of Environmental Quality

Submit to:
Arizona Department of Environmental Quality
Surface Water Section, Stormwater & General Permits Unit
1110 West Washington Street, 5415A-1
Phoenix, Arizona 85007

I. Authorization # AZCON-57967 Project/Site Name: Payson to Show Low Hwy - Doubtful Canyon SR 260 MP 269 To MP 272.3

Monitoring Period (yr/mo/day): 2/15/11 to 5/31/11

Use this form for reporting analytical and visual monitoring anytime a pollutant is known or suspected to discharge from the construction site (Permit Part V.F.).

II. Contact Information

Name: Curtis Bilow

Address: 8333 E Hartford Drive

Phone Number: 602-540-7981

V. Pollutants Monitored

III. Discharge Date	IV. Sample Date	A. Visual Monitoring: Sheen	Color	Foam	Solids	Odor (specify)	Other (specify)	Other (specify)	B. Analytical Monitoring: TSS (Units)	Turbidity (Units)	pH	Other (specify)	Other (specify)

No Discharge

VI. ATTACHMENTS Y ☐ N ■ IF "YES," LIST: _____

VII. CERTIFICATION:

"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 assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, I believe the information submitted is 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."

Printed Name: Curtis Bilow Title: Project Manager Phone: 602-540-7981

Signature: _____ Date: 6/2/2011

June 2008

Ames Construction

Fax

To: Attention Storm Water & ADEQ - General Permits Units **From:** Ames Construction, Inc.

Fax: 602-771-4528 **Pages:** 2

Phone: **Date:** 6-2-11

Re: DMR submittal for Nov-May period **cc:**

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

• **Comments:**

APPENDIX L
Maintenance Facility Discharge Monitoring Reports

AZS000018
DISCHARGE MONITORING REPORT (DMR)

(Complete a separate form for each monitoring point)

Facility Name: Nogales Maintenance Yard	**Monitoring Point (Outfall):** Outfall from yard (drains approximately 2.75 acres or 119,790 ft^2)
Facility Address: 1340 North Hohokam Drive, Nogales, Arizona	**Year:** 2010/11 Reporting Year –Summer Storm Event
Monitoring Personnel Name(s): Thomas Ross, EEC	**Date/Time Collected:** 7/20/2010 @ 12:45pm

Time Rainfall Began: Approx 10:30am	**Duration of Rainfall Event:** Approx. 3 Hrs	**Rainfall Amount (inches):** 0.24 (0.02 feet)
Runoff Source: ☒ Rainfall ☐ Snowmelt	**Time Elapsed Since Last 0.1 inch Rainfall Event:** **Approximately 32 days**	**Qualifying Rainfall Event:** ☒ YES ☐ NO
Estimated Total Volume of Discharge (Include units; gal, ft^3, etc.): **119,790 ft^2 X 0.02 ft^2 of rain = 2,395.8 ft^3 X 75% runoff = 1,796.85 ft^3 (7.2827) = 13,093.65 gallons**		**NO DISCHARGE** ☐

Parameter	Quantity or Loading			Quality or Concentration			No Ex	Frequency of Analysis	Sample Type
	Average	Maximum	Units	Minimum	Average	Units			
Ammonia Nitrogen		**0.11**	**Lbs**	**0.50**		**mg/L**		**Once each season**	**Grab**
Total Dissolved Solids		**64.55**	**Lbs**	**290**		**mg/L**		**Once each season**	**Grab**
Total Suspended Solids		**144.69**	**Lbs**	**650**		**mg/L**		**Once each season**	**Grab**
Copper, total		**0.11**	**Lbs**	**0.51**		**mg/L**		**Once each season**	**Grab**
TPH - DRO		**1.18**	**Lbs**	**5.3**		**mg/L**		**Once each season**	**Grab**
Residual Chlorine		**0.12**	**Lbs**	**0.55**		**mg/L**		**Once each season**	**Grab**
Total Coliform		**534.24**	**Lbs**	**2400**		**MPN**		**Once each season**	**Grab**
E. Coli		**534.24**	**Lbs**	**2400**		**MPN**		**Once each season**	**Grab**
Total Hardness		**NR**	**Lbs**	**NR**		**mg/L**		**Once each season**	**Grab**

NR – Not Reported

AZS000018
DISCHARGE MONITORING REPORT (DMR)

(Complete a separate form for each monitoring point)

Facility Name: ADOT – Superior Fuel Yard L-413522-01		**Monitoring Point (Outfall):** Along the west corner of the exterior of the fuel yard
Facility Address: 952 W Main St., Superior, AZ 85273		**Year:** 2010/11 Reporting Year – Summer Storm Event
Monitoring Personnel Name(s): Gary Hoffmann, EEC		**Date/Time Collected:** 7/22/10 at 11:39am
Time Rainfall Began: Approximately 9:30 am	**Duration of Rainfall Event:** Approximately 2 hours	**Rainfall Amount (inches):** 0.21 inches (or 0.0175 ft)
Runoff Source: ☒ Rainfall ☐ Snowmelt	**Time Elapsed Since Last 0.1 inch Rainfall Event:** Approximately 15 days	**Qualifying Rainfall Event:** ☒ YES ☐ NO
Estimated Total Volume of Discharge (Include units; gal, ft^3, etc.): **9,150 ft^2 X 0.022 ft^2 of rain = 198.25 ft^3 X 75% runoff = 148.69 ft^3 (7.2827) = 1,082.84 gallons**		**NO DISCHARGE** ☐

Parameter	Quantity or Loading			Quality or Concentration			No Ex	Frequency of Analysis	Sample Type
	Average	Maximum	Units	Minimum	Average	Units			
Total Dissolved Solids		**79.52**	**Lbs**	**450**		**mg/L**		**Once Per Season**	**Grab**
Total Suspended Solids		**30.04**	**Lbs**	**170**		**mg/L**		**Once Per Season**	**Grab**
Copper		**0.05**	**Lbs**	**0.28**		**mg/L**		**Once Per Season**	**Grab**
Copper, Dissolved		**0.01**	**Lbs**	**0.056**		**mg/L**		**Once Per Season**	**Grab**
Oil & Grease (Hexane Extr)		**0.80**	**Lbs**	**5.3**		**mg/L**		**Once Per Season**	**Grab**

AZS000018
DISCHARGE MONITORING REPORT (DMR)

(Complete a separate form for each monitoring point)

Facility Name: ADOT – Superior Maintenance Yard		**Monitoring Point (Outfall):** Along the southeast corner of the maintenance yard
Facility Address: 951 W Main St., Superior, AZ 85273		**Year:** 2010/2011 Reporting Year – Summer Storm Event
Monitoring Personnel Name(s): Gary Hoffmann, EEC		**Date/Time Collected:** 7/22/10 at 11:39am
Time Rainfall Began: Approximately 9:30 am	**Duration of Rainfall Event:** Approximately 2 hours	**Rainfall Amount (inches):** 0.21 inches (or 0.0175 ft)
Runoff Source: ☒ Rainfall ☐ Snowmelt	**Time Elapsed Since Last 0.1 inch Rainfall Event:** Approximately 15 days	**Qualifying Rainfall Event:** ☒ YES ☐ NO
Estimated Total Volume of Discharge (Include units; gal, ft^3, etc.): **16,500 ft^2 X 0.0175 ft^2 of rain = 288.75 ft^3 X 75% runoff = 216.56 ft^3 (7.2827) = 1,577.16 gallons**		**NO DISCHARGE** ☐

Parameter	Quantity or Loading			Quality or Concentration			No Ex	Frequency of Analysis	Sample Type
	Average	Maximum	Units	Minimum	Average	Units			
Oil & Grease (Hexane Extr)		**0.94**	**Lbs**	**5.3**		**mg/L**		**Once per season**	**Grab**
Total Dissolved Solids		**79.52**	**Lbs**	**450**		**mg/L**		**Once per season**	**Grab**
Total Suspended Solids		**25.52**	**Lbs**	**170**		**mg/L**		**Once per season**	**Grab**
Copper		**0.04**	**Lbs**	**0.28**		**mg/L**		**Once per season**	**Grab**
Copper, Dissolved		**0.01**	**Lbs**	**0.056**		**mg/L**		**Once per season**	**Grab**

APPENDIX M
Maintenance Facility Laboratory Report

Superior Maintenance Yard

ESC LAB SCIENCES
YOUR LAB OF CHOICE

12065 Lebanon Rd
Mt. Juliet, TN 37122
(615) 758-5858
(800) 767-5859
Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

Quality Control Summary
SDG: L470257

For: Engineering & Env. Consultants, INC. -AZ
Superior Storage and Fueling Yard

L470257

Lab SampleID.	Client ID
L470257-01	SUPERIOR STORAGE YARD

ESC LAB SCIENCES
YOUR LAB OF CHOICE

12065 Lebanon Rd
Mt. Juliet, TN 37122
(615) 758-5858
(800) 767-5859
Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

Quality Control Summary
SDG: L470257

For: Engineering & Env. Consultants, INC. -AZ
Project: Superior Storage and Fueling Yard
July 30, 2010

Sample Receiving and Handling

All sample aliquots were received at the correct temperature, in the proper containers, and with the appropriate preservatives. All method specified holding times were met.

Dissolved Solids by Method 2540C

Laboratory Control Sample

Sample L470257-01 was analyzed in analytical batch WG490104. The laboratory control sample associated with this sample was within the laboratory control limits.

Sample Duplicate Analysis

For analytical batch WG490104 sample duplicate analysis was performed on sample L470043-03. The relative percent differences were within the method limits.

For analytical batch WG490104 sample duplicate analysis was performed on sample L470290-02. The relative percent differences were within the method limits.

Matrix Spike/Matrix Spike Duplicate

Precision for batch WG490104 was evaluated using the LCS / LCSD. The RPDs were within method limits.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Oil & Grease (Hexane Extr) by Method 1664A

Laboratory Control Sample

Sample L470257-01 was analyzed in analytical batch WG490396. The laboratory control sample associated with this sample was within the laboratory control limits.

Matrix Spike/Matrix Spike Duplicate

Precision for batch WG490396 was evaluated using the LCS / LCSD. The RPDs were within method limits.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Suspended Solids by Method 2540D

Laboratory Control Sample

Sample L470257-01 was analyzed in analytical batch WG490813. The laboratory control sample associated with this sample was within the laboratory control limits.

Sample Duplicate Analysis

For analytical batch WG490813 sample duplicate analysis was performed on sample L470257-01. The relative percent differences were within the method limits.

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

12065 Lebanon Rd
Mt. Juliet, TN 37122
(615) 758-5858
(800) 767-5859
Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

Quality Control Summary
SDG: L470257
For: Engineering & Env. Consultants, INC. -AZ
Project: Superior Storage and Fueling Yard
July 30, 2010

Matrix Spike/Matrix Spike Duplicate
Precision for batch WG490813 was evaluated using the LCS / LCSD. The RPDs were within method limits.

Blank Analysis
The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Trace Metals by Method 6010B
Laboratory Control Sample
Sample L470257-01 was analyzed in analytical batch WG490219. The laboratory control sample associated with this sample was within the laboratory control limits for all compounds.

Sample L470257-01 was analyzed in analytical batch WG490656. The laboratory control sample associated with this sample was within the laboratory control limits for all compounds.

Sample Duplicate Analysis
For analytical batch WG490219 sample duplicate analysis was performed on sample L470412-01. The relative percent differences were within the method limits.

For analytical batch WG490656 sample duplicate analysis was performed on sample L470580-13. The relative percent differences were within the method limits.

Matrix Spike/Matrix Spike Duplicate
For analytical batch WG490219 matrix spike/matrix spike duplicate analysis was performed on sample L470412-01. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes.

For analytical batch WG490656 matrix spike/matrix spike duplicate analysis was performed on sample L470580-13. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes.

Blank Analysis
The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Nancy F. Winters
ESC Representative
ESC Lab Sciences

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Est. 1970

Gary Hoffmann
Engineering & Env. Consultants, INC. -AZ
7878 N. 16th Street, Suite 140
Phoenix, AZ 85020

Report Summary

Friday July 30, 2010

Report Number: L470257
Samples Received: 07/23/10
Client Project: 308032.07

Description: Superior Fueling Yard

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Daphne R Richards

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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Quality Control Summary
SDG: L470257

For: Engineering & Env. Consultants, INC. -AZ
Superior Storage and Fueling Yard

L470257

Lab SampleID.	Client ID
L470257-01	SUPERIOR STORAGE YARD

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SAMPLE NUMBER
SUPERIOR STORAGE YARD

Customer :	Engineering & Env. Consultants, INC. -	Project :	308032.07
Source :	SUPERIOR STORAGE YARD	Date Sampled :	7/22/2010 11:39 AM
Location :	Superior Storage and Fueling Yard	Sampled By :	Phillip McNamara
Lab Sample ID :	**L470257-01**	Date Received :	7/23/2010

1664A

Analytic Batch: WG490396 | Analysis Date: 7/28/2010 | Analysis Time: 12:32
Instrument: BAL | Analyst: 078 | Preparation Date: 7/27/2010 12:24
Method: 1664A | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
	Oil & Grease (Hexane Extr)	5.3	< 5.3	

2540C

Analytic Batch: WG490104 | Analysis Date: 7/28/2010 | Analysis Time: 10:04
Instrument: BAL | Analyst: 183 | Preparation Date: 7/27/2010 7:52
Method: 2540C | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
DSOLIDS	Dissolved Solids	10	**450**	

2540D

Analytic Batch: WG490813 | Analysis Date: 7/28/2010 | Analysis Time: 6:38 PM
Instrument: BAL | Analyst: 183 | Preparation Date: 7/28/2010 6:38
Method: 2540D | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
SSOLIDS	Suspended Solids	1.0	**170**	

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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SAMPLE NUMBER
SUPERIOR STORAGE YARD

Customer :	Engineering & Env. Consultants, INC. -	Project :	308032.07
Source :	SUPERIOR STORAGE YARD	Date Sampled :	7/22/2010 11:39 AM
Location :	Superior Storage and Fueling Yard	Sampled By :	Phillip McNamara
Lab Sample ID :	**L470257-01**	Date Received :	7/23/2010

6010B

Analytic Batch: WG490219 | Analysis Date: 7/28/2010 | Analysis Time: 10:29
Instrument: ICP6 | Analyst: 338 | Preparation Date: 7/25/2010 6:08
Method: 6010B | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
7440-50-8	Copper	0.020	**0.28**	

6010B

Analytic Batch: WG490656 | Analysis Date: 7/28/2010 | Analysis Time: 11:58
Instrument: ICP6 | Analyst: 338 | Preparation Date:
Method: 6010B | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
7440-50-8	Copper,Dissolved	0.020	**0.056**	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Dissolved Solids by Method 2540C		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490104**
Analysis Date:	7/28/2010 10:04:00 PM	Analyst:	183
Instrument ID:	BAL	Extraction Date:	7/24/2010
Sample Numbers:	L470257-01		

Method Blank

Analyte	CAS	PQL	Qualifiers
Dissolved Solids		<10.0	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Dissolved Solids	8800	8660	98.4	85 - 115	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Dissolved Solids	8800	8720	99.0	85 - 115	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Dissolved Solids by Method 2540C		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490104**
Analysis Date:	7/28/2010 10:04:00 PM	Analyst:	183
Instrument ID:	BAL	Extraction Date:	7/24/2010
Sample Numbers:	L470257-01		

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Dissolved Solids	8800	8660	98.4	8720	99.0	85-115		0.6	20	

Sample Duplicate
L470043-03

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Dissolved Solids	2300	2240	2.4	5	

Sample Duplicate
L470290-02

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Dissolved Solids	1700	1650	3.2	5	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Oil & Grease (Hexane Extr) by Method 1664A		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490396**
Analysis Date:	7/28/2010 12:32:00 PM	Analyst:	078
Instrument ID:	BAL	Extraction Date:	7/27/2010
Sample Numbers:	L470257-01		

Method Blank

Analyte	CAS	PQL	Qualifiers
Oil & Grease (Hexane Extr)		<5.00	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Oil & Grease (Hexane Extr)	40.0	40.0	100	78 - 114	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Oil & Grease (Hexane Extr)	40.0	40.0	100	78 - 114	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Oil & Grease (Hexane Extr) by Method 1664A		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490396**
Analysis Date:	7/28/2010 12:32:00 PM	Analyst:	078
Instrument ID:	BAL	Extraction Date:	7/27/2010
Sample Numbers:	L470257-01		

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Oil & Grease (Hexane Extr)	40.0	40.0	100	40.0	100	78-114		0.0	20	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Suspended Solids by Method 2540D		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490813**
Analysis Date:	7/28/2010 6:38:00 PM	Analyst:	183
Instrument ID:	BAL	Extraction Date:	7/28/2010
Sample Numbers:	L470257-01		

Method Blank

Analyte	CAS	PQL	Qualifiers
Suspended Solids		<1.00	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Suspended Solids	773	800	103	85 - 115	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Suspended Solids	773	772	99.9	85 - 115	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Suspended Solids by Method 2540D		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490813**
Analysis Date:	7/28/2010 6:38:00 PM	Analyst:	183
Instrument ID:	BAL	Extraction Date:	7/28/2010
Sample Numbers:	L470257-01		

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Suspended Solids	773	800	103	772	99.9	85-115		3.6	20	

Sample Duplicate
L470257-01

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Suspended Solids	170	176	3.5	5	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Trace Metals by Method 6010B		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490219**
Analysis Date:	7/28/2010	Analyst:	338
Instrument ID:	ICP6	Extraction Date:	7/25/2010
Sample Numbers:	L470257-01		

Method Blank

Analyte	CAS	PQL	Qualifiers
Copper	7440-50-8	<0.0200	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Copper	1.13	1.13	100	85 - 115	

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Quality Control Summary
SDG: L470257
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Test:	Trace Metals by Method 6010B		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490656**
Analysis Date:	7/28/2010	Analyst:	338
Instrument ID:	ICP6	Extraction Date:	7/28/2010
Sample Numbers:	L470257-01		

Method Blank

Analyte	CAS	PQL	Qualifiers
Copper,Dissolved	7440-50-8	<0.0200	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Copper,Dissolved	1.13	1.09	96.5	85 - 115	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Trace Metals by Method 6010B		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490219**
Analysis Date:	7/28/2010	Analyst:	338
Instrument ID:	ICP6	Extraction Date:	7/25/2010
Sample Numbers:	L470257-01		

Sample Duplicate
L470412-01

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Copper	0.00000	0.0000			

Matrix Spike/Matrix Spike Duplicate
L470412-01

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qualifier	% RPD	Control Limits	RPD Qual
Copper	1.13	0.00000	1.16	103	1.15	102	75-125		0.9	20	

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Quality Control Summary
SDG: L470257
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Test:	Trace Metals by Method 6010B		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490656**
Analysis Date:	7/28/2010	Analyst:	338
Instrument ID:	ICP6	Extraction Date:	7/28/2010
Sample Numbers:	L470257-01		

Sample Duplicate
L470580-13

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Copper,Dissolved	0.00000	0.0000			

Matrix Spike/Matrix Spike Duplicate
L470580-13

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qualifier	% RPD	Control Limits	RPD Qual
Copper,Dissolved	1.13	0.00000	1.07	94.7	1.07	94.7	75-125		0.0	20	

Company Name/Address

EEC

7878 N. 16th St., Suite 140
Phoenix, AZ 85020

Alternate Billing

Report to: GARY HOFFMANN

E-mail to: GHOFFMANN@EECPHX.COM

Project Description: **Superior Storage and Fueling Yard**

City/State Collected: SUPERIOR, AZ

PHONE:602-248-7702

FAX: 602-248-7851

Client Project No. 308032.07

Lab Project #

Collected by: PHILLIP MCNAMARA

Collected by(signature):

Site/Facility ID# SUPERIOR STORAGE YARD

P.O.#

Packed on Ice N___ Y ✓

Rush? (Lab MUST be Notified)
_____Next Day.....100%
_____Two Day.....50%
[redacted] Three Day.....25%

Date Results Needed

Email? ___No (X) Yes
FAX? ___No ___Yes

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No of Cntrs	TDS 25ml HDPE No Pres	TSS 1L HDPE No Pres	OGHEX 1L Clear HCL	Cu 500ml HDPE HNO3	Cu (Dissolved) 500ml HDPE No Pres				Remarks/contaminant	Sample # (lab only)
SUPERIOR STORAGE YARD	GRAB	OT		7/22/10	11:39AM	5	X	X	X	X	X					L470257-01

Analysis/Container/Preservative

Chain of Custody
Page__1_of__1_

A033

Prepared by:

ENVIRONMENTAL Science corp
12065 Lebanon Road
Mt. Juliet TN 37122
Phone (615)758-5858
Phone (800) 767-5859
FAX (615)758-5859

CoCode (lab use only)
ENGENVPAZ
Template/Prelogin

Shipped Via:

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other STORMWATER

pH_____ Temp_____

Remarks:

Flow_____ Other_____

Relinquisher by:(Signature	Date:	Time:	Received by:(Signature)	Samples returned via: FedEx__ UPS__Other__	Condition (lab use only)
Phillip McNamara	7/22/10	1331		434198022267	COCS F
Relinquisher by:(Signature	Date:	Time:	Received by: (Signature)	Temp: 2.3°C	Bottles Received: 5
Relinquisher by:(Signature	Date:	Time:	Received for lab by: (Signature)	Date: 7/23/10	Time: 0900

pH Checked: ___ NCF: 18 of 18

Superior Fuel Yard

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Quality Control Summary
SDG: L470257

For: Engineering & Env. Consultants, INC. -AZ
Superior Storage and Fueling Yard

L470257

Lab SampleID.	Client ID
L470257-01	SUPERIOR STORAGE YARD

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Quality Control Summary
SDG: L470257

For: Engineering & Env. Consultants, INC. -AZ
Project: Superior Storage and Fueling Yard
July 30, 2010

Sample Receiving and Handling

All sample aliquots were received at the correct temperature, in the proper containers, and with the appropriate preservatives. All method specified holding times were met.

Dissolved Solids by Method 2540C

Laboratory Control Sample

Sample L470257-01 was analyzed in analytical batch WG490104. The laboratory control sample associated with this sample was within the laboratory control limits.

Sample Duplicate Analysis

For analytical batch WG490104 sample duplicate analysis was performed on sample L470043-03. The relative percent differences were within the method limits.

For analytical batch WG490104 sample duplicate analysis was performed on sample L470290-02. The relative percent differences were within the method limits.

Matrix Spike/Matrix Spike Duplicate

Precision for batch WG490104 was evaluated using the LCS / LCSD. The RPDs were within method limits.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Oil & Grease (Hexane Extr) by Method 1664A

Laboratory Control Sample

Sample L470257-01 was analyzed in analytical batch WG490396. The laboratory control sample associated with this sample was within the laboratory control limits.

Matrix Spike/Matrix Spike Duplicate

Precision for batch WG490396 was evaluated using the LCS / LCSD. The RPDs were within method limits.

Blank Analysis

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Suspended Solids by Method 2540D

Laboratory Control Sample

Sample L470257-01 was analyzed in analytical batch WG490813. The laboratory control sample associated with this sample was within the laboratory control limits.

Sample Duplicate Analysis

For analytical batch WG490813 sample duplicate analysis was performed on sample L470257-01. The relative percent differences were within the method limits.

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Quality Control Summary
SDG: L470257
For: Engineering & Env. Consultants, INC. -AZ
Project: Superior Storage and Fueling Yard
July 30, 2010

Matrix Spike/Matrix Spike Duplicate
Precision for batch WG490813 was evaluated using the LCS / LCSD. The RPDs were within method limits.

Blank Analysis
The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Trace Metals by Method 6010B
Laboratory Control Sample
Sample L470257-01 was analyzed in analytical batch WG490219. The laboratory control sample associated with this sample was within the laboratory control limits for all compounds.

Sample L470257-01 was analyzed in analytical batch WG490656. The laboratory control sample associated with this sample was within the laboratory control limits for all compounds.

Sample Duplicate Analysis
For analytical batch WG490219 sample duplicate analysis was performed on sample L470412-01. The relative percent differences were within the method limits.

For analytical batch WG490656 sample duplicate analysis was performed on sample L470580-13. The relative percent differences were within the method limits.

Matrix Spike/Matrix Spike Duplicate
For analytical batch WG490219 matrix spike/matrix spike duplicate analysis was performed on sample L470412-01. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes.

For analytical batch WG490656 matrix spike/matrix spike duplicate analysis was performed on sample L470580-13. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes.

Blank Analysis
The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

Nancy F. Winters
ESC Representative
ESC Lab Sciences

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Gary Hoffmann
Engineering & Env. Consultants, INC. -AZ
7878 N. 16th Street, Suite 140
Phoenix, AZ 85020

Report Summary

Friday July 30, 2010

Report Number: L470257
Samples Received: 07/23/10
Client Project: 308032.07

Description: Superior Fueling Yard

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Daphne R Richards

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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Quality Control Summary
SDG: L470257

For: Engineering & Env. Consultants, INC. -AZ
Superior Storage and Fueling Yard

L470257

Lab SampleID.	Client ID
L470257-01	SUPERIOR STORAGE YARD

ESC LAB SCIENCES
YOUR LAB OF CHOICE

12065 Lebanon Rd
Mt. Juliet, TN 37122
(615) 758-5858
(800) 767-5859
Fax (615) 758-5859
Tax I.D 62-0814289
Est. 1970

SAMPLE NUMBER
SUPERIOR STORAGE YARD

Customer :	Engineering & Env. Consultants, INC. -	Project :	308032.07
Source :	SUPERIOR STORAGE YARD	Date Sampled :	7/22/2010 11:39 AM
Location :	Superior Storage and Fueling Yard	Sampled By :	Phillip McNamara
Lab Sample ID :	**L470257-01**	Date Received :	7/23/2010

1664A

Analytic Batch: WG490396 | Analysis Date: 7/28/2010 | Analysis Time: 12:32
Instrument: BAL | Analyst: 078 | Preparation Date: 7/27/2010 12:24
Method: 1664A | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
	Oil & Grease (Hexane Extr)	5.3	< 5.3	

2540C

Analytic Batch: WG490104 | Analysis Date: 7/28/2010 | Analysis Time: 10:04
Instrument: BAL | Analyst: 183 | Preparation Date: 7/27/2010 7:52
Method: 2540C | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
DSOLIDS	Dissolved Solids	10	**450**	

2540D

Analytic Batch: WG490813 | Analysis Date: 7/28/2010 | Analysis Time: 6:38 PM
Instrument: BAL | Analyst: 183 | Preparation Date: 7/28/2010 6:38
Method: 2540D | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
SSOLIDS	Suspended Solids	1.0	**170**	

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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SAMPLE NUMBER
SUPERIOR STORAGE YARD

Customer :	Engineering & Env. Consultants, INC. -	Project :	308032.07
Source :	SUPERIOR STORAGE YARD	Date Sampled :	7/22/2010 11:39 AM
Location :	Superior Storage and Fueling Yard	Sampled By :	Phillip McNamara
Lab Sample ID :	**L470257-01**	Date Received :	7/23/2010

6010B

Analytic Batch: WG490219 | Analysis Date: 7/28/2010 | Analysis Time: 10:29
Instrument: ICP6 | Analyst: 338 | Preparation Date: 7/25/2010 6:08
Method: 6010B | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
7440-50-8	Copper	0.020	**0.28**	

6010B

Analytic Batch: WG490656 | Analysis Date: 7/28/2010 | Analysis Time: 11:58
Instrument: ICP6 | Analyst: 338 | Preparation Date:
Method: 6010B | Dilution: 1

CAS NO	Analyte	RL mg/l	RESULTS mg/l	FLAG
7440-50-8	Copper,Dissolved	0.020	**0.056**	

LEGEND

RL - Reporting Limit

Comments: 1) Sample results are reported as rounded values.
2) These results are applicable only to the items tested.

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Est. 1970

Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Dissolved Solids by Method 2540C		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490104**
Analysis Date:	7/28/2010 10:04:00 PM	Analyst:	183
Instrument ID:	BAL	Extraction Date:	7/24/2010
Sample Numbers:	L470257-01		

Method Blank

Analyte	CAS	PQL	Qualifiers
Dissolved Solids		<10.0	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Dissolved Solids	8800	8660	98.4	85 - 115	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Dissolved Solids	8800	8720	99.0	85 - 115	

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Est. 1970

Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Dissolved Solids by Method 2540C		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490104**
Analysis Date:	7/28/2010 10:04:00 PM	Analyst:	183
Instrument ID:	BAL	Extraction Date:	7/24/2010
Sample Numbers:	L470257-01		

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Dissolved Solids	8800	8660	98.4	8720	99.0	85-115		0.6	20	

Sample Duplicate
L470043-03

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Dissolved Solids	2300	2240	2.4	5	

Sample Duplicate
L470290-02

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Dissolved Solids	1700	1650	3.2	5	

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Est. 1970

Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Oil & Grease (Hexane Extr) by Method 1664A		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490396**
Analysis Date:	7/28/2010 12:32:00 PM	Analyst:	078
Instrument ID:	BAL	Extraction Date:	7/27/2010
Sample Numbers:	L470257-01		

Method Blank

Analyte	CAS	PQL	Qualifiers
Oil & Grease (Hexane Extr)		<5.00	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Oil & Grease (Hexane Extr)	40.0	40.0	100	78 - 114	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Oil & Grease (Hexane Extr)	40.0	40.0	100	78 - 114	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Oil & Grease (Hexane Extr) by Method 1664A		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490396**
Analysis Date:	7/28/2010 12:32:00 PM	Analyst:	078
Instrument ID:	BAL	Extraction Date:	7/27/2010
Sample Numbers:	L470257-01		

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Oil & Grease (Hexane Extr)	40.0	40.0	100	40.0	100	78-114		0.0	20	

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Est. 1970

Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Suspended Solids by Method 2540D		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490813**
Analysis Date:	7/28/2010 6:38:00 PM	Analyst:	183
Instrument ID:	BAL	Extraction Date:	7/28/2010
Sample Numbers:	L470257-01		

Method Blank

Analyte	CAS	PQL	Qualifiers
Suspended Solids		<1.00	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Suspended Solids	773	800	103	85 - 115	

Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Suspended Solids	773	772	99.9	85 - 115	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Suspended Solids by Method 2540D		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490813**
Analysis Date:	7/28/2010 6:38:00 PM	Analyst:	183
Instrument ID:	BAL	Extraction Date:	7/28/2010
Sample Numbers:	L470257-01		

Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Suspended Solids	773	800	103	772	99.9	85-115		3.6	20	

Sample Duplicate
L470257-01

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Suspended Solids	170	176	3.5	5	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Trace Metals by Method 6010B		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490219**
Analysis Date:	7/28/2010	Analyst:	338
Instrument ID:	ICP6	Extraction Date:	7/25/2010
Sample Numbers:	L470257-01		

Method Blank

Analyte	CAS	PQL	Qualifiers
Copper	7440-50-8	<0.0200	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Copper	1.13	1.13	100	85 - 115	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Trace Metals by Method 6010B		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490656**
Analysis Date:	7/28/2010	Analyst:	338
Instrument ID:	ICP6	Extraction Date:	7/28/2010
Sample Numbers:	L470257-01		

Method Blank

Analyte	CAS	PQL	Qualifiers
Copper,Dissolved	7440-50-8	<0.0200	

Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Copper,Dissolved	1.13	1.09	96.5	85 - 115	

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Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Trace Metals by Method 6010B		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490219**
Analysis Date:	7/28/2010	Analyst:	338
Instrument ID:	ICP6	Extraction Date:	7/25/2010
Sample Numbers:	L470257-01		

Sample Duplicate
L470412-01

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Copper	0.00000	0.0000			

Matrix Spike/Matrix Spike Duplicate
L470412-01

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qualifier	% RPD	Control Limits	RPD Qual
Copper	1.13	0.00000	1.16	103	1.15	102	75-125		0.9	20	

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Est. 1970

Quality Control Summary
SDG: L470257
Engineering & Env. Consultants, INC. -AZ

Test:	Trace Metals by Method 6010B		
Project No:	308032.07	Matrix:	Water - mg/L
Project:	Superior Storage and Fueling Yard	EPA ID:	TN00003
Collection Date:	7/22/2010	**Analytic Batch:**	**WG490656**
Analysis Date:	7/28/2010	Analyst:	338
Instrument ID:	ICP6	Extraction Date:	7/28/2010
Sample Numbers:	L470257-01		

Sample Duplicate
L470580-13

Name	Sample Results	Duplic Results	%RPD	Limit	Qualifiers
Copper,Dissolved	0.00000	0.0000			

Matrix Spike/Matrix Spike Duplicate
L470580-13

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qualifier	% RPD	Control Limits	RPD Qual
Copper,Dissolved	1.13	0.00000	1.07	94.7	1.07	94.7	75-125		0.0	20	

Company Name/Address

EEC

7878 N. 16th St., Suite 140
Phoenix, AZ 85020

Alternate Billing

Report to: GARY HOFFMANN

E-mail to: GHOFFMANN@EECPHX.COM

Project Description: **Superior Storage and Fueling Yard**

City/State Collected: SUPERIOR, AZ

PHONE:602-248-7702

FAX: 602-248-7851

Client Project No. 308032.07

Lab Project #

Collected by: PHILLIP MCNAMARA

Collected by(signature):

Site/Facility ID# SUPERIOR STORAGE YARD

P.O.#

Packed on Ice N___ Y ✓

Rush? (Lab MUST be Notified)
_____Next Day.....100%
_____Two Day.....50%
[redacted] Three Day.....25%

Date Results Needed

Email? ___No (X) Yes
FAX? ___No ___Yes

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No of Cntrs	TDS 25ml HDPE No Pres	TSS 1L HDPE No Pres	OGHEX 1L Clear HCL	Cu 500ml HDPE HNO3	Cu (Dissolved) 500ml HDPE No Pres				Remarks/contaminant	Sample # (lab only)
SUPERIOR STORAGE YARD	GRAB	OT		7/22/10	11:39AM	5	X	X	X	X	X					L470257-01

Analysis/Container/Preservative

Chain of Custody
Page__1_of__1_

A033

Prepared by:

ENVIRONMENTAL Science corp
12065 Lebanon Road
Mt. Juliet TN 37122
Phone (615)758-5858
Phone (800) 767-5859
FAX (615)758-5859

CoCode (lab use only)
ENGENVPAZ
Template/Prelogin

Shipped Via:

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other STORMWATER

pH_____ Temp_____

Remarks:

Flow_____ Other_____

Relinquisher by:(Signature	Date:	Time:	Received by:(Signature)	Samples returned via: FedEx__ UPS__Other__	Condition (lab use only)
Phillip McNamara	7/22/10	1331		434198022267	COCS F
Relinquisher by:(Signature	Date:	Time:	Received by: (Signature)	Temp: 2.3°C	Bottles Received: 5
Relinquisher by:(Signature	Date:	Time:	Received for lab by: (Signature)	Date: 7/23/10	Time: 0900

pH Checked: ___ NCF: 18 of 18

Nogales Maintenance Yard

August 17, 2010

John Burton
Engineering and Environmental Consultants, Inc.
7878 N. 16th Street Suite 140
Phoenix, AZ 85020

TEL (602) 248-7702
FAX 6022487851

Work Order No.: 10G0599
Order Name: 308032.07

RE: ADOT SW (Nogales)

Dear John Burton,

Turner Laboratories, Inc. received 1 sample(s) on 07/20/2010 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri Garcia
Technical Director

Client: Engineering and Environmental Consultants, Inc
Project: ADOT SW (Nogales) **Order: 308032.07**
Work Order: 10G0599
Date Received: 07/20/2010

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
10G0599-01	Nogales ADOT SW	Storm Water	07/20/2010 1245

Client: Engineering and Environmental Consultants, Inc.
Project: ADOT SW (Nogales)
Work Order: 10G0599
Date Received: 07/20/2010

Case Narrative

E	Value is above quantitation range.
M7	The matrix spike recovery was below acceptance limits. Re-extraction and/or re-analysis confirms the low recovery.
ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Client:	Engineering and Environmental Consultants	**Client Sample ID:**	Nogales ADOT SW
Project:	ADOT SW (Nogales)	**Collection Date/Time:**	07/20/2010 1245
Work Order:	10G0599	**Matrix:**	Storm Water
Lab Sample ID:	10G0599-01	**Order Name:**	308032.07

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
ICP Dissolved Metals-E 200.7								
Copper	ND	0.020		mg/L	1	07/24/2010 1015	07/26/2010 1341	RAD
N-Hexane Extractable Material (HEM)-E1664A								
Oil & Grease	5.30	5.00		mg/L	1	07/23/2010 0800	07/23/2010 1622	EW
ICP Total Metals-E200.7								
Copper	0.051	0.020		mg/L	1	07/26/2010 0815	07/29/2010 1137	RAD
Total Residual Chlorine-H8167								
Total Residual Chlorine	0.55	0.50	M7	mg/L	5	07/20/2010 1515	07/20/2010 1640	GW
Total Dissolved Solids (Residue, Filterable)-SM2540 C								
Total Dissolved Solids (Residue, Filterable)	290	20		mg/L	1	07/22/2010 0840	07/27/2010 1125	GW
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D								
Total Suspended Solids	650	10		mg/L	1	07/22/2010 1125	07/23/2010 0920	GW
Ammonia as N-SM4500 B,C								
Nitrogen, Ammonia (As N)	ND	0.50		mg/L	1	07/21/2010 0730	07/22/2010 1130	JM
Total Coliform & E. Coli, MPN-SM9223B								
E.Coli	2400	1	E	org/100 mL	1	07/20/2010 1450	07/21/2010 1550	EW
Total Coliform	2400	1	E	org/100 mL	1	07/20/2010 1450	07/21/2010 1550	EW

Turner Laboratories W.O. #: 1060599

Delivered by: CLIENT

TURNER LABORATORIES INC.

1.	Shipping container/cooler in good condition?	☑ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☑ Not Present
3.	Chain of custody present?	☑ Yes	☐ No	
4.	COC agrees with sample labels?	☑ Yes	☐ No	
5.	Samples in proper container/bottle?	☐ Yes	☑ No	
6.	Sample container intact?	☑ Yes	☐ No	
7.	Sufficient sample volume for requested tests?	☑ Yes	☐ No	
8.	Samples received within holding times?	☑ Yes	☐ No	
9.	VOA vials received with no headspace?	☐ Yes	☐ No	☑ No Vials
10.	Bacti bottles received with appropriate headspace?	☑ Yes	☐ Above 100ml	
		☐ Not Applicable	☐ Below 100ml	

Additional Comments: MPN COLLECTED BY CLIENT
THE REST OF SAMPLES POURED OVER BY LAB PERSONEL

2445 NORTH COYOTE DRIVE ▪ SUITE #104 ▪ TUCSON, ARIZONA 85745 ▪ 520 882-5880 ▪ FAX # 520 882-9788

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 10G0599 DATE 7/20/10 PAGE 1 OF 1

PROJECT NAME Nogales ADOT SW # 308032.07
CONTACT NAME John Burton
COMPANY NAME EEC
ADDRESS 7878 N. 16th Street, Suite 140
Phoenix, AZ PHONE 602-248-7702 FAX 602-248-7857
SAMPLER'S SIGNATURE Chad S. Hancock

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Base Neutrals 625/8270 ☐ / Acids ☐	Volatile Organics 624/524.2/8260 ☐	TTHMS ☐ / HAA5 ☐	Pesticides 8081 ☐ / PCB's 8082 ☐	Total Petroleum Hydrocarbons IR(8015AZ) ☐	Oil and Grease Grav. 1664A ☐	TCLP Analysis VOA ☐ / SemiVOA ☐ / Pest./Herb. ☐	Metals TCLP ☐ Dissolved ☐ / Total ☐ / Priority Pollutants ☐	Cyanide Total ☐ / Amen. ☐ / WAD ☐	SDWA-INORGANICS PRIMARY ☐ / SECONDARY ☐	Coliform MPN ☐ / Colilert ☐	pH ☐	COD ☐ / Cl ☐	TSS ☐ / BOD ☐	NH3
Nogales ADOT SW	7/20/10	1245		Stormwater	5						✓		X			X	X	✓	✓	X

1. RELINQUISHED BY:
Signature: Chad S. Hancock
Printed Name: Chad S. Hancock
Firm: EEC
Date/Time: 7/20/10 1418

2. RECEIVED BY:
Signature:
Printed Name:
Firm:
Date/Time:

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day ____ 2 Day ____ 5 Day*
____ Fax Preliminary Results
Requested Report Date ____
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # ____
Bill to: ____

SAMPLE RECEIPT:
Total Containers 4
Temperature 6
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature:
Printed Name:
Firm:
Date/Time:

4. RECEIVED BY:
Signature:
Printed Name: STEPHEN Lundh
Firm: TURNER LABORATORIES, INC.
Date/Time: 7.20.10 1418

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

Page 6 of 6

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

APPENDIX N
Summary of EPA Audit Results

U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) COMPLIANCE AUDIT

STATE OF ARIZONA DEPARTMENT OF TRANSPORTATION

ADOT MS4 AUDIT REPORT

Audit Date:
October 25–29, 2010

Report Date:
May 10, 2011

United States Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

CONTENTS

Executive Summary

Between October 25 and 29, 2010, EPA contractor PG Environmental and representatives from the U.S. Environmental Protection Agency, Region 9 ("EPA") conducted an audit of the State of Arizona, Department of Transportation ("ADOT"), Municipal Separate Storm Sewer System (MS4) Program. The purpose of the audit was to assess compliance with the *Arizona Pollutant Discharge Elimination System ("AZPDES") Arizona Department of Transportation Statewide Permit for Discharges to Waters of the United States*, No. AZS000018-2008 ("Permit") and to evaluate ADOT's current implementation of its Statewide Stormwater Management Program ("SSWMP").

The EPA Audit Team evaluated four ADOT Districts: Phoenix, Flagstaff, Tucson and Prescott. The audit included document review, interviews, and field verification inspections at 57 ADOT construction sites and maintenance facilities. ADOT staff, including Headquarters and District program managers and construction and maintenance personnel participated extensively throughout the entire audit process. An ADOT headquarters session was held to obtain information regarding overall program management, program evaluation and oversight, and the MS4-related monitoring program. In addition, the EPA Audit Team held a closing conference at ADOT Headquarters on October 29, 2010, with representatives from headquarters and several Districts.

The audit team observed several positive elements of the ADOT MS4 Program, including:

- ADOT Environmental Management personnel demonstrated a thorough knowledge of Permit requirements and ADOT's SSWMP;
- ADOT had implemented sound monitoring and sampling practices at construction projects within ¼-mile of unique and sensitive waters; and
- The District Environmental Coordinators were knowledgeable of local stormwater features and maintenance issues and effectively communicated stormwater maintenance needs to ADOT staff.

This Program audit report also identifies program deficiencies and potential Permit violations; however, it is not a formal finding of violation. The following summarizes the most significant potential permit violations:

- ADOT had not fully implemented its Employee Stormwater Training Program;
- ADOT had not conducted dry-weather outfall screening of its 71 major MS4 outfalls;
- ADOT had not implemented an adequate illicit connection and illicit discharge detection and elimination program;
- ADOT had not conducted inspections of post-construction BMPs and had not implemented a system to inspect and track conditions of its MS4 system; and
- Inspections of ADOT facilities and construction sites revealed common housekeeping deficiencies, including improperly installed BMPs, inadequate containment of pollutant sources and uncertified or outdated Storm Water Pollution Prevention Plans.