



**AUTHORIZATION TO DISCHARGE STORMWATER FROM  
A MUNICIPAL SEPARATE STORM SEWER SYSTEM  
TO WATERS OF THE UNITED STATES**

This permit provides authorization to the following Permittee to discharge stormwater under the Arizona Pollutant Discharge Elimination System (AZPDES) program, in compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Article 3.1; Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Article 9; and the Clean Water Act, as amended (33 U.S.C. 1251 et seq.).

**Arizona Department of Transportation  
1611 West Jackson Street, Mail Drop EM02  
Phoenix, Arizona 85007**

The Permittee, hereinafter known as ADOT, is authorized statewide (except for Indian Country) to discharge stormwater from the municipal separate storm sewer system operated by ADOT to Waters of the United States in Arizona in accordance with the terms and conditions in this permit.

This stormwater discharge permit supersedes ADOT's coverage under the Phase I municipal stormwater permit issued by ADEQ on September 19, 2008.

This permit is effective on August 17, 2015.

This permit and the authorization to discharge expires at midnight, August 16, 2020.

A handwritten signature in black ink, appearing to read "Trevor Baggione". The signature is written over a horizontal line.

Trevor Baggione, Director  
Water Quality Division  
Arizona Department of Environmental Quality

Signed this 17<sup>th</sup> day of July, 2015

**TABLE OF CONTENTS**

**1.0 AUTHORIZATION ..... 1**

    1.1 AUTHORIZED DISCHARGES.....1

    1.2 LIMITATIONS OF COVERAGE.....1

    1.3 NON-STORMWATER DISCHARGES.....2

**2.0 PROTECTION OF WATER QUALITY AND COMPLIANCE WITH ARIZONA WATER QUALITY STANDARDS ..... 3**

    2.1 PROTECTION OF WATER QUALITY FROM MS4 DISCHARGES.....3

    2.2 TOTAL MAXIMUM DAILY LOADS (TMDLs).....4

**3.0 LEGAL AUTHORITY ..... 5**

    3.1 REVIEW LEGAL AUTHORITY.....5

    3.2 MAINTAIN ADEQUATE LEGAL AUTHORITY .....5

    3.3 ENFORCEMENT MEASURES AND TRACKING.....6

    3.4 ENFORCEMENT AUTHORITY FRAMEWORK .....7

**4.0 STORMWATER MANAGEMENT PROGRAM/ PLAN (SWMP) ..... 8**

    4.1 SWMP GENERAL REQUIREMENTS AND IMPLEMENTATION .....8

    4.2 SWMP REQUIREMENTS.....10

**5.0 MAPPING THE MS4 ..... 11**

    5.1. STORM SEWER SYSTEM INVENTORY AND OUTFALL MAPPING.....11

    5.2 SUBMIT PROPOSAL TO MAP THE STORM SEWER SYSTEM .....11

**6.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) ..... 12**

    6.1 IDDE PROGRAM DEVELOPMENT .....12

    6.2 MINIMIZE ILLICIT DISCHARGES (INCLUDES ILLEGAL DUMPING).....12

    6.3 DETECTING POTENTIAL ILLICIT DISCHARGES AND ILLICIT CONNECTIONS .....13

    6.4 IDDE SOURCE INVESTIGATION AND ELIMINATION.....14

    6.5 RESPONDING TO SPILLS .....15

**7.0 STORMWATER MANAGEMENT OF DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY ..... 15**

    7.1 ADOT’S RESPONSIBILITIES UNDER THIS PERMIT .....15

    7.2 APPLICABILITY OF REQUIREMENTS TO ADOT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY ...16

    7.3 APPLICABILITY OF REQUIREMENTS TO OPERATORS UNDER CONTRACT WITH ADOT FOR PERFORMING CONSTRUCTION ACTIVITIES .....16

    7.4 VIOLATIONS AND ENFORCEMENT.....16

    7.5 POST-CONSTRUCTION AND MEASURES TO CONTROL DISCHARGES FROM NEW DEVELOPMENT AND REDEVELOPMENT .....17

**8.0 MEASURES TO CONTROL DISCHARGES FROM ROADWAYS..... 18**

    8.1 STORM SEWER SYSTEM AND HIGHWAY MAINTENANCE .....18

    8.2 ROADSIDE MANAGEMENT PROGRAM.....19

    8.3 WINTER STORM POLICIES .....20

**9.0 TRAINING ..... 21**

    9.1 ADOT EMPLOYEE TRAINING .....21

    9.2 ADOT CONSTRUCTION CONTRACTOR TRAINING AND CERTIFICATION .....22

<b>10.0</b>	<b>PUBLIC OUTREACH AND EDUCATION / PUBLIC INVOLVEMENT AND PARTICIPATION.....</b>	<b>23</b>
10.1	PUBLIC OUTREACH / EDUCATION .....	23
10.2	PUBLIC INVOLVEMENT / PARTICIPATION .....	23
10.3	INTRA- AND INTER-GOVERNMENTAL COORDINATION .....	24
<b>11.0</b>	<b>STORMWATER DISCHARGES FROM ADOT FACILITIES AND ACTIVITIES .....</b>	<b>24</b>
11.1	FACILITY INVENTORY AND PRIORITIZATION.....	24
11.2	FACILITY AND DISCHARGE ACTIVITY BEST MANAGEMENT PRACTICES .....	25
11.3	STORMWATER POLLUTION PREVENTION PLAN .....	25
11.4	FACILITY INSPECTIONS .....	27
11.5	MONITORING REQUIREMENTS .....	29
<b>12.0</b>	<b>MONITORING REQUIREMENTS.....</b>	<b>30</b>
12.1	COMPLIANCE WITH MONITORING REQUIREMENTS.....	30
12.2	MONITORING PROTOCOLS / MONITORING INSTRUCTIONS.....	30
12.3	MAINTENANCE FACILITIES REQUIRING MONITORING.....	33
12.4	WET WEATHER MONITORING REQUIREMENTS .....	34
12.5	Impaired Water Monitoring .....	39
<b>13.0</b>	<b>REPORTING AND RECORDKEEPING REQUIREMENTS .....</b>	<b>40</b>
13.1	REPORTING .....	40
13.2	SUBMITTAL DEADLINES.....	46
<b>14.0</b>	<b>STANDARD CONDITIONS .....</b>	<b>46</b>
	<b>DEFINITIONS .....</b>	<b>57</b>
	<b>ACRONYMS.....</b>	<b>62</b>



## 1.0 AUTHORIZATION

### 1.1 Authorized Discharges

Subject to the terms and conditions of this permit, ADOT is authorized to discharge the following to Waters of the United States (U.S.) in Arizona:

- 1.1.1 Stormwater from ADOTs Municipal Separate Storm Sewer System (MS4);
- 1.1.2 Stormwater from maintenance facilities (that are not subject to separate industrial stormwater permitting) operated by ADOT as described in Part 11, and
- 1.1.3 Non-stormwater discharges that are specifically listed in Table 1.1.

### 1.2 Limitations of Coverage

- 1.2.1 Non-Stormwater Discharges to Impaired or Outstanding Arizona Waters (OAW). Except discharges associated with emergency firefighting activities, this permit does not authorize non-stormwater discharges to receiving waters listed as impaired on the most current version of Arizona's 303(d) and not attaining waters listed in the 305(b) Assessment Report or to Outstanding Arizona Waters (OAWs) listed in Arizona Administrative Code (A.A.C.) R18-11-112. All non-stormwater discharges to these waters are prohibited unless covered under another AZPDES permit (such as an individual permit, or the AZPDES General Permit for Wastewater Discharges that Pose a Limited or Insignificant (De Minimis) Threat to Water Quality).
- 1.2.2 Total Maximum Daily Load (TMDL)
  - 1.2.2.1 ADOT shall not discharge a pollutant into any water for which a Total Maximum Daily Load (TMDL) has been either established or approved by United States Environmental Protection Agency (USEPA), if the discharge is inconsistent with that TMDL.
  - 1.2.2.2 Where applicable, if a discharge contains pollutants for which a TMDL has been established, the Stormwater Management Program (SWMP) and/or applicable Stormwater Pollution Prevention Plan (SWPPP) shall specifically identify control measures necessary to ensure that the discharges will be consistent with the provisions of the TMDL established for the pollutant for which the receiving water is impaired.
- 1.2.3 Stormwater Discharges Associated with Construction Activity This permit does not authorize stormwater discharges associated with construction activity as defined in 40 CFR 122.26(b)(14)(x) or 122.26(b)(15). ADOT shall obtain separate authorization under another AZPDES permit for discharges related to its construction stormwater discharges.
- 1.2.4 Stormwater Discharges Associated with Industrial Activity This permit does not authorize stormwater discharges associated with industrial activity as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi). ADOT shall obtain separate authorization under another AZPDES permit for discharges related to its industrial stormwater discharges.
- 1.2.5 Discharges from the Application of Aquatic Pesticides to or over, including near, Waters of the U.S. This permit does not authorize discharges of biological pesticides and chemical pesticides. ADOT shall obtain separate authorization under another AZPDES permit for discharges related to the application of pesticides.

**1.3 Non-Stormwater Discharges**

- 1.3.1 Prohibited Non-Stormwater Discharges Except for fire-fighting, non-stormwater discharges resulting from third party activities are not authorized by this permit.
- 1.3.2 Allowable Non-Stormwater Discharge. Only non-stormwater discharges listed in Table 1.1 or those otherwise covered under a separate NPDES or AZPDES permit are authorized to discharge to Waters of the U.S. or ADOT’s storm sewer system, provided:
  - 1.3.2.2 The discharge is not identified by either ADOT or ADEQ as a significant source of pollutants; and
  - 1.3.2.3 ADOT implements control measures, as necessary, during all non-stormwater discharges and describes those control measures in the SWMP in accordance with Part 4.2.1.1 of the permit or in the appropriate SWPPP.

Table 1.1. Allowable Non-Stormwater Discharges	
a.	Lawn and landscape watering / irrigation provided: reclaimed or other wastewaters are not used; all pesticides; herbicides and fertilizers have been applied in accordance with the manufacturer’s instructions; and run-off is minimized.
b.	Discharges from fire-fighting activities, excluding fire training activities.
c.	Water used for dust control provided effluent or other wastewaters are not used.
d.	Water for compaction of earth and aggregate base course for routine maintenance of dirt roads and shoulders provided reclaimed or other wastewaters are not used.
e.	Water used for compacting soil provided effluent or other wastewaters are not used.
f.	Water from the routine external washing of buildings, conducted without the use of detergents, chemical additives, or other toxic cleaning agents.
g.	Routine tunnel wall washwater where detergents, chemical additives, or other toxic cleaning agents are not used.
h.	Sign washwater where detergents, chemical additives, or other toxic cleaning agents are not used.
i.	Water from crawl space pumps.
j.	Fire hydrant flushings, potable water and irrigation water line flushings, potable water well flushing, and other discharges related to installation and maintenance of potable water supply systems, provided the total residual chlorine has been reduced, if necessary, to meet the applicable surface water quality standard for the affected surface water (A.A.C. R18-11, Appendix A) prior to discharge.
k.	Dechlorinated swimming pool discharges.
l.	Uncontaminated groundwater, whether originating from pumpage, infiltration (as defined at 40 CFR 35.2005(20)), rising groundwater or springs.
m.	Foundation or footing drains where flows are not contaminated with process materials such as solvents.
n.	Uncontaminated water from evaporative coolers and air conditioning or compressor condensates.
o.	Diverted stream flows.
p.	Discharges from riparian habitats and wetlands.
q.	Uncontaminated water used for drilling and coring.
r.	Water obtained from dewatering operations /foundations in preparation for and during excavation and construction.
s.	Discharges from emergency highway situations where federal rules specify washing as the preferred method to ensure public safety.

- 1.3.3 ADOT shall not discharge any allowable non-stormwater listed in Table 1.1 directly to or in an area where the discharge may reasonably be expected to reach an impaired water or OAW. (See Part 1.2.1)
- 1.3.4 ADOT shall include the following information in the SWMP or the appropriate SWPPP for any allowable non-stormwater discharge listed in Table 1.1:
  - 1.3.4.1 Identification of each non-stormwater discharge, unless the source is from fire-fighting activities or discharges from emergency highway situations; and
  - 1.3.4.2 Appropriate control measures that will be used for each discharge that will minimize discharge of pollutants.
- 1.3.5 ADOT shall eliminate or reduce discharges of non-stormwater to the maximum extent feasible.
- 1.3.6 ADOT shall hold superchlorinated wastewaters on-site until the chlorine dissipates, or are otherwise dechlorinated prior to discharge.
- 1.3.7 ADOT may discharge stormwater mixed with sources of non-stormwater only if the non-stormwater discharges occur in compliance with this permit or a separate AZPDES permit.

## **2.0 PROTECTION OF WATER QUALITY AND COMPLIANCE WITH ARIZONA WATER QUALITY STANDARDS**

### **2.1 Protection of Water Quality from MS4 Discharges**

This Section applies to ADOT's MS4 system statewide.

- 2.1.1 ADOT shall protect water quality by reducing, to the maximum extent practicable, any discharge that may cause or contribute to an exceedance of any surface water quality standard (SWQS) of the State of Arizona (A.A.C. Title 18, Chapter 11, Article 1), applicable to receiving waters of the MS4. To do so, ADOT shall fully implement the SWMP, any subsequent revisions, and all requirements of this permit.
- 2.1.2 ADOT shall compare stormwater discharge water quality monitoring data, as measured from the MS4 outfalls as described in Part 12.4, to the water quality standards applicable to the receiving waters. A pollutant concentration that is greater than the applicable surface water quality standard is not considered a violation of this permit when ADOT is in compliance with the conditions of this permit. In the event a pollutant concentration greater than the applicable surface water standard is detected, ADOT shall continue to perform routine monitoring of stormwater discharges as required by Part 12.2 of this permit. If monitoring data collected under this permit show a recurring (more than once) condition at an outfall, ADOT shall investigate and identify potential source(s) of the pollutant(s). ADOT shall evaluate the effectiveness of existing control measures on the pollutant(s) of concern and necessary pollutant reductions to achieve water quality standards. ADOT shall identify additional control measures or actions necessary to improve the quality of discharges from ADOT's MS4.
- 2.1.3 If, despite full implementation of the SWMP and other requirements of this permit, ADOT finds that a discharge contains a pollutant above a SWQS, ADOT shall report this

information in the Annual Report. This report shall include, at a minimum, the information specified in Part 13.1.6 of this permit. For recurring discharges containing pollutants above a SWQS, actions taken to investigate and identify sources and any recommended actions for water quality improvement shall be included in the Annual Report.

- 2.1.4 If a recurring discharge of pollutants above a SWQS exists at an MS4 outfall and it is determined that there are feasible actions within ADOT's control that may be taken to reduce a recurring discharge of pollutants above the SWQS, ADOT shall immediately begin to implement those, or alternatively propose to ADEQ an action plan including a schedule for timely implementation. If a discharge of pollutants above a SWQS persists and ADOT has not acted to reduce the discharge to the maximum extent practicable, this permit may be reopened and modified to require additional actions to control the discharge of pollutants.

## **2.2 Total Maximum Daily Loads (TMDLs)**

This Section applies to ADOT's MS4 system statewide.

- 2.2.1 ADOT shall meet any applicable requirements of a final TMDL and the associated implementation plan, including any assigned wasteload allocation. If ADOT is not assigned a WLA in the final TMDL, ADOT shall meet the applicable surface water quality standard for the pollutant of concern at the point of discharge.
- 2.2.1.1 ADOT shall modify the SWMP, as necessary, to ensure that the wasteload allocation, and associated implementation plan will be met.
- 2.2.1.2 ADOT shall implement control measures that address the requirements of the TMDL and clearly identify these practices in the SWMP.
- 2.2.2 ADOT shall include any pollutant(s) associated with the TMDL in stormwater monitoring to be performed at outfall(s) discharging to the receiving water.
- 2.2.2.1 ADOT shall monitor for listed pollutants throughout the permit term at the outfall(s) discharging to the receiving water at the frequencies required in Part 12.
- 2.2.2.2 Stormwater monitoring shall be performed to assess the contribution of listed pollutants from the MS4 and to evaluate the effectiveness of control measures in meeting any wasteload allocation or load allocation specified in the TMDL.
- 2.2.3 ADOT shall include stormwater monitoring results and the assessment of the effectiveness of control measures in meeting wasteload allocations or load allocations associated with the TMDL in the Annual Report.
- 2.2.4 Pursuant to A.A.C. R-18-9-A905, which incorporates by reference 40 CFR 122.62, this permit may be reopened and modified to include the requirements of an approved TMDL and associated implementation plan.



### **3.0 LEGAL AUTHORITY**

To the extent allowable under state law, ADOT shall continue to develop, maintain, and enforce legal authority to control pollutant discharges to its municipal separate storm sewer through policies, standards, permits, agreements or other means necessary.

#### **3.1 Review Legal Authority**

Within 12 months of the effective date of this permit ADOT shall review, revise and/ or adopt relevant rules, memorandums of agreement or other regulatory mechanisms, to the extent allowable under state law, that provide it with adequate legal authority to control pollutant discharges into and from its MS4, and to meet the requirements of this permit.

#### **3.2 Maintain Adequate Legal Authority**

ADOT shall utilize the powers delegated to it by the Arizona Legislature to control and enforce the release of pollutants to and discharges from the MS4 that is owned or operated by ADOT through rules and regulations regulating encroachments (e.g., A.A.C. R17-3-501 – 509), permits, contracts or similar means.

Where necessary to assist in implementing this legal authority, ADOT shall develop and/ or revise procedures, agreements, and/or memorandums of understanding with other agencies, such as the Arizona Office of the Attorney General and the Arizona Department of Public Safety. These procedures/ agreements/ memorandums shall be documented in the SWMP.

To be considered adequate, this legal authority shall, at a minimum, address the following:

- a. Authority to Prohibit Illicit Discharges: Prohibit and eliminate illicit connections and discharges to the MS4. Illicit connections include pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4. Illicit discharges include all non-stormwater discharges except firefighting discharges, discharges from NPDES permitted industrial sources and discharges not otherwise allowed under Part 3.2(b) of this permit.
- b. Allowable Non-Stormwater Discharges: Exceptions to the prohibition in Part 3.2(a) may include the allowable non-stormwater discharges described in Part 1.3, only if they are non-significant contributors of pollutants (i.e., do not result in the discharge of pollutants above a numeric or narrative SWQS).
- c. Authority to Prohibit Spills or Other Releases: Control the discharge of spills, and prohibit dumping or disposal of materials other than stormwater into the MS4.
- d. Authority to Require Compliance: Require compliance with conditions in ADOT's statutes, rules, permits, contracts, or orders (i.e., hold dischargers accountable for their contributions of pollutants and flows).
- e. Authority to Require Installation, Implementation, and Maintenance of Control Measures: Require owners/operators of construction sites, new or redeveloped land, and industrial and commercial facilities that discharge to ADOT's MS4 to minimize the discharge of pollutants through the installation, implementation, and maintenance of stormwater control measures.
- f. Authority to Receive and Collect Information: Require from operators of construction sites that discharge to ADOT's municipal storm sewer system information such as stormwater plans, inspection reports, and monitoring results, and other information deemed necessary to assess compliance with this permit.

- g. Authority to Inspect: To the extent allowable under state law, ADOT shall have authority to inspect facilities or activities that result in a discharge to its municipal storm sewer system.
- h. Response to Violations: Establish written procedures to promptly require that violators cease and desist illicit discharges or discharges of stormwater in violation of any ADOT-specific statute, rule, permit or other mechanisms and abate such discharges, including the ability to:
  - 1. Require the responsible person to abate the illicit discharge, spill, or pollutant release immediately and initiate remedial activities as soon as practicable;
  - 2. If a situation persists where pollutant-causing sources or activities are not abated, provide the option to order the cessation of activities until such problems are adequately addressed.
  - 3. When all parties agree that remedial activities cannot be initiated immediately, ADOT shall determine a new timeframe and notify ADEQ within 14 days of becoming aware of the illicit discharge, spill, or pollutant release.
- i. Interagency Agreements: As necessary, establish agreements (memorandum of agreement, etc.) with other MS4s to abate, control, or reduce the discharge of pollutants to ADOT's municipal storm sewer system

### **3.3 Enforcement Measures and Tracking**

- 3.3.1 Enforcement Response Plan (ERP). The ERP sets out ADOT's potential responses to violations and addresses repeat and continuing violations through progressively stricter responses as needed to achieve compliance. ADOT shall continue to implement, and revise if necessary, an ERP. ADOT shall review the ERP at least annually and update as necessary. ADOT shall submit the ERP, including any intergovernmental agreements, to ADEQ in the first Annual Report. The ERP shall describe how ADOT shall use each of the following types of enforcement responses based on the type of violation:
  - a. Where ADOT lacks direct legal authority to prohibit illicit discharges, require compliance, receive and collect information, inspect, respond to violations, levy monetary penalties or impose civil/ criminal penalties, ADOT shall establish agreements with other agencies, to the extent allowable by state law, including, but not limited to the Arizona Office of the Attorney General and Arizona Department of Public Safety. Such interagency agreements shall, at a minimum, contain the following:
    - 1. Inter-agency Divisions
    - 2. Process for referring matters to the appropriate agency for enforcement
    - 3. Time frames for referrals, actions, response and resolution
  - b. Verbal Warnings – At a minimum, verbal warnings shall specify the nature of the violation and required corrective action.
  - c. Written Notices – Written notices of violation (NOVs), or their equivalent, shall stipulate the nature of the violation and the required corrective action, with deadlines for taking such action.
  - d. Escalated Enforcement Measures – ADOT shall establish and maintain the legal ability to employ any combination of the enforcement actions below (or their functional equivalent), and to escalate enforcement responses where necessary to address non-compliance, repeat or escalating violations, or incidents of major environmental harm:

1. Citations – The ERP shall define the process whereby ADOT shall refer to the Attorney General’s Office for assessment of monetary fines, which may include civil and administrative penalties.
  2. Stop Work Orders – The ERP shall define ADOT’s authority to: a) issue stop work orders that require construction activities to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate control measures; b) withhold payment from a contractor for deficiencies in construction; and c) charge illegal encroachers for the removal of an illicit connection/ encroachment.
  3. Withholding of Plan Approvals or Other Authorizations – Where a construction contractor is in non-compliance, the ERP shall address how ADOT’s own approval process affecting the contractor’s ability to discharge to the MS4 can be used to abate the violation.
  4. Additional Measures – ADOT shall also establish and implement additional enforcement measures, as necessary, to address construction permit non-compliance and/ or violations committed by contractors, illicit dischargers and other persons who create illicit discharges.
- 3.3.2 Enforcement Tracking – ADOT shall track instances of non-compliance either in hard-copy files or electronically. The enforcement case documentation shall include, at a minimum, the following:
- a. Name of owner/operator of facility or site of violation
  - b. Location of the illicit discharge source (e.g., construction project, industrial facility)
  - c. Description of violation
  - d. Required schedule for returning to compliance
  - e. Description of enforcement response used, including escalated responses if repeat violations occur or violations are not resolved in a timely manner
  - f. Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violations)
  - g. Any referrals to different departments or agencies
  - h. Date violation was resolved.
- 3.3.3 Recidivism Reduction – ADOT shall identify chronic violators of any SWMP component and reduce the rate of non-compliance recidivism. ADOT shall summarize inspection results by these chronic violators and include incentives, disincentives, or an increased inspection frequency at the operator’s sites.

### **3.4 Enforcement Authority Framework**

ADOT shall include as part of its written SWMP the framework for enforcing the use of its storm sewer system. This statement shall include:

- a. Identification of all departments within ADOT’s jurisdiction that conduct stormwater-related activities and their roles and responsibilities under this permit. Include an up-to-date organizational chart specifying these departments, key personnel, and contact information.

- b. Identification of ADOT's administrative and legal procedures, rules and statutes available to mandate compliance with stormwater-related requirements and therefore with the conditions of this permit.
- c. A description of how stormwater related-requirements are implemented and, where applicable, appealed.
- d. A description of ADOT's procedures to issue administrative orders and injunctions through the Arizona Attorney General's Office or the court system for enforcement actions.

## **4.0 STORMWATER MANAGEMENT PROGRAM/ PLAN (SWMP)**

### **4.1 SWMP General Requirements and Implementation**

ADOT shall revise and update its written SWMP document and submit the SWMP (including any attachments) to ADEQ for review not later than 12 months after the effective date of this permit, in accordance with Part 4.1.2(d). ADOT shall continue to implement the current SWMP until the revised SWMP is submitted.

At a minimum, ADOT shall include the following information in the SWMP:

- a. Regulatory mechanisms that describe the legal authority necessary to implement and enforce the requirements of this permit (see Part 3.1) and the Enforcement Response Plan (see Part 3.3.1);
- b. Written procedures and other mechanisms to establish, implement and maintain the legal authority required in Part 3.2;
- c. Written procedures that describe how ADOT will establish, implement and maintain the IDDE provisions described in Parts 6.1 through 6.5;
- d. Written procedures that describe the following programs for best management practices:
  - Stormwater Monitoring Guidance Manual
  - Dry Weather Field Screening
  - Erosion and Pollution Control Manual (erosion, sediment, and waste control)
  - Construction & Post- Construction control measures
  - Maintenance & facilities control measures
  - Winter Storm Policies

In addition, ADOT's SWMP shall include a discussion of activities to be implemented by ADOT including programs for public education and outreach, employee training, public involvement/participation, illicit discharge detection and elimination, construction site stormwater pollution prevention, post-construction stormwater pollution control measures, roadway maintenance standards and BMPs, facility management, monitoring, and standards for activities within 1/4 mile of impaired or OAWs.

#### **4.1.1 Program Implementation: ADOT shall:**

- a. Implement and maintain a SWMP designed to minimize, to the maximum extent practicable, the release of pollutants to and the discharge of pollutants from the MS4 that is owned, operated, or used by ADOT.

- b. At a minimum, implement and maintain each of the components [*i.e.* measures, control measures, and measurable goals (*e.g.* frequencies, amounts, timeframes)] as specified in this permit. ADOT shall continue to implement additional stormwater and non-stormwater control measures as necessary to minimize the discharge of pollutants to and from the storm sewer system and to Waters of the U.S. to the maximum extent practicable.
  - c. Implement the SWMP in its entirety. This permit is the governing document in any discrepancy between ADOT's SWMP and this permit's requirements.
- 4.1.2 SWMP Update: ADOT shall:
- a. Update the SWMP as necessary to comply with the provisions of this permit and to provide detail of proposed actions and time-frames for implementation.
  - b. Update the SWMP with all of the information required in Parts 4 through 11.
  - c. Sign the SWMP in accordance with Part 14.3.
  - d. Submit one written copy and one electronic copy of the updated SWMP, including attachments, to ADEQ not later than 12 months from the effective date of this permit. ADOT shall submit the updated SWMP to the address provided in Part 13.1.8.2.
- 4.1.3 Annual Program Review: ADOT shall conduct an annual program review, in conjunction with the preparation of the Annual Report required under Part 13.1, to:
- a. Assess progress in implementing the SWMP; and
  - b. Evaluate the effectiveness of the program in reducing the discharge of pollutants to the maximum extent practicable.
- 4.1.4 Revisions to the SWMP: ADOT shall update the SWMP during the term of the permit as necessary to improve the effectiveness of the program in reducing the discharges of pollutants from the storm sewer system, to the maximum extent practicable. Changes to the SWMP made in accordance with the following do not require formal modification of this permit:
- 4.1.4.1 Adding New Control Measures: ADOT may modify the SWMP to add control measures at any time during the term of the permit. ADOT shall include a description of these modification(s) in the subsequent Annual Report;
  - 4.1.4.2 Adding Temporary or Experimental Control Measure: In addition to the practices or controls described in the SWMP, ADOT may implement temporary (event-driven) control measures and/or experimental control measures at any time during the term of the permit. Such controls may also be removed at ADOT's discretion. A statement of the purpose, effectiveness and description of the temporary or experimental stormwater controls shall be described in the subsequent Annual Report.
  - 4.1.4.3 Increasing Existing Control Measures: ADOT may modify the SWMP to increase the amount, frequency or other quantity of existing controls implemented at any time during the term of the permit. ADOT shall include a description of these modification(s) in the subsequent Annual Report;
  - 4.1.4.4 Replacing Existing Control Measures: Whenever ADOT replaces an existing control measure, ADOT shall include an explanation in the subsequent Annual

Report of how the existing control measure was not adequate in reducing the discharge of pollutants and how the new control measure is expected to improve the effectiveness of reducing pollutants in the discharge to the maximum extent practicable.

- 4.1.4.5 Discontinuing or Decreasing an Existing Control Measure: Whenever ADOT discontinues or decreases a control measure, ADOT shall provide the following information in the subsequent Annual Report:
- a. A description of the control measure to be eliminated or reduced;
  - b. An explanation of why the controls should be eliminated or reduced;
  - c. An analysis of how the goals of the existing control measure are expected to be achieved once the control is eliminated or reduced;
  - d. An analysis of how the changes will provide equivalent or improved water quality protection; and
  - e. An explanation of how the SWMP will continue to achieve a reduction in pollutants to the maximum extent practicable.

## **4.2 SWMP Requirements**

- 4.2.1 Revision of the SWMP: ADOT shall revise the SWMP as required in Part 4.1.4 to include, at a minimum, the following components:
- 4.2.1.1 A description of the control measures selected, implemented, maintained, and updated to minimize the discharges of pollutants that may contribute to an exceedance of any surface water quality standard;
  - 4.2.1.2 A list of narrative and/or numeric measurable goals for each BMP. At a minimum, the SWMP shall include the measurable goals identified in this permit. ADOT may also identify additional measurable goals, such as frequencies, amounts, time-frames, or steps toward development of a BMP;
  - 4.2.1.3 The permit year by which ADOT will achieve each measurable goal. These achievement dates shall occur before the expiration date of this permit; and
  - 4.2.1.4 The ADOT organizational unit(s) responsible for implementing and coordinating each measure.

## **5.0 MAPPING the MS4**

ADOT shall provide a copy of the storm sewer system map(s) for review by ADEQ or U.S .EPA upon request.

### **5.1. Storm Sewer System Inventory and Outfall Mapping**

ADOT shall maintain existing maps and continue to map its storm sewer system, including all ADOT outfalls within the regulated MS4s.

The following mapping schedule shall be completed by the end of the permit term. ADOT shall include an update on the status of storm sewer system and outfall mapping (including percent complete) with each Annual Report that documents progress with the mapping project.

- First 18 months of the permit term – Interstate 10 corridor
- Second 18 months of the permit term – Interstate 17 corridor
- Year 4 of the permit term – Interstate 8 and Interstate 19 corridors
- Year 5 of the permit term – Interstate 40 corridor

The storm sewer system maps shall include, at a minimum, the following information about the outfall:

- a. The ADOT outfall location, including latitude and longitude;
- b. Outfall diameter;
- c. Outfall type (corrugated metal pipe, cast concrete, etc.);
- d. The drainage pattern and the water quality status (unimpaired, not-attaining, impaired or OAW) of the receiving water;
- e. The associated stormwater collection and conveyance structures (e.g. drainage pipes, streets, floodway structures, drywells, retention/ detention basins);
- f. The surrounding highway system, including the nearest milepost; and
- g. The relevant ADOT district boundary.

### **5.2 Submit Proposal to Map the Storm Sewer System**

With the submittal of the fourth year Annual Report to ADEQ, ADOT shall include a proposal to identify and map all remaining outfalls statewide. The proposal shall identify and prioritize all remaining unmapped areas and propose schedules for completing the mapping of these areas in phases within the next three 5-year permit terms.

ADOT's proposal for storm sewer system outfall mapping shall include the following information:

- a. An explanation of the rationale for prioritization of outfall mapping;
- b. The watershed contributing to those outfalls and the water quality status (unimpaired, not-attaining, impaired or OAW) of the receiving water(s) in the areas to be mapped;
- c. The associated asset types (e.g. drainage pipes, streets, floodway structures, basins);
- d. The routes;
- e. The relevant district boundary; and
- f. A schedule to identify and map all remaining outfalls statewide.

## 6.0 ILLICIT DISCHARGE DETECTION and ELIMINATION (IDDE)

ADOT shall implement an ongoing program to minimize, detect, investigate, and eliminate illicit discharges, including unauthorized non-stormwater discharges and spills, into the storm sewer system that is owned and/ or operated by ADOT. The SWMP shall include the following components and control measures:

### 6.1 IDDE Program Development

- 6.1.1 ADOT shall continue to develop and implement a program to detect, investigate, and eliminate non-stormwater discharges (see Part 1.3), including illegal dumping, into its system. The IDDE program shall include the following:
  - a. An up-to-date storm sewer system map (see Part 5)
  - b. Procedures for identifying priority areas within the MS4 likely to have illicit discharges, and a list of all such areas identified in the system
  - c. Field screening to detect illicit discharges (see Part 6.3)
  - d. Procedures for tracing the source of an illicit discharge (see Part 6.4)
  - e. Procedures for removing the source of the illicit discharge (see Part 6.4)
  - f. Procedures for program evaluation and assessment (see Part 4.1.3)
  - g. Procedures to prevent and correct any on-site sewage disposal systems that discharge into the MS4.
- 6.1.2 In implementing the IDDE program, ADOT may conduct such investigations, contract for investigation, coordinate with storm drain investigation activities of others, or use any combination of these approaches.
- 6.1.3 When ADOT observes illicit connections or illicit discharges related to another operator's municipal storm sewer system, ADOT shall notify the other operator as soon as practicable, but in no case greater than three (3) business days.
- 6.1.4 If another operator notifies ADOT of an illegal connection or illicit discharge to the municipal separate storm sewer system, ADOT shall follow the requirements specified in Part 6.3.
- 6.1.5 ADOT shall develop the following written procedures for incorporation into the SWMP document:
  - a. Implementing the illicit discharge enforcement policy and jurisdiction, including those components described in Parts 6.1 – 6.5; and
  - b. Conducting investigations into the source of all identified illicit discharges, including approaches to requiring such discharges to be eliminated.

### 6.2 Minimize Illicit Discharges (includes Illegal Dumping)

ADOT shall implement practices to minimize illicit discharges to ADOT's storm sewer system, including the following controls:

- 6.2.1 Maintain Illicit Discharge Authority: ADOT shall continue to maintain sufficient legal authority to prohibit and eliminate illicit discharges to ADOT's storm sewer system, including illicit connections to the storm sewer system and improper disposal (illegal



dumping) of wastes, toxic chemicals, and other non-stormwater discharges into the storm sewer system;

6.2.2 Enforce Standard Encroachment Permit: ADOT shall continue to implement and enforce encroachment permits and external party requirements on stormwater impacts for activities within ADOT's jurisdiction. ADOT, unless prohibited by statute or court order, shall prohibit all third party illicit discharges to the storm sewer system owned or operated by ADOT as unauthorized encroachments pursuant to A.A.C. R17-3-508.A;

6.2.3 Training: ADOT shall train employees in accordance with Part 9.

### **6.3 Detecting Potential Illicit Discharges and Illicit Connections**

ADOT shall implement the following control measures to detect illicit discharges and illicit connections into ADOT's storm sewer system through mapping and outfall inspections:

6.3.1 Outfall Inspection: ADOT shall inspect a minimum of 20% of all priority outfalls during each year of the permit term. ADOT shall document inspections and report the following minimum information in the Annual Report:

- a. Outfall identification (including ADOT district, closest roadway, and milepost)
- b. Receiving water (including if the receiving water is listed as impaired or OAW)
- c. Evidence of Illicit discharges including non-stormwater flows (ongoing and other evidence such as wet areas, staining, odor, trash, stressed vegetation, etc.)

6.3.2 Screening: Conduct dry weather field screening in accordance with the stormwater monitoring guidance procedures in the SWMP.

- a. ADOT shall continue to implement and revise, when necessary, written dry weather field screening procedures to detect and eliminate illicit discharges to the MS4. These procedures shall be included as part of the IDDE program, and incorporated into ADOT's SWMP. Dry weather field screening may consist of:
  - i. Field observations;
  - ii. Field screening monitoring; and
  - iii. Analytical monitoring.

The stormwater monitoring procedures shall include a description of ADOT's field screening activities for dry weather discharges to and from the MS4.

- b. ADOT shall describe all updates in the Annual Report;

6.3.3. Record Findings of Outfall Inspections: As described in the dry weather field screening procedures in the SWMP, ADOT shall implement and maintain a system to track and record the findings of outfall inspections, including the conditions of outfalls, potential sources of pollutants, and maintenance needs. Findings (including outfall identification, evidence of illicit discharges, observations, any follow up activities, and other information as necessary) shall be documented in the Annual Report;

6.3.4 Take Action to Eliminate Sources of Illicit Discharges: ADOT shall report the number of illicit discharges and their resolution each year in the Annual Report; and

6.3.5. Training: ADOT shall train employees in the detection of illicit discharges and illicit connections, in accordance with Part 9.1.

#### **6.4 IDDE Source Investigation and Elimination**

- 6.4.1 Minimum Investigation Requirements: At a minimum, ADOT shall conduct an investigation(s) to identify and locate the source of any continuous or intermittent non-stormwater discharge as soon as practicable, but in no case greater than three (3) business days after becoming aware of the illicit discharge.
- a. Illicit discharges suspected of being sanitary sewage and/or significantly contaminated shall be investigated first.
  - b. ADOT shall report immediately the occurrence of any dry weather flows believed to be an immediate threat to human health or the environment to the ADEQ Emergency Response Hotline at (602) 771-2330 or, toll free, at (800) 234-5677.
  - c. ADOT shall track all investigations to document at a minimum:
    - i. The date(s) the illicit discharge was observed;
    - ii. The results of the investigation;
    - iii. Any follow-up of the investigation; and
    - iv. The date the investigation was closed.
- 6.4.2 Source of the Illicit Discharge: ADOT shall determine and document through its investigations (in accordance with Part 6.3.1) the source of all illicit discharges. If the source of the illicit discharge is found to be a discharge authorized under an AZPDES permit, no further action is required.
- a. If an illicit discharge is found, but within six (6) months of the beginning of the investigation neither the source nor the same non-stormwater discharge has been identified/ observed, then ADOT shall maintain written documentation for review by ADEQ.
  - b. If the observed discharge is intermittent, ADOT shall document that a minimum of three (3) separate investigations were made to observe the discharge when it was flowing. If these attempts are unsuccessful, ADOT shall maintain written documentation for review by ADEQ. However, since this is an ongoing program, ADOT should periodically recheck these suspected intermittent discharges.
- 6.4.3 Duty to Eliminate Illicit Discharge: Immediately upon determining the source of the illicit discharge, ADOT shall notify the responsible party of the problem to cease the discharge immediately. Furthermore, ADOT shall require the responsible party to conduct all necessary actions to eliminate the non-stormwater discharge within 24 hours of notification.

Upon being notified that the discharge has been eliminated, ADOT shall conduct a follow-up investigation, with field screening, consistent with Part 6.3.2 (Field Screening), to verify that the discharge has been eliminated. ADOT shall document its follow-up investigation.

- 6.4.4. Coordinate with Local Jurisdictions for Complaint Response and Investigation
- a. The SWMP shall include a description of ADOT's procedures for coordinating with municipalities and state or federal regulatory agencies to address situations where investigations indicate that the illicit discharge originates outside ADOT's jurisdiction.
  - b. ADOT shall continue to implement procedures for notifying 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.
- 6.4.5 Record Actions: ADOT shall continue to track all actions taken on identified illicit discharges, including those reported to other jurisdictions for follow-up. ADOT shall present the number of illicit discharges identified and their resolution in the Annual Report.

## **6.5 Responding to Spills**

ADOT shall implement and maintain control measures to respond to spills that occur to ADOT's storm sewer system. ADOT shall continue compliance with the Arizona State Emergency Response and Recovery Plan (SERRP) for ADOT's Emergency Response Program and shall identify these procedures in the SWMP.

## **7.0 STORMWATER MANAGEMENT of DISCHARGES ASSOCIATED with CONSTRUCTION ACTIVITY**

ADOT shall continue to implement the program to reduce the discharge of pollutants from construction activities that discharge to its MS4.

### **7.1 ADOT's Responsibilities under this Permit**

- 7.1.1 ADOT shall develop and implement an inspection and oversight program to monitor and control pollutants in stormwater discharges to the MS4 from construction activities. ADOT shall:
- a. Ensure that operators of construction activities (including ADOT) that discharge or have the potential to discharge to ADOT's MS4 have obtained coverage under the current AZPDES Construction General Permit (CGP);
  - b. Continue to implement requirements for inspection and enforcement of ADOT's erosion and pollution control procedures in the SWMP. ADOT shall evaluate its Erosion and Pollution Control Manual at least annually and not later than June 30 of each year during this permit term, and update the manual as necessary. Updates to the manual shall be described in the Annual Report.
  - c. ADOT shall review contractor SWPPPs to verify conformance with the CGP and any ADOT requirements, including erosion and sediment control, prior to issuing construction approvals or authorizations.
- 7.1.2 ADOT shall develop an inventory of construction activities that discharge, or have the potential to discharge to the MS4.

- a. The inventory, list, or database shall include any construction activities that will result in land disturbance of one (1) or more acres and that have the potential to discharge to ADOT's MS4.
- b. The inventory shall be updated as new projects are permitted and projects are completed, including the name of the project and its associated AZCON number(s), that have achieved final stabilization and that ADOT considers complete. This shall also include projects that are turned over to ADOT to ensure stabilization in accordance with ADEQ's Stormwater Construction General Permit. ADOT shall submit this list to the address provided in Part 13.1.8.2 or shall provide ADEQ with a website address which will be continually updated with the required information.
- c. ADOT shall complete a comprehensive inventory within 12 months of the effective date of this permit. ADOT shall maintain and update the inventory annually, thereafter, and include the inventory in the Annual Report.
- d. ADOT shall maintain an up-to-date inventory of all construction sites that discharge, or have the potential to discharge to the MS4. The inventory shall contain the:
  - i. Relevant contact information for each project (e.g., name, address, phone, etc.);
  - ii. Size of the project and area of disturbance;
  - iii. CGP AZCON Number(s);
  - iv. ADOT district where the construction project is located; and
  - v. Other relevant information normally tracked in an ADOT inventory.

ADOT shall submit a copy of the inventory each year in the Annual Report.

## **7.2 Applicability of Requirements to ADOT for Stormwater Discharges Associated with Construction Activity**

ADOT shall submit separate, accurate and complete Notices of Intent (NOIs) to ADEQ for construction activities, for which ADOT meets one or both of the definitions of "operator" in the CGP.

## **7.3 Applicability of Requirements to Operators under Contract with ADOT for Performing Construction Activities**

1. ADOT shall, at a minimum, require its contractors to comply with the CGP for regulated construction projects, including the contractor's requirement to submit a NOI and obtain authorization under the CGP for each construction project or site.
2. For projects where ADOT's contractor has submitted a Notice of Termination (NOT) (*i.e.*, final stabilization has not been achieved), ADOT shall assume responsibility for all CGP requirements at the site until final stabilization is achieved for the entire project, unless another permitted operator assumes responsibility.

## **7.4 Violations and Enforcement**

ADOT shall develop and maintain a list and description of all stormwater-related violations and their resolution, including any enforcement actions taken against its contractors.

ADOT shall notify ADEQ of any construction activities that discharge or have the potential to discharge stormwater to ADOT's MS4 that do not have AZPDES permit coverage (*i.e.*, unpermitted/illicit discharges). Unpermitted discharges do not include operators that have received written acknowledgment of a permit waiver certification form from ADEQ.

ADOT shall report unpermitted dischargers to ADEQ as soon as practicable, but in no case greater than three business days and shall include, to the extent known, the following information:

- Project or facility name;
- Address; and
- Operator name and contact information.

## **7.5 Post-Construction and Measures to Control Discharges from New Development and Redevelopment**

7.5.1 ADOT shall develop, implement, and maintain comprehensive planning procedures and control measures to reduce the discharge of pollutants to the maximum extent practicable from new development and significant redevelopment within the MS4. This applies to projects that result in land disturbance of greater than or equal to one (1) acre including projects less than one (1) acre that are part of a larger common plan of development or sale. The SWMP shall include a post-construction stormwater pollution control program including maintenance of post-construction stormwater pollution control measures.

- a. Within 180 days of the effective date of this permit, ADOT shall complete the development of the post-construction stormwater pollution control program. ADOT shall document the completion date in the Annual Report.
- b. Immediately after completing development of the post-construction stormwater pollution control program, ADOT shall implement the program within all ADOT districts. ADOT shall provide training, as specified in Part 9.1.4, to ensure that post-construction control measures are part of the comprehensive planning process. The number of trainings completed shall be documented in the Annual Report.

7.5.2 Implement the Water Quality Post-Construction BMP Manual: ADOT shall continue to update, maintain and implement its Post-Construction Best Management Practices Manual ADOT shall ensure each district has the most recent version of the manual and that projects are designed and constructed in accordance with the manual.

7.5.3 Install Post-Construction Stormwater Control Measures: Controls shall be installed for all newly developed or redeveloped roadways that discharge stormwater runoff.

7.5.4 Maintain a Post-Construction BMP Inventory: ADOT shall inventory, inspect, and maintain all post-construction stormwater pollution control measures in accordance with the written procedures in the SWMP. ADOT shall provide an up-to-date inventory in each Annual Report.

7.5.5 Training: ADOT shall train employees in accordance with Part 9.1.

## 8.0 MEASURES to CONTROL DISCHARGES from ROADWAYS

ADOT shall continue to implement programs for roadway and storm sewer system repair, maintenance and cleaning, vegetation management, and winter storm policies to reduce the discharge of pollutants to and from the storm sewer system. The SWMP shall include policies and procedures to prevent or reduce the discharge of pollutants to and from ADOT's MS4.

1. Update the roadway maintenance best management practices described in the SWMP as necessary to comply with permit requirements; and
2. Describe updates to the roadway maintenance control measures in the Annual Report.

### 8.1 Storm Sewer System and Highway Maintenance

Immediately following the effective date of this permit, ADOT shall implement the following control measures for operating and maintaining roadways and drainage ways to minimize discharges to and from the storm sewer system:

#### 8.1.1. Inspect Storm Sewer System

- a. ADOT shall continue to inspect and record conditions of the storm sewer system including roadways used for stormwater conveyance, catch basins, storm drain inlets, open channels, washes, culverts, and retention/detention basins to identify potential sources of pollutants and determine maintenance needs;
- b. ADOT shall maintain records of inspections and conditions found and shall present the number of inspections in each Annual Report;

#### 8.1.2. System Maintenance Schedules and Priorities

- a. ADOT shall identify routine maintenance schedules and maintenance priorities for its storm sewer system, including roadways to minimize pollutant discharges from the storm sewer system;
- b. ADOT shall evaluate priorities and update the maintenance schedule annually, as needed;

#### 8.1.3. Perform Repair, Maintenance, and Cleaning

- a. ADOT shall continue to repair, maintain, and clean its roadways used for stormwater conveyance and its storm sewer system to minimize the discharge of pollutants (including floatable debris) from the storm sewer system;
- b. During repair, maintenance or cleaning activities, ADOT shall ensure that all storm drain inlets are assessed for evidence of illicit discharges (including illegal dumping), such as significant loads of a specific pollutant(s) or material(s). Upon discovery, ADOT shall initiate procedures in accordance with Part 6;

#### 8.1.4. Control Measures for Repair, Maintenance, and Cleaning

- a. ADOT shall continue to implement appropriate control measures to reduce the discharge of pollutants to and from the storm sewer system when performing repair, maintenance, or cleaning of the storm sewer system, including roadways;
- b. ADOT shall describe the control measures in the updated maintenance and facilities best management practices portion of the SWMP, as required in Part 8.0(1);

8.1.5 ADOT shall properly dispose of waste removed from its storm sewer system and ADOT facilities, including dredge spoil and accumulated sediments, products, materials and other wastes;

8.1.6 ADOT shall train employees in accordance with Part 9.1.

## **8.2 Roadside Management Program**

8.2.1 ADOT shall continue to implement and maintain effective pollution prevention and control measures for the application of pesticides / herbicides and fertilizers in public rights-of-way. These measures shall minimize the discharge of these pollutants to and from the storm sewer system. These measures shall be described and updated, as needed, in the SWMP.

8.2.2 ADOT shall implement the following control measures to manage vegetation along roadsides:

a. Pesticide Application, Certification and Licensing Procedures.

- 1) ADOT shall continue to implement practices and procedures for ADOT staff and commercial applicators to use only USEPA-approved pesticides and herbicides. ADOT shall design these practices to avoid chemical application when feasible and to minimize the amount of chemicals applied. ADOT shall comply with all application and disposal requirements included on the registered pesticide, herbicide and insecticide label;
- 2) Within 12 months from the effective date of this permit, ADOT shall develop control measures to address the timing of applications in relation to expected precipitation events, proximity to water bodies, and other practices to minimize the runoff of pollutants;
- 3) If ADOT must apply pesticides in any area that is within, or directly adjacent to a water of the U.S., ADOT shall first obtain coverage under the AZPDES Pesticide General Permit;
- 4) ADOT shall review application practices annually and update procedures as needed to minimize runoff of pollutants; and
- 5) ADOT shall continue to require certification / licensing of staff and commercial applicators that apply pesticides to ADOT rights-of-way;

b. Implement Fertilizer Application Procedures

- 1) ADOT shall minimize the presence of fertilizers in the discharge by continuing to implement fertilizer application procedures in accordance with manufacturer's specifications; and
- 2) ADOT shall review application practices annually and update procedures in the SWMP, as needed, to minimize runoff of pollutants.

c. ADOT shall train employees in accordance with Part 9.1

8.2.3 ADOT shall maintain a program to identify, track, and prioritize stabilization along road segments where slopes are 3:1 or greater and have the potential to erode and/ or discharge sediment to ADOT's storm sewer system. Each Annual Report shall summarize erosion abatement projects conducted during the year.

- 8.2.4 ADOT shall develop a program to retrofit existing developed highways that impact water quality originating from a transportation-related municipal separate storm sewer system. ADOT shall develop a retrofit program within 24 months of the effective date of this permit and shall emphasize controls that infiltrate, evapotranspire, or harvest and use stormwater discharges. The program shall include:
- a. An inventory of potential retrofit locations that considers, at a minimum:
    - 1) Locations that contribute highway transportation-related pollutants of concern to an impaired waterbody
    - 2) Locations that contribute highway transportation-related pollutants of concern to an outstanding Arizona water
    - 3) Locations that contribute highway transportation-related pollutants of concern to a local agency municipal separate storm sewer system.
  - b. An evaluation and ranking of the inventoried locations to prioritize retrofitting that includes, at a minimum:
    - 1) Feasibility;
    - 2) Availability of Rights-of-Way;
    - 3) Cost effectiveness;
    - 4) Pollutant removal effectiveness;
    - 5) Roadway area potentially treated; and
    - 6) Maintenance requirements

### **8.3 Winter Storm Policies**

- 8.3.1 ADOT shall continue to implement and maintain effective pollution prevention and control measures for minimizing impacts from the application of salt, de-icing and anti-icing chemicals and abrasives for snow and ice removal; salt and sand storage locations; and snow disposal areas. ADOT shall describe the program for its maintenance and facilities control measures in the SWMP. The storage of salt, de-icing and anti-icing chemicals and abrasives shall be conducted in a manner to minimize the discharge of pollutants.



## **9.0 TRAINING**

ADOT shall implement a stormwater pollution prevention training program that meets the requirements of Parts 9.1.1 through 9.1.6. The goal of this program is to reduce or eliminate behaviors and practices that cause or contribute to adverse impacts to stormwater quality.

### **9.1 ADOT Employee Training**

ADOT shall continue to implement an employee stormwater training program and shall outline and update the program as necessary in the SWMP. Training of ADOT employees for each subject-specific area (*i.e.*, Parts 9.1.1 through 9.1.6) shall include: new ADOT employees whose job responsibilities include stormwater duties; and existing ADOT staff whose job responsibilities change to include stormwater duties.

All such employees shall receive initial training within 12 months of employment or change in duties. ADOT shall require refresher training for all subject-specific areas at least once every three (3) years thereafter. ADOT shall keep records of all employees who receive stormwater training and shall summarize the training and attendance in the Annual Report.

The SWMP shall include the following control measures:

- a. ADOT shall provide stormwater awareness training 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.
- b. ADOT shall provide training to educate personnel who are directly involved in activities that may impact stormwater quality or that may generate or manage non-stormwater discharges. The Annual Report shall identify the following information for each subject-specific area: number of trainings offered; number of employees trained; and other appropriate measurable goals. The employee training program shall include the following subject-specific areas:

9.1.1 Illicit discharges and illegal dumping: ADOT shall train all staff whose responsibilities may include responding to illicit discharges or illicit connections to the storm sewer system. Training shall include:

- a. The procedures for detection, investigation, (*i.e.* field screening procedures, sampling methods, field measurements) identification, clean-up, and reporting of illicit discharges and connections, and improper disposal/dumping; and
- b. The procedures for outfall screening and investigation;

9.1.2 Non-stormwater discharges: ADOT shall train all staff directly involved in managing non-stormwater discharges. The training shall include:

- a. The types of discharges allowed under this permit and those that are prohibited;
- b. The distinction between non-stormwater discharges and potential pollutant sources;
- c. The pollutants of concern that may be in non-stormwater discharges; and
- d. The control measures that shall be employed to minimize the discharge of pollutants;

- 9.1.3. Construction Site Inspections: ADOT shall train all staff directly involved in performing stormwater construction site inspections. Training shall include:
- a. The requirements of this permit and the AZPDES Construction General Permit for structural and non-structural control measures on construction sites, such as erosion and sediment control and waste control
  - b. The ADOT Contractors' requirements to obtain coverage under and comply with the AZPDES Construction General Permit and the requirements of that permit, and
  - c. ADOT's compliance, enforcement, and contractual processes to minimize stormwater discharges
- 9.1.4 New development and significant redevelopment: In accordance with Parts 7.5(1) and (2), ADOT shall implement a training program for all staff directly involved in controlling stormwater runoff from new development or redevelopment, including those persons with responsibilities for preliminary design, design, and design review. Training shall include:
- a. Training on the concepts and use of post-construction control measures to prevent or minimize water quality impacts, and
  - b. Design standards, maintenance requirements, and planning as related to stormwater;
- 9.1.5 Storm sewer system and highway maintenance: ADOT shall train all staff directly involved in storm sewer system maintenance, street repair, and road improvement. Training shall include:
- a. Potential sources of contaminants related to repair and maintenance activities, and
  - b. Proper maintenance, housekeeping, and repair control measures to prevent discharges to the storm sewer system and Waters of the U.S.
- 9.1.6 Good housekeeping:
- a. ADOT shall train all staff who may be involved in waste disposal, spill prevention and response. Training shall include:
    - i. Procedures to prevent, contain, and respond to spills, and
    - ii. Proper handling, storage, transportation, and disposal of toxic and hazardous materials, including used oil and batteries, to prevent or minimize spills or discharges to the storm sewer system
  - b. ADOT shall ensure that all staff directly involved in the application of pesticides, herbicides, and fertilizers are trained to recognize the potential for stormwater contamination resulting from misapplication or over-application of chemicals; and proper application procedures and control measures

## **9.2 ADOT Construction Contractor Training and Certification**

ADOT shall continue to require training and certification for its construction contractors. The selected course shall train ADOT construction contractors on the erosion and sediment control measure requirements in the AZPDES Construction General Permit, and the inspection and maintenance requirements of these controls. ADOT shall maintain a description of the program to train and certify ADOT construction contractors in the SWMP.

## 10.0 PUBLIC OUTREACH and EDUCATION / PUBLIC INVOLVEMENT and PARTICIPATION

ADOT shall implement an education program that includes public education and outreach, public participation and involvement, and intra- and inter-governmental coordination. The goal of this program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater quality impacts.

### 10.1 Public Outreach / Education

ADOT shall implement a Public Education / Outreach Program to provide information to the general public about actions individuals can take to reduce transportation-related pollutants and improve water quality. ADOT shall implement or participate in a stormwater education program that uses different types of media and targets a wide range of audiences. ADOT shall continue to maintain materials in a stormwater library.

10.1.1 The program shall include a description of:

- a. The methods for disseminating information
- b. The target audiences and how they were selected, and
- c. The target pollutants and sources and how they were selected

10.1.2 The SWMP shall include the following control measures:

- a. Distribution of Educational Materials through Public Places
  - i. ADOT shall continue to implement educational and public information activities to distribute education materials on stormwater quality, and
  - ii. ADOT shall present the number of materials (posters, brochures, signs, etc.) created and distributed, the number of public events ADOT attended with displays, and other appropriate measurable goals in the Annual Report
- b. Distribution of Educational Materials through ADOT's Web page
  - i. ADOT shall continue to maintain a publicly accessible Web page on its stormwater program and shall update the Web page as needed, and
  - ii. ADOT shall make the SWMP and any submittals required by this permit, including annual reports, available to the public on its Web page or at another public location (*i.e.* ADOT office(s))

### 10.2 Public Involvement / Participation

ADOT shall continue to implement a Public Involvement / Participation Program that encourages public involvement and participation and promotes, publicizes, and facilitates public reporting of illicit discharges and illegal dumping to or from ADOT's storm sewer system. The SWMP shall include the following control measures:

10.2.1 Make stormwater documents available to the public in accordance with Part 10.1.2(b).

10.2.2 Continue to implement the process for documenting and responding to public comments on its SWMP.

10.2.3 Implement a Public Reporting System:

- a. ADOT shall implement and maintain a reporting system to facilitate and track public reports of spills, discharges, and dumping to its storm sewer system. ADOT shall develop procedures for receiving and investigating public complaints. ADOT shall post or advertise telephone numbers or other information to direct the public in reporting illicit discharges and illegal dumping. ADOT shall evaluate and where appropriate, ADOT shall post these numbers in places where illicit discharges and illegal dumping are found to be a recurring problem; and
- b. ADOT shall record and report the number of reports received from the public and investigated in the Annual Report.

10.2.4 Develop, implement, and maintain a litter pick up program. ADOT shall report the amount of litter collected in the Annual Report

10.2.5 Develop, implement, and maintain a litter reporting hotline. ADOT shall report the number of calls received and responses in the Annual Report.

**10.3 Intra- and Inter-Governmental Coordination**

ADOT shall coordinate among divisions, groups, sections, and districts within ADOT to ensure compliance with the terms of this permit. ADOT may also coordinate with other government agencies and MS4 communities when necessary to address issues of common concern related to implementation of this permit.

**11.0 STORMWATER DISCHARGES FROM ADOT FACILITIES AND ACTIVITIES**

ADOT shall implement the requirements of this Part for all facilities and discharge activities that are not subject to another AZPDES / NPDES permit, and discharge, or have the potential to discharge, pollutants.

**11.1 Facility Inventory and Prioritization**

ADOT shall develop and maintain an inventory of facilities and activities that discharge or have the potential to discharge pollutants. ADOT shall develop and implement a process to prioritize the facilities and activities according to risk. Risk shall be based on, at a minimum, the following:

- a. Proximity to an impaired water or outstanding Arizona water
- b. Type and quantity of chemical and materials stored or used at the facility
- c. Type of activities conducted at the facilities
- d. The degree to which chemicals, materials, activities and other potential pollutant sources are or can be exposed to stormwater and stormwater runoff
- e. Fuel storage and dispensing, and
- f. Other factors that can increase the risk of pollutant discharge.

ADOT shall evaluate and update the inventory, prioritization, and site inspection frequency annually in connection with annual reporting. A copy of the updated inventory shall be included with the corresponding Annual Report.

## **11.2 Facility and Discharge Activity Best Management Practices**

ADOT shall develop a section in the SWMP for facilities and discharge activities not subject to AZPDES permitting that describes measures to control the discharge of pollutants to the maximum extent practicable.

ADOT shall annually review and update the SWMP procedures for maintenance and facilities best management practices. A summary of any updates/changes to the maintenance and facilities best management practices shall be included in the Annual Report.

ADOT shall continue a program that implements and maintains effective pollution prevention and control measures for the application of pesticides / herbicides and fertilizers at ADOT facilities and public areas. These measures shall be documented and updated as necessary in the SWMP.

## **11.3 Stormwater Pollution Prevention Plan**

ADOT shall develop and maintain a site specific pollution prevention plan for each facility or discharge activity that discharges or has the potential to discharge pollutants, and are not otherwise subject to separate AZPDES permitting (i.e., industrial stormwater permitting, construction site permitting, etc.). The site pollution prevention plan shall be available on-site and evaluated and updated, as necessary at least once per calendar year.

ADOT shall develop and implement a site specific pollution prevention plan before operation of a new facility or before a new discharge activity occurs. Each site-specific stormwater pollution prevention plan (SWPPP) shall include, at a minimum, the following components:

- 11.3.1 The SWPPP coverage area shall include all areas of a facility or activity with the potential to discharge pollutants.
- 11.3.2 The SWPPP shall, at a minimum, address any potential pollutants from activities materials, products, wastes, and other pollutant sources.
- 11.3.3 The SWPPP shall include control measures that are selected, installed, implemented, and maintained in accordance with good engineering practices to minimize the discharge of pollutants.
- 11.3.4 As applicable, the SWPPP shall include the following:
  - a. A site description covering all associated activities that can potentially affect the stormwater discharges covered by this permit;
  - b. A general site location map including a general description of the location of the site relative to major transportation routes and communities;
  - c. A site map showing detailed site characteristics including:
    - i. Site boundaries;
    - ii. An outline of the drainage areas, the corresponding discharge locations from the facility and arrows depicting the direction of flow;
    - iii. Locations of vehicle/equipment maintenance activities: fueling stations (including mobile fueling areas); maintenance or cleaning areas; storage areas for vehicle/equipment with actual or potential fluid leaks; loading/unloading areas; areas where treatment, storage or disposal of wastes occur; liquid storage tanks; processing areas; and storage areas;

- iv. Locations of processing activities (screening, washing, crushing, etc.);
  - v. Locations of access roads;
  - vi. Locations of outdoor equipment storage, fueling, and maintenance areas;
  - vii. Locations of outdoor storage, materials handling and materials disposal areas;
  - viii. Locations of outdoor chemicals storage areas; and
  - ix. Locations of all waste and other material storage areas;
  - x. Identify the nearest water(s) of the U.S., including wetlands, ephemeral and intermittent streams, dry washes, and arroyos. If applicable, the SWPPP map shall identify the areal extent of, and describe any wetlands near the site that could potentially receive discharges from the facility;
  - xi. Location of where any water (including process water) leaves the site;
  - xii. Identify the location of on-site drywell(s) on the site map. Include a list of the on-site drywells and their registration number(s) in the text of the SWPPP. Hazardous materials shall not be used, stored, loaded, or treated in areas near a drywell unless the drywell is specifically permitted under the aquifer protection program;
- d. Listing of potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from a facility;
- e. Description of control measures that will reduce pollutants in stormwater discharges including:
- i. Stormwater Diversions:
    - 1) Interceptor or diversion control measures (e.g., dikes, swales, curbs, or berms);
    - 2) Pipe slope drains;
    - 3) Subsurface drains;
    - 4) Conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars);
    - 5) Rolling dips and road sloping; and
    - 6) Roadway surface water deflector and culverts;
  - ii. Erosion and Sediment Control Measures: A combination of erosion and sediment control measures is required to achieve maximum pollutant removal.
    - 1) Flow diversion control measures;
    - 2) Stabilization (e.g., erosion control - temporary or permanent seeding); and
    - 3) Sediment controls (e.g., sediment traps, dikes, silt fences);
  - iii. Treatment: ADOT shall provide treatment of stormwater from a maintenance facility (e.g., chemical or physical systems, oil and water separators, artificial wetlands) if necessary to meet any applicable water quality standards. If treatment is employed, the SWPPP shall describe the type and location of

treatment used. Treated stormwater runoff may be discharged as a stormwater source regulated under this permit.

- f. All necessary control measures to ensure that the discharge is consistent with any relevant TMDL that has been established or approved by EPA;
- g. Listing of responsible party/parties for on-site SWPPP implementation (pollution prevention team); and
- h. A copy of the Facility Inspection Report required by Part 11.4.2.
- i. A description of good housekeeping practices, including litter prevention and abatement, debris, waste, equipment, supplies, and chemicals that could be exposed to stormwater
- j. A description of controls to prevent or minimize contamination of stormwater runoff from all areas used for vehicle or equipment storage and maintenance areas.
- k. A description for preventing and responding to spills, including the following:
  - i. Spill Prevention: Management practices and procedures for handling toxic and hazardous materials
  - ii. Spill Response Procedures: Practices and procedures for responding to spills of toxic materials
  - iii. Spill Records: A system to track and record spills and other releases, including information on the number, type, and amount of materials released, the location and extent of the spill, the circumstances of the release (e.g. spilled to storm sewer), and the name of the parties involved
- l. A description of salt storage piles, piles containing salt, de-icing and anti-icing chemicals and abrasives, including the location (*i.e.*, the name of the maintenance facility or storage location within a roadway)
- m. A description of staff training program, including frequency and topics, in accordance with Part 9.1

#### **11.4 Facility Inspections**

ADOT shall conduct inspections of all its facilities and discharge activities that discharge or have the potential to discharge pollutants. If, during any inspection, or at any other time, the facility's control measures are found to be inadequate or otherwise not be properly operated and / or maintained, ADOT shall review the selection, design, installation, and implementation of the control measures to determine if maintenance and/or modifications are necessary to meet the applicable water quality-based requirements and numeric effluent limitations in Part 2 of this permit. Such modifications shall be documented in the SWPPP and implemented as expeditiously as practicable.

11.41 Frequency of Inspections: ADOT shall identify and follow inspection frequencies based on facility risk / prioritization. At a minimum, each facility or activity shall be inspected one time per year.

11.4.2 Facility Inspection Report Form: ADOT shall develop, maintain, and utilize a standard inspection report form. Within seven (7) calendar days of completing an inspection, the corresponding inspection report shall be placed with previous reports (in chronological order) and kept with the SWPPP.

At a minimum the inspection form shall include:

- a. The inspection date;
- b. The name(s) and title(s) of the person(s) making the inspection. (See definitions of qualified personnel in Part 15). The list of qualified personnel shall either be on or attached to the report or alternatively, if the SWPPP documents the qualifications of the inspectors by name, that portion of the SWPPP may be referenced;
- c. Estimated precipitation since the last inspection;
- d. Rainfall information and a description of any discharges occurring at the time of the inspection;
- e. The location(s) of discharges of sediment or other pollutants from the site;
- f. The location(s) of control measures that need to be maintained, that failed to operate as designed, or proved inadequate for a particular location;
- g. The location(s) where additional control measures are needed that did not exist at the time of inspection;
- h. The corrective action(s) required, including any changes to the SWPPP and implementation dates;
- i. The identification of all sources of non-stormwater discharges and the associated control measures;
- j. Where applicable, the identification of material storage areas, and evidence of or potential for pollutant discharges from these areas;
- k. Inspection reports shall identify any incidents of non-compliance with the permit conditions. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the activities are in compliance with the SWPPP and this permit; and
- l. The report shall be signed and certified in accordance with Part 14.3.4.

11.4.3 Scope of Inspections: At a minimum, and as applicable, ADOT shall inspect and document all of the following during each inspection:

- a. All areas of the site exposed to precipitation, as well as areas where spills and leaks have occurred. Inspectors shall look for evidence of, or the potential for, pollutant sources;
- b. The following areas shall be included in the inspection program:
  - i. Storage areas (chemicals, wastes, materials, vehicles, equipment and other pollutant sources);
  - ii. Fueling areas (including mobile fueling);
  - iii. Indoor and outdoor maintenance areas;



- v. Material source stockpile(s) to determine if piles are protected from run-on, run-off, if materials are contributing to off-site discharges
  - vi. Vehicle/equipment cleaning areas and loading/unloading areas; and
  - vii. Onsite waste storage or disposal;
  - c. Control measures, including efficacy, condition, and other observations;
  - d. Discharge locations or discharge points to determine whether control measures are effective;
  - e. Where discharge locations are inaccessible, inspect nearby downstream locations to the extent that the inspections are practicable; and
  - f. Locations where vehicles enter or exit the site for evidence of debris, and other pollutants onto and off the site and evidence of off-site sediment tracking;
- 11.4.4 Corrective Actions: Based on the results of the inspection, ADOT shall modify the SWPPP as necessary to include additional or modified control measures designed to correct problems identified. ADOT shall complete revisions to the SWPPP and modify or add control measures as necessary within 30 calendar days following the inspection. ADOT shall document and maintain with the SWPPP the following information:
- a. Summary of corrective action taken or to be taken;
  - b. Date corrective action initiated or will be initiated; and
  - c. Date corrective action completed or expected to be completed.

ADOT shall implement tracking and follow-up procedures to ensure that the appropriate corrective action is taken in response to issues noted during inspections. These procedures shall be documented in the SWMP.

ADOT shall summarize any corrective actions taken in response to these facility inspections and document in the Annual Report.

- 11.4.5 Removal of Sediment or Other Materials Stored on Site: If sediment or other materials escape the site, ADOT shall remove the off-site accumulations of sediment or other materials at a frequency sufficient to minimize off-site impacts. The removal shall take place within seven (7) calendar days of discovery unless precluded by legal, regulatory, or physical access constraints. ADOT shall use all reasonable efforts to obtain access, and in such instances, removal and stabilization shall take place within seven (7) calendar days of obtaining access.
- 11.4.6 Inspectors: Inspections shall be performed by qualified personnel (see Definitions); and
- 11.4.7 Inspection Records: ADOT shall retain a record of each inspection and of any actions taken in accordance with Part 14.16 with the SWPPP for at least five years from the expiration date of this permit.

## **11.5 Monitoring Requirements**

Facilities identified in Part 12.3 as requiring monitoring shall follow the requirements therein.

## 12.0 MONITORING REQUIREMENTS

### 12.1 Compliance with Monitoring Requirements

ADOT shall implement and comply with all of the monitoring requirements specified in this Part 12 and Part 14.18.3 (Monitoring Reports) and monitoring of stormwater discharges from the MS4. Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which includes the possibility of fines and/or imprisonment.

### 12.2 Monitoring Protocols / Monitoring Instructions

#### 12.2.1 Monitoring Instructions

##### 12.2.1.1 Collection and Analysis of Samples for Analytical Monitoring

- a. For purposes of the analytical monitoring requirements described in Part 12, ADOT shall assess the applicable sampling requirements on an outfall-by-outfall basis. ADOT shall collect and analyze all samples in accordance with the requirements of Part 12.
- b. Samples and measurements taken during monitoring shall be representative of the stormwater being discharged.
  - i. Sample collection, preservation, and handling shall be performed as described in 40 CFR 136 including the referenced Editions of Standard Methods for the Examination of Water and Wastewater.
  - ii. Where collection, preservation, and handling procedures are not described in 40 CFR 136, the procedures specified in 9 A.A.C. 14, Article 6, methods for wastewater samples shall be used.
  - iii. ADOT shall outline the proper procedures in the Quality Assurance Manual (described in Part 12.2.2), and samples taken to meet the monitoring requirements in this permit shall conform to these procedures whether collection and handling is performed directly by ADOT or contracted to a third party.

##### 12.2.1.2 Analytical Methods

- a. All samples collected for monitoring shall be analyzed using a method specified in this permit. If no test procedure is specified in this permit, then ADOT shall analyze the pollutant using:
  - i. A test procedure listed in 40 CFR 136
  - ii. An alternative test procedure approved by the EPA in 40 CFR 136
  - iii. A test procedure listed in 40 CFR 136, with modifications allowed by the EPA and approved as a method alteration by the Arizona Department of Health Services (ADHS) under A.A.C. R9-14-610(B), or
  - iv. If no test procedure for a pollutant is available under sub-sections i. through iii. above, any method in A.A.C. R9-14-612 or approved under A.A.C. R9-14-610(C) for wastewater may be used. If there is

no approved wastewater method for a parameter, any other method identified in 9 A.A.C. 14, Article 6 that will achieve appropriate detection and reporting limits may be used for analyses

- b. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods.
- c. ADOT shall use an analytical method with a Limit of Quantitation (LOQ) that is lower than the surface water quality criteria applicable to the receiving water. If all methods have LOQs higher than applicable water quality criteria, ADOT shall use the approved analytical method with the lowest LOQ.
- d. ADOT shall use a standard calibration where the lowest standard point is equal to or less than the LOQ.

12.2.1.3 Laboratory Certification: All samples collected for monitoring shall be analyzed by a laboratory that is licensed by the ADHS Office of Laboratory Licensure and Certification. However, this requirement does not apply to parameters which require analysis at the time of sample collection as long as the testing methods used are approved by ADHS or ADEQ. (These parameters may include flow, dissolved oxygen, pH, temperature, and total residual chlorine.)

#### 12.2.2 Quality Assurance (QA) Manual

12.2.2.1 ADOT shall keep a QA Manual at the office of the District Environmental Coordinator. The QA Manual shall describe the sample collection and analyses processes at facilities that conduct sampling. If a third party collects and/or analyzes samples on behalf of ADOT, ADOT shall obtain a copy of applicable portions of the third party's QA Manual or a description of the QA/QC procedures used.

12.2.2.2 ADOT shall ensure that the QA Manual is available for review by ADEQ/ADHS upon request. ADOT is responsible for the quality and accuracy of all data required under this permit. The QA Manual shall be updated as necessary and shall describe the following:

- a. Project Management: Roles and responsibilities of the participants; personnel qualification requirements for collecting samples; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable regulatory or permit-specific limits; or other water quality thresholds.
- b. Sample Collection Procedures: Equipment used; the type and number of samples to be collected including QA/QC samples (*i.e.*, background samples, duplicates, and equipment or field blanks); preservatives; and holding times for the samples (See methods under 40 CFR 136 or 9 A.A.C. 14, Article 6 or any condition in this permit that specifies a particular test method).
- c. Approved Analytical Method(s) to Be Used: Method Detection Limits (MDLs) and LOQs to be reported; required QC results to be reported (*e.g.*, matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike

recoveries); acceptance criteria; and corrective actions to be taken by ADOT or the laboratory as a result of problems identified during QC checks.

- d. Data Review: The process ADOT will use to review data; report results to ADEQ; resolve data quality issues; and identify limitations on the use of the data.

### 12.2.3 Adverse Conditions Waiver

12.2.3.1 Sampling of representative event is not required during adverse conditions. When adverse conditions prohibit collection of samples during an applicable monitoring period, ADOT shall document in the monitoring records the adverse conditions that prevented the collection of samples. Adverse conditions that make sampling impracticable include temporary non-weather related hazardous working conditions, and adverse weather conditions. Adverse conditions are defined as:

- a. Those conditions that are recognized hazards that might cause injury or death and do not comply with the specific safety and health standards and regulations promulgated by the Occupational Safety and Health Administration (OSHA), or
- b. Those conditions that create inaccessibility for ADOT personnel or its contractors, such as local flooding, high winds, electrical storms.

12.2.3.2 In the case of sampling the MS4 monitoring outfalls, see Part 12.4 concerning required recordkeeping for conditions that prevent sampling.

12.2.3.3 ADOT shall document information in the Annual Report on any adverse conditions that prevented sampling required by this permit. ADOT shall continue to document all subsequent storm events occurring during the monitoring season, and shall sample stormwater during a qualifying storm event if another occurs during the same wet season.

### 12.2.4 Reporting and Records Retention

12.2.4.1 Monitoring Reports: ADOT shall report results at the intervals specified elsewhere in this permit.

- a. ADOT shall report monitoring for MS4 outfalls as specified in Parts 12.3 and 12.4 of the permit using the Annual Report format provided by the department.12.3.3
- b. If ADOT monitors any pollutant more frequently than required by the permit, ADOT shall include the results of this additional MS4 monitoring, in the Annual Report form.
- c. ADOT shall calculate all limitations that require averaging of measurements using an arithmetic mean.

12.2.4.2 Laboratory Analyses: ADOT shall retain records for all laboratory analyses conducted related to discharges under this permit. The records shall include;

- a. The date, exact location and time of sampling or measurements performed, and any preservatives used;

- b. The names of individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The laboratory(s) that performed the analyses; and
- e. The analytical techniques or methods used and the minimum detection levels for those methods.

12.2.4.3 **Field Monitoring:** ADOT shall document data collection, observations, and field activities in the form of a field log, such as hardbound field notebook, or on field data sheets developed by ADOT. All entries shall be legible, dated, written in permanent ink, signed, and contain accurate information. ADOT shall maintain the field log on-site with the SWPPP or with the SWMP records. Field logs shall document:

- a. The date and time of the testing;
- b. The name of the individual taking the test; flow information; and visual observations;
- c. Sampling equipment or field screening techniques used;
- d. The name, range, and accuracy of the equipment; and
- e. The sampling results.

12.2.4.4 **Records Retention:** ADOT shall retain copies of all the following for at least five years from the date this permit expires:

- a. Monitoring information, such as calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, field logs, and monitoring results
- b. Copies of SWPPPs or BMP Plans
- c. Copies of all reports required by this permit, and
- d. Records of all data used

### **12.3 Maintenance Facilities Requiring Monitoring**

12.3.1 ADOT shall implement a monitoring program for all facilities located within 1/4 mile of an impaired water or OAW, including, but not limited to:

- Nogales Maintenance Yard
- Superior Maintenance Yard
- Superior Storage and Fuel Yard

12.3.2 ADOT shall monitor for the following parameters:

- a. Total Dissolved Solids (TDS)
- b. Total Suspended Solids (TSS)
- c. Polycyclic Aromatic Hydrocarbons (PAH)
- d. Any additional pollutants of concern (*i.e.*, causes of impairment) for those impaired or not-attaining waters.

- 12.3.3 Each year of permit coverage, ADOT shall collect and analyse a total of two (2) samples of their stormwater discharges from each representative outfall during precipitation events.

Representative Outfalls – Outfalls that are Essentially Identical

- a. Some ADOT facilities may have two (2) or more outfalls that discharge substantially identical effluents. This may occur when similarities exist in the activities, significant materials, or stormwater management practices within the outfalls' drainage areas. In these cases, ADOT may test the effluent of one (1) of the outfalls and report that the quantitative data applies to substantially identical outfall(s).
  - b. For this testing to be permissible, ADOT shall document the information below. ADOT shall describe this information in the SWPPP and include the information in the applicable Annual Report.
    - i. Locations of the outfalls
    - ii. Why the outfalls are expected to discharge substantially identical effluents
    - iii. Estimates of the size of the drainage area (in square feet) for each of the outfalls, and
    - iv. An estimate of the runoff coefficient of the drainage areas (low: under 40 percent; medium: 40 to 65 percent; high: above 65 percent)
- 12.3.4 ADOT shall collect a minimum of one (1) sample per facility from each representative outfall between June 1 and October 31 and one (1) sample between November 1 and May 31.

**12.4 Wet Weather Monitoring Requirements**

- 12.4.1 ADOT shall implement a long-term comprehensive wet weather water quality monitoring program. The program shall be described in the SWMP, including procedures and guidance for monitoring stormwater in the MS4. ADOT shall maintain and update the SWMP, as needed, to comply with permit requirements. ADOT shall describe the updates in the Annual Report.

12.4.2 Wet Weather Monitoring at Outfalls

- 12.4.2.1 ADOT shall continue the monitoring program at the Phoenix, Tucson, Sedona, Nogales, and Flagstaff locations. ADOT shall perform wet weather monitoring at these five established monitoring locations as described in Part 12.4.2. These five (5) locations shall be sampled and analyzed in a manner consistent with all terms of this permit.
- a. ADOT shall include the following information in tabular format for each monitoring location:
    - i. The outfall identification number or name
    - ii. The address and physical location of the outfall including latitude and longitude
    - iii. The size, in acres, of the outfall's drainage area
    - iv. The land use(s) with an estimated percentage of each use

- v. The name and description of the receiving water, including designated uses, and status as an impaired water or OAW, as appropriate, and
- vi. The type of sampling method used (e.g., first flush, manual, auto sampler or composite)

ADOT shall submit this information in the updated SWMP in accordance with Part 4.1.2 and in the Annual Reports, in accordance with Part 13.1.

- b. ADOT shall include a map in the updated SWMP showing the five (5) monitoring locations/outfalls. ADOT shall not make modifications to change monitoring locations without permit modification.

12.4.2.2 ADOT shall collect stormwater samples from the first representative storm event of each wet season and subsequent representative storm events as necessary to collect at least one (1) stormwater sample for each wet season from each outfall at the five (5) established monitoring locations.

- a. Representative Storm Events: ADOT shall collect a minimum of one grab sample from a discharge resulting from a measurable storm event that produces a sufficient volume to allow collection of a sample. Samples shall be collected within the first 30 minutes of a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample shall be collected as soon as practicable after the first 30 minutes. ADOT shall document in the Annual Report the reason(s) it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples shall be taken during a period with a measurable discharge.
- b. Stormwater Monitoring Seasons: ADOT shall sample stormwater discharging from its storm sewer system to Waters of the U.S. throughout the permit term. ADOT shall collect stormwater samples each wet season from each monitoring location (outfall). Wet seasons, for the purposes of monitoring are:

Summer wet season:                      June 1 – October 31

Winter wet season:                         November 1 – May 31

12.4.2.3 ADOT shall collect and analyze samples from storm sewer system outfalls for the parameters listed in Table 12.1. ADOT shall collect both discrete (grab) and flow-weighted composite samples of stormwater discharge.

- a. ADOT shall collect discrete manual samples for PAH and *Escherichia coli* (*E. coli*).
- b. Flow, pH and temperature shall be collected as field measurements.
- c. Flow weighted composite samples shall be collected for all other parameters in Table 12.1. ADOT may collect a flow-weighted composite sample with a continuous sampler or as a combination of multiple discrete samples (aliquots). Only one (1) analysis of the composite of aliquots is required.

- d. Sampling shall be conducted:
  - i. Over the first three (3) hours of the discharge; or
  - ii. For the entire discharge period, if the discharge lasts less than three (3) hours.
- e. Sampling shall be conducted over the first three (3) hours of the discharge, or for the entire discharge period if the discharge lasts less than three (3) hours. ADOT shall design sampling efforts with an attempt to include the “first flush” (first 30 minutes of stormwater discharge) of a representative storm event whenever possible to do so.

12.4.2.4 **Sample Frequencies and Parameters:** ADOT shall collect samples from monitoring locations of storm sewer system outfalls at the following frequencies:

- a. The sampling frequency for conventional parameters, nutrients, *E. coli*, PAHs, and metals is once each wet season for each year in the permit term at each monitoring location (outfall); and
- b. For any outfall to an impaired water, in addition to the parameters specified in Table 12.1, ADOT shall sample for the pollutants of concern listed on the 303(d) list once each wet season for each year of the permit term. ADEQ’s list of impaired waters is available at:

<http://www.azdeq.gov/environ/water/assessment/assess.html>.

Table 12.1. STORMWATER MONITORING PARAMETERS	
PARAMETER	SAMPLING FREQUENCY
Flow	Each time an outfall is sampled, for each aliquot
pH	Once each wet season for each year in the permit term
Total Dissolved Solids (TDS) (mg/L)	Once each wet season for each year in the permit term
Total Suspended Solids (TSS) (mg/L)	Once each wet season for each year in the permit term
Turbidity	Once each wet season for each year in the permit term
Biochemical Oxygen Demand (BOD) (mg/L)	Once each wet season for each year in the permit term
Chemical Oxygen Demand (COD) (mg/L)	Once each wet season for each year in the permit term
Inorganics	
Sulfates	Once each wet season for each year in the permit term
Nutrients (mg/L)	
Nitrate (NO <sub>3</sub> -N)	Once each wet season for each year in the permit term
Nitrite (NO <sub>2</sub> -N)	Once each wet season for each year in the permit term
Sodium	Once each wet season for each year in the permit term



Table 12.1. STORMWATER MONITORING PARAMETERS	
PARAMETER	SAMPLING FREQUENCY
Calcium	Once each wet season for each year in the permit term
Chloride	Once each wet season for each year in the permit term
Microbiological	
<i>Escherichia coli</i> ( <i>E. coli</i> ) (CFU/100 mg or MPN)	Once each wet season for each year in the permit term
Fecal Coliform	Once each wet season for each year in the permit term
Metals <sup>1</sup> (µg/L)	
Arsenic	Once each wet season for each year in the permit term
Barium	Once each wet season for each year in the permit term
Cadmium	Once each wet season for each year in the permit term
Chromium	Once each wet season for each year in the permit term
Copper	Once each wet season for each year in the permit term
Lead	Once each wet season for each year in the permit term
Mercury	Once each wet season for each year in the permit term
Nickel	Once each wet season for each year in the permit term
Selenium	Once each wet season for each year in the permit term
Silver	Once each wet season for each year in the permit term
Zinc	Once each wet season for each year in the permit term
Organic Toxic Pollutants	
Polycyclic Aromatic Hydrocarbons (PAH) – use EPA Method 8310	Once each wet season for each year in the permit term

Footnote:

<sup>1</sup> Metals shall be analyzed for total metals (assumes a 1:1 ratio of total to dissolved metals).

12.4.3 Stormwater Monitoring Records: For each storm event that results in stormwater sampling, ADOT shall maintain a record of the storm event, including the following information:

- a. The date sampled or measurements performed;
- b. The locations sampled or measurements performed;
- c. The time sample/measurements were taken for each location;
- d. The name of individual(s) who performed the sampling or measurements;
- e. The duration (in hours) of storm event(s);

- f. The estimated duration (in hours or days) between the storm event sampled and the end of the previous measurable storm event;
  - g. Rainfall measurements (in inches) of the storm event that generated the sampled discharge;
  - h. Flow rate. The estimated volume of stormwater discharged and the duration of the storm event (volume per unit of time). Measure the flow rate for each sample aliquot and determine the average flow rate and duration of the discharge event sampled for each outfall;
  - i. The duration of the sampling period;
  - j. The volume of discharge in the sampling period;
  - k. The volume of each discrete or composite sample;
  - l. The volume of each aliquot in the flow-weighted composite sample;
  - m. The volume of discharge at the time of collection of each aliquot;
  - n. The number of aliquots in each flow-weighted composite sample;
  - o. The time of collection of each aliquot for composite samples;
  - p. The sample preservatives used;
  - q. The date(s) the analyses were performed;
  - r. The laboratory and individual(s) who performed the analyses;
  - s. The analytical techniques or methods used;
  - t. The results of the analyses. ADOT shall report analytical results in the units specified for each category or parameter in Table 12.1;
  - u. The laboratory Method Detection Limit and Quantitation Level of each method used;
  - v. The chain of custody forms;
  - w. Any comments, case narrative or summary of results produced by the laboratory required to be supplied to ADOT by the laboratory under ADHS licensure rules; and
  - x. A summary of data interpretation and any corrective action taken by ADOT.
- 12.4.4 Report Monitoring Data: ADOT shall report all monitoring data collected for each outfall in the Annual Report. Each Annual Report shall tabulate data from the same outfall for the previous five (5) years into the analysis of results.
- 12.4.5 Record Storm Events: ADOT shall maintain a record of storm events greater than 0.1 inch in the areas where the MS4 monitoring outfalls are located, whether a stormwater sample was collected or not, until all samples required to be collected during the season are obtained from the outfall. ADOT shall provide a summary of this information in the Annual Report following the example provided on the form. The record shall include the following information:
- a. The date of the storm event
  - b. The rainfall measurements (in inches) of the storm event at each monitoring location, and

- c. For each monitoring location, whether a sample was collected or if not collected, information on the conditions that prevented sampling

## **12.5 Impaired Water Monitoring**

During year one of the permit term, ADOT shall conduct an assessment of its stormwater discharges to impaired waters and shall include the assessment in the revised SWMP. The assessment shall include an identification of impaired waters with an approved TMDL, the pollutant(s) causing the impairments, the estimated number of outfalls that discharge to each impaired water segment, potential for discharges from ADOT's storm sewer system to be a contributing factor to the impairment, and a proposed monitoring program (or rationale for not conducting analytical monitoring). Documentation demonstrating discharges from ADOT's MS4 are not a contributor of pollutants must be submitted to ADEQ for review and approval to be exempt from monitoring discharges to impaired water

Exclusive of outfall monitoring required pursuant to Part 12.4.2.1 which is ongoing, beginning in year two of the permit term, ADOT shall conduct analytical monitoring for discharges to impaired waters at a minimum of one (1) outfall or monitoring location during a wet weather event each year of the permit term. If the approved TMDL assigns a wasteload allocation (WLA) to ADOT, ADOT shall conduct analytical monitoring for the pollutant(s) as specified in the TMDL.

ADOT shall comply with monitoring requirements specified in Parts 12.4.2.1(a)(i-vi), 12.4.2.2(a), 12.4.3, and 12.4.5.

At least annually, ADOT shall review the most current listing of impaired waters and assigned WLAs (available from ADEQ) and incorporate them into the updated SWMP and identify them in the annual report submitted to ADEQ. ADOT shall also identify BMPs to be incorporated into the SWMP to ensure discharges from ADOT's MS4 are meeting applicable standards (WLA, surface water quality standard where a WLA is not assigned to ADOT, or other requirements specified in the TMDL).

## 13.0 REPORTING AND RECORDKEEPING REQUIREMENTS

### 13.1 Reporting

13.1.1 Annual Reports. ADOT shall submit all Annual Reports by September 30th of each year.

13.1.2 Structure for all Annual Reports. ADOT shall prepare an Annual Report, on a form provided by the ADEQ, summarizing the progress of the SWMP and the findings of monitoring activities for each year of the permit term. ADOT shall provide all information required by the Annual Report, which addresses the following information (in the order provided) and associated attachments:

- a. General Information
- b. Annual Report Certification
- c. Narrative Summary of SWMP Activities
- d. Numeric Summary of SWMP Activities
- e. Evaluation of the SWMP
- f. SWMP Modifications
- g. Monitoring Location Information
- h. Storm Event Records
- i. Summary of Monitoring Data (by location)
- j. Assessment of Monitoring Results, and
- k. Annual Expenditures

13.1.3 Fourth Year Annual Report: In addition to the information in Part 13.1.2 of this permit, the 4th year submittal shall be expanded to include the following provisions. This comprehensive document shall serve as the renewal application for ADOT. ADOT shall submit one (1) up-to-date hard copy and one (1) electronic copy of the renewal application, including the updated SWMP.

- a. Receiving Waters: Identification of receiving waters that receive discharges from the MS4. Include a brief description of the designated uses of each receiving water and any known water quality impairments or total maximum daily loads (TMDLs) for those waters, or designation of any such water as an outstanding Arizona water.
- b. Mapping: An up-to-date map or map(s) showing MS4 boundaries, locations where ADOT's MS4 discharges to receiving waters, locations where ADOT's MS4 discharges to a municipal separate storm sewer system owned or operated by another party, and wet weather stormwater monitoring location(s) and the associated drainage basins.
- d. Discharge Characterization Data: Summary of stormwater quality monitoring data based on all sampling results obtained during the permit term. Provide an evaluation of the quality of stormwater discharges from the MS4, including a discussion on the detection and non-detection of specific pollutants. Include an assessment of any trends, improvements, or degradation of stormwater quality discharges from the MS4.
- e. Updated SWMP: A copy of the current updated SWMP (see Part 4.0).

- g. Any proposed modifications to the monitoring program: If changes are proposed to the stormwater monitoring program (such as changes to monitoring locations, parameters, or frequency), identify those and include a brief discussion on the reason(s) for modification.
  - h. Modifications to the SWMP: Summary of changes made to the SWMP during the permit term, including any addition or replacement of control measures.
  - i. Proposed Modifications to the SWMP: If modifications to the SWMP are proposed for the next permit term, identify those and include a brief discussion on the reasons for the modification(s).
  - j. Fiscal Analysis: Brief description of the funding sources used to support MS4 SWMP expenditures
  - k. Low Impact Development (LID): Summary of the evaluation of the potential for incorporating and enhancing LID practices into ADOT’s site planning and development process for new development and significant redevelopment projects.
- 13.1.4 Reporting Deadlines: All Annual Reports are due on September 30th of each year and shall cover activities for the period of July 1st through June 30th of each year.
- 13.1.5 Table 13.1 summarizes ADOT's annual reporting requirements. ADOT shall ensure that Annual Reports are complete and documented in the format provided by the department.

Table 13.1. SUMMARY OF ANNUAL REPORT REQUIREMENTS		
Section #	Section Heading	Summary
2.1.3	Protection of Water Quality from MS4 Discharges	Report any information about a discharge that contains a pollutant above a surface water quality standard (SWQS) in the current year Annual Report. Also, for recurring discharges containing pollutants above a SWQS, include any actions taken to investigate and identify sources and any recommended actions for water quality improvement.
2.2.3	Total Maximum Daily Loads	Include stormwater monitoring results and the assessment of the effectiveness of control measures in meeting wasteload allocations or load allocations associated with a TMDL in the Annual Report.
3.3.1	Enforcement Response Plan (ERP)	Submit the ERP, including any intergovernmental agreements, to ADEQ in the first Annual Report
4.1.3	Annual Program Review	Conduct an annual program review, in conjunction with the preparation of the Annual Report

Table 13.1. SUMMARY OF ANNUAL REPORT REQUIREMENTS		
Section #	Section Heading	Summary
4.1.4	Revisions to the SWMP	<p>Include a description/ statement/ explanation in the subsequent Annual Report whenever these SWMP modification(s) are made:</p> <ul style="list-style-type: none"> <li>• adding new control measures (Part 4.1.4.1)</li> <li>• adding temporary or experimental control measures (Part 4.1.4.2)</li> <li>• increasing existing control measures (Part 4.1.4.3)</li> <li>• replacing existing control measures (Part 4.1.4.4)</li> <li>• discontinuing or decreasing an existing control measure (Part 4.1.4.5)</li> </ul>
5.1	Storm Sewer System Inventory and Outfall Mapping	Include an updated map with each Annual Report that documents progress with the schedule of the mapping project
5.2	Submit Proposal to map the separate storm sewer system	With the submittal of the fourth year Annual Report to ADEQ, include a proposal to identify and map all remaining outfalls statewide
6.3	Detecting Potential Illicit Discharges and Illicit Connections	<p>Include a description/ statement/ explanation in the Annual Report for the following:</p> <ul style="list-style-type: none"> <li>• Document outfall inspections and report (Part 6.3.1)</li> <li>• Describe all updates to the dry weather field screening (“Stormwater Monitoring Guidance Manual for MS4 Activities”) (Part 6.3.2(b))</li> <li>• Record findings of outfall inspections (including outfall identification, evidence of illicit discharges, observations, any follow up activities, and other information as necessary) (Part 6.3.3)</li> <li>• Report the number of illicit discharges and their resolution each year (Part 6.3.4)</li> </ul>
6.4.5	IDDE Source Investigation and Elimination – Record Actions	Continue to track all actions taken on identified illicit discharges; present the number of illicit discharges identified and their resolution, including those reported to other jurisdictions for follow-up.
7.1.1(b)	Update Erosion and Pollution Control Manual	Describe all updates to this manual (except erosion and sediment control BMP detail drawings).
7.1.2(c) and 7.1.2(d)	ADOT’s responsibilities under this permit [for inspection and oversight of construction activities]	<p>Complete a comprehensive inventory of construction activities that discharge, or have the potential to discharge to the MS4, within 12 months of the effective date of this permit; maintain and update the inventory annually, include the inventory in each Annual Report.</p> <p>Maintain an up-to-date inventory of all construction activities; submit a copy of the inventory each year.</p>

Table 13.1. SUMMARY OF ANNUAL REPORT REQUIREMENTS		
Section #	Section Heading	Summary
7.5(1)(a)	Post-Construction and Measures to Control Discharges from New Development and Redevelopment	Document the completion date of the development of the post-construction stormwater pollution control program
7.5(1)(b)		Document the number of trainings completed on the post-construction stormwater pollution control program
7.5.4	Maintain a Post-Construction BMP Inventory	Provide an up-to-date inventory in each Annual Report
8.0(2)	Measures to Control Discharges from Roadways	Describe updates to the Roadway Maintenance BMPs in ADOT manuals as necessary to comply with permit requirements
8.1.1(b)	Inspect Storm Sewer System	Maintain records of inspections and conditions found and report the number of inspections performed on the storm sewer system.
8.2.3	Roadside Management Program	Summarize erosion abatement projects conducted during each year.
9.1 and 9.1(b)	ADOT Employee Training	Summarize the training conducted under the employee stormwater training program: for each topic, the number of trainings offered, the number of employees trained ( <i>i.e.</i> , attendance); and other appropriate measurable goals.
10.1.2	Public Outreach / Education	<ul style="list-style-type: none"> <li>Report on the distribution of educational materials through public places and ADOT’s stormwater web page</li> <li>Make annual reports available to the public</li> </ul>
10.2.3(b)	Implement a Public Reporting System	Record and report the number of reports received from the public and investigated.
10.2.4(b)	Litter pick up program	Report the amount of trash collected.
10.2.5	Litter Reporting Hotline Implementation	Report the number of calls received from the “Keep Arizona Beautiful” program.
11.1	Facility Inventory and Prioritization	Evaluate and update the inventory, prioritization, and site inspection frequency annually in connection with annual reporting. A copy of the updated inventory shall be included with the corresponding Annual Report.
11.2	Facility and Discharge Activity Best Management Practices	Summarize any updates/ changes to the <i>Maintenance and Facilities Best Management Practices (BMPs) Manual</i> in each Annual Report.
11.4.4	Corrective Actions	Summarize any corrective actions taken in response to facility inspections.
12.2.3.3	Adverse Conditions Waiver	Document information on any adverse conditions that prevented sampling required by this permit.
12.2.4.1(a)	Monitoring Reports	Report MS4 outfall monitoring as specified in Parts 12.3 and 12.4 of the permit.

Table 13.1. SUMMARY OF ANNUAL REPORT REQUIREMENTS		
Section #	Section Heading	Summary
12.2.4.1(b)		If any pollutant is monitored more frequently than required by the permit, include the results of this additional MS4 monitoring.
12.3.3(b)	Representative Outfalls - Outfalls that are Essentially Identical	Submit the required information in (i) – (iv) and the monitoring results obtained from each representative outfall.
12.4.2.1(a)	Wet Weather Monitoring for the Phoenix, Tucson, Sedona, Nogales, and Flagstaff locations	Submit the information required by Part 12.4.2.1(a)(i. – vi.) in tabular format for each monitoring location. Submit this information in the updated SWMP in accordance with Part 3.1.2 and in the Annual Report, as specified in Part 13.1.
12.4.1	Update <i>Stormwater Monitoring Procedures</i>	Perform updates to the stormwater monitoring procedures as needed and describe those updates in the applicable Annual Report.
12.4.4	Report Monitoring Data	<ul style="list-style-type: none"> <li>• Report all monitoring data collected for each outfall.</li> <li>• Tabulate data from the same outfall for the previous five (5) years into the analysis of results.</li> </ul>
12.4.5	Record Storm Events	Maintain a record and summarize storm events greater than 0.1 inch in the areas where the MS4 monitoring outfalls are located.
14.1	Duty to Reapply	<ul style="list-style-type: none"> <li>• Submit a renewal application with the fourth year Annual Report, in accordance with Part 13.1.3.</li> </ul>
14.18.6	Other non-compliance	Report all instances of non-compliance.

13.1.6 Discharge of Pollutants above a Surface Water Quality Standard: If ADOT has a discharge that causes or contributes to an exceedance of an applicable surface water quality standard (SWQS), ADOT shall document this information in the Annual Report. The report, at a minimum, shall include:

- a. The sampling date
- b. The monitoring location
- c. Waters of the U.S. that received the discharge and the surface water quality standard that was exceeded
- d. The monitoring results (laboratory reports)
- e. If discharges of the same pollutant(s) are recurring (*i.e.*, detected more than once at an outfall), a description of the efforts to investigate potential sources of the pollutant(s) and identify the circumstances that may have caused or contributed to the recurrence(s)
- f. Recommended actions for reducing the discharge of pollutants, if any, including feasible changes in management practices or pollution controls; to prevent the



discharge from causing or contributing to an exceedance of a SWQS in the future,;  
and

- g. If applicable, a schedule for implementing the proposed stormwater or non-stormwater control measures.

13.1.7 Additional Reporting Requirements: ADOT shall comply with all additional reporting requirements specified in Part 14.

13.1.8 Reporting Location:

13.1.8.1 ADOT 24-hour reporting shall be made to:

ADEQ's 24-hour Emergency Response Hotline (602) 771-2330

13.1.8.2 ADOT shall direct all documents required by this permit to:  
Arizona Department of Environmental Quality  
Surface Water Section, Stormwater and General Permits Unit  
1110 W. Washington Street, Mail Code 5415A-1  
Phoenix, AZ 85007  
Phone: (602) 771-4508

13.1.9 Signatory and Certification Requirements: All applications, reports or information submitted to ADEQ shall be signed and certified in accordance with Section 14.3.2 and Section 14.3.4.

**13.2 Submittal Deadlines**

In addition to the Annual Reports, ADOT shall submit the documents and information, summarized in Table 13.2.

Table 13.2 SCHEDULE FOR SUBMITTALS			
Section #	Permit Requirement	Submittal Due Date	Submittal/Reporting
3.3.1	Submit the Enforcement Response Plan (ERP), including any intergovernmental agreements	With first year Annual Report (September 30)	Submit to ADEQ.
4.1.2(d)	Submit two written copies and one electronic copy of the updated SWMP, including attachments.	Not later than 12 months after the effective date of this permit.	Submit updated SWMP, including attachments to ADEQ.
5.3	Submit proposal to inventory remaining outfalls statewide.	With the fourth year Annual Report (September 30).	With the Annual Report, include a proposal to identify and map all remaining outfalls statewide.
7.4	Report unpermitted (illicit) discharges	Semi-annually: March 31 & September 30	Submit to ADEQ.
12.4.2	Include with the updated SWMP the information required by Part 12.4.2.1(a)(i.-vi.) in tabular format for each wet weather monitoring location.	Not later than 12 months after the effective date of this permit.	Submit to ADEQ.
13.1.1	Annual Report	Due September 30 of each year permit is effective.	Submit all Annual Reports to ADEQ.
13.1.3	Renewal application	Due September 30 of fourth year of permit.	Submit with fourth Annual Report to ADEQ.

**14.0 STANDARD CONDITIONS**

14.1 Duty to Reapply: [A.A.C. R18-9-B904(B)] The fourth year Annual Report shall serve as ADOT’s reapplication and shall include the additional information specified in Parts 13.1.3 and 13.1.4.

14.2 Applicable Federal, State or Local Programs:

14.2.1 The SWMP and SWPPPs shall be consistent with all applicable federal, state, or local requirements for stormwater management.

14.2.2 The SWMP and SWPPPs may incorporate by reference the appropriate elements of plans required by other agencies.

14.2.3 ADOT shall attach a copy of any requirements incorporated by reference to the SWMP and SWPPPs.

- 14.2.4 ADOT shall update as necessary the SWMP and SWPPPs to remain consistent with any revisions made to these requirements.
- 14.3 Signatory Requirements: [A.A.C. R18-9-A905(A)(1)(c), which incorporates by reference 40 CFR 122.22, and 122.41(k)]
- 14.3.1 The SWMP and all ADOT applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this Section, a principal executive officer means the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 14.3.2 All reports required by this permit, SWPPPs, and other information requested by ADEQ shall be signed by a person described in sub-section 14.3.1, or by a duly authorized representative of that person (e.g., ADOT District Engineer or Director of Environmental Services). A person is a duly authorized representative only if:
- 14.3.2.1 The authorization is made in writing by a person described in Section 14.3.1.
- 14.3.2.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
- 14.3.2.3 The written authorization is submitted to ADEQ.
- 14.3.3 Changes to Authorization: If an authorization under Section 14.3.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section 14.3.2 shall be submitted to ADEQ prior to or together with any reports, information, or applications to be signed by an authorized representative.
- 14.3.4 Certification: Any person signing a document under Section 14.3.1 or 14.3.2 shall make the following 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.*
- 14.4 Deficiencies in the SWMP or SWPPPs:
- 14.4.1 ADEQ may notify ADOT at any time that the SWMP or a SWPPP does not meet one or more of the requirements of this permit. The notification shall identify the provisions of this permit that are not being met and parts of the SWMP or SWPPP that require modification.

- 14.4.2 Within 30 calendar days of receipt of the notification, ADOT shall make the required changes to the SWMP or SWPPP and submit to ADEQ a written certification that the requested changes have been made.
- 14.4.3 ADEQ may request re-submittal of the SWMP or SWPPP to confirm all deficiencies have been adequately addressed.
- 14.4.4 ADEQ may take appropriate enforcement action for the period of time ADOT was operating under a plan that did not meet the minimum requirements of this permit.
- 14.5 Duty to Comply: [A.A.C. R18-9-A905(A)(3)(a) and A.R.S. §§ 49- 262, 263.01, and 49-263.02, which incorporates by reference 40 CFR 122.41(a)(i).]
- 14.5.1 ADOT shall comply with all conditions of this permit and any standard and prohibition required under A.R.S. Title 49, Chapter 2, Article 3.1 and A.A.C. Title 18, Chapter 9, Articles 9 and 10. Any permit non-compliance constitutes a violation of the Clean Water Act; A.R.S. Title 49, Chapter 2, Article 3.1; and A.A.C. Title 18, Chapter 9, Articles 9 and 10; and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or denial of a permit renewal application.
- 14.5.2 The issuance of this permit does not waive any federal, state, county, or local regulations or permit requirements with which a person discharging under this permit is required to comply.
- 14.5.3 ADOT shall comply with the effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulation that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- 14.6 Duty to Mitigate: [A.A.C. R18-9-A905(A)(3)(a), which incorporates by reference 40 CFR 122.41(d)] ADOT shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- 14.7 Duty to Provide Information: [A.A.C. R18-9-A905(A)(3)(a), which incorporates by reference 40 CFR 122.41(h)] ADOT shall furnish to ADEQ, within a reasonable time, any information which ADEQ may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. ADOT shall furnish to ADEQ upon request, copies of records required to be kept by this permit.
- 14.8 Inspection and Entry: [A.A.C. R18-9-A905(A)(3)(a), which incorporates by reference 40 CFR 122.41(i)] ADOT shall allow ADEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
- 14.8.1 Enter upon ADOT's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this permit;
- 14.8.2 Have access to and copy, at reasonable times, any records that shall be kept under the terms of the permit;

- 14.8.3 Inspect at reasonable times any facilities, equipment (including monitoring equipment or control equipment), practices or operations regulated or required under this permit; and
- 14.8.4 Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by A.R.S. Title 49, Chapter 2, Article 3.1, and 18 A.A.C. 9, Articles 9 and 10, any substances or parameters at any location.
- 14.9 Maintaining an Updated SWMP and Non-Construction SWPPP: ADOT shall amend the SWMP and a SWPPP within 30 days whenever:
  - 14.9.1 There is a change in design, construction, operation, or maintenance at the facility that has a significant effect on the discharge, or potential for discharge, of pollutants to the Waters of the U.S. that has not been previously addressed in the SWMP or SWPPP; or
  - 14.9.2 During inspections, monitoring if required, or investigations by ADOT or by local, state, MS4, or federal officials, it is determined the discharges are causing or contributing to water quality exceedances or the SWMP or SWPPP is ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the facility.
- 14.10 Monitoring and Records: [A.A.C. R18-9-A905(A)(3)(a), which incorporates by reference 40 CFR 122.41(j)]
  - 14.10.1 Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - 14.10.2 ADOT shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit for a period of at least five years. This period may be extended by written request of ADEQ at any time.
  - 14.10.3 Monitoring shall be conducted according to test procedures specified in this permit. If a test procedure is not specified in the permit, then monitoring shall be conducted according to test procedures approved under A.A.C. R18-9-A905(B).
- 14.11 Need to Halt or Reduce Activity Not a Defense: [A.A.C. R18-9-A905(A)(3)(a), which incorporates by reference 40 CFR 122.41(c)] It shall not be a defense for ADOT in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- 14.12 Proper Operation and Maintenance: [A.A.C. R18-9-A905(A)(3)(a), which incorporates by reference 40 CFR 122.41(e)]
  - 14.12.1 ADOT shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by ADOT to achieve compliance with the conditions of this permit.

- 14.12.2 Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by ADOT only when the operation is necessary to achieve compliance with the conditions of the permit.
- 14.13 Permit Actions: [A.A.C. R18-9-A905(A)(3)(a), which incorporates by reference 40 CFR 122.41(f)] This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by ADOT for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated non-compliance does not stay any permit condition.
- 14.14 Permit Related Records: ADOT's SWMP shall include the copies of any other existing agreements with federal, state, or local agencies that would affect the provisions or implementation of the SWMP or SWPPP.
- 14.15 Property Rights: [A.A.C. R18-9-A905(A)(3)(a), which incorporates by reference 40 CFR 122.41(g)] This permit does not convey any property rights of any sort, or any exclusive privilege.
- 14.16 Retention of Records:
- 14.16.1 ADOT shall retain all documentation required by this permit, including:
- 14.16.1.1 Copies of ADEQ authorization certificate for NOIs filed by contractors for ADOT construction projects;
- 14.16.1.2 All monitoring information, including field logs and monitoring results; and
- 14.16.1.3 Copies of SWPPPs. The retention period for all SWPPPs shall be for the permit term; the retention for the SWMP and other documents shall be for at least five years from the date this permit expires.
- 14.16.2 Accessibility. ADOT shall ensure a copy of the SWPPP is retained on-site (or other local location accessible to ADEQ or other parties) for construction projects. SWPPPs shall be available to operators with day to day control over the implementation of control measures and shall be retained throughout the permit term. ADOT shall ensure a copy of the SWPPP is on-site at industrial projects or at the nearest engineering office, if the facility is unoccupied.
- 14.16.3 Addresses. All written correspondence concerning discharges covered under this permit shall be sent to ADEQ at the address specified in Section 13.1.8.2.
- 14.17 Signature, Plan Review, and Making Plans Available:
- 14.17.1 ADOT shall sign the SWMP and SWPPP in accordance with Section 14.3 and retain a copy of the plan on site.
- 14.17.2 ADOT shall keep the SWMP and SWPPP on-site or locally accessible and available, in its entirety, to ADEQ, local authorities or EPA for review and copying at the time of an on-site inspection. ADOT shall make the SWPPP available upon request to ADEQ, or to any other state, federal, local agency, or to the operator of an MS4 or Tribal authority that receives stormwater discharges from the site;

- 14.17.3 Any other person may make a written request to ADOT for access to a copy of the SWMP or a SWPPP. In this event, ADOT shall make the documents available for public viewing.
- 14.18 Reporting Requirements: [A.A.C. R18-9-A905(A)(3)(a), which incorporates by reference 40 CFR 122.41(l)]
- 14.18.1 Planned changes: ADOT shall give notice to ADEQ as soon as possible of any planned physical alterations or additions to the permitted facilities. Notice is required only when:
- 14.18.1.1 The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in A.A.C. R18-9-A905(A)(1)(e), which incorporates by reference 40 CFR 122.29(b)]; or
- 14.18.1.2 The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements under A.A.C. R18-9-A905(A)(3)(b), which incorporates by reference 40 CFR 122.42(a)(1)]; and
- 14.18.1.3 The alteration or addition results in a significant change in ADOT's practices, and the alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- 14.18.2 Anticipated non-compliance: ADOT shall give advance notice to ADEQ of any planned changes in the permitted facilities or activities that may result in non-compliance with permit requirements.
- 14.18.3 Monitoring reports: ADOT shall report monitoring results at the intervals specified elsewhere in this permit.
- 14.18.3.1 ADOT shall report monitoring results on the Annual Report or on forms provided or formatted by ADEQ for reporting results of monitoring.
- 14.18.3.2 If ADOT monitors any pollutant more frequently than required by the permit, ADOT shall include the results of this monitoring in the calculation and reporting of the data submitted in the Annual Report, or sludge reporting form specified by ADEQ.
- 14.18.3.3 Calculations for all limitations, which require averaging of measurements, shall use an arithmetic mean unless otherwise specified by ADEQ in the permit.
- 14.18.4 Compliance schedules: ADOT shall submit reports of compliance or non-compliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit not later than 14 days following each schedule date.

14.18.5 Twenty-Four Hour Reporting:

- a. ADOT shall orally report any non-compliance with this permit which may endanger health or the environment within 24 hours from the time ADOT becomes aware of the circumstances to the ADEQ 24 hour Emergency Response Hotline at (602) 771-2330.

A written submission shall also be provided to the ADEQ Water Quality Compliance Section within five (5) business days of the time ADOT becomes aware of the circumstances. The written submission shall contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the non-compliance.

- b. ADOT shall report the following information within 24 hours.
- (i) Any unanticipated bypass that exceeds any effluent limitation in the permit. [See A.A.C. R18-9-A905(A)(3)(a), which incorporates by reference 40 CFR 122.41(g)];
  - (ii) Any upset that exceeds any effluent limitation in the permit; and
  - (iii) ADOT shall report any violation of a maximum daily discharge limitation for any of the pollutants listed by ADEQ in the permit within 24 hours. [See A.A.C. R18-9-A905(A)(3)(d), which incorporates by reference 40 CFR 122.44(g)].

14.18.6 Other non-compliance: ADOT shall report all instances of non-compliance not reported under Sections 14.18.3, 14.18.4, and 14.18.5, at the time monitoring reports are submitted or as specified to be included in the Annual Report. The reports shall contain the information listed in Section 14.18.5.

14.18.7 Other information: Where ADOT becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to ADEQ, ADOT shall promptly submit these facts or information.

14.19 Bypass: [A.A.C. R18-9-A905(A)(3)(a), which incorporates by reference 40 CFR 122.41(m)].

14.19.1 Definitions

- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

14.19.2 Bypass not Exceeding Limitations: ADOT may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs three (3) and four (4) of this section



14.19.3 Notice

- a. Anticipated Bypass: If ADOT knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.
- b. Unanticipated Bypass: ADOT shall submit notice of an unanticipated bypass as required in paragraph 5 of Part 14.18.5 (Twenty-Four Hour Reporting).

14.19.4 Prohibition of Bypass

- a. Bypass is prohibited, and ADEQ may take enforcement action against a permittee for a bypass, unless:
  - (i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (iii) ADOT submitted notices as required under paragraph three (3) of this Section.
- b. ADEQ may approve an anticipated bypass, after considering its adverse effects, if ADEQ determines it will meet the three (3) conditions listed in paragraph 4.a. of this section.

14.20 Upset: [A.A.C. R18-9-A905(A)(3)(a), A.R.S. §§ 49-255(8) and 255.01(E), which incorporates by reference 40 CFR 122.41(n)].

14.20.1 Definition: "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of ADOT. An upset does not include noncompliance to the extent that it is caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

14.20.2 Effect of an Upset: An upset constitutes an affirmative defense to any administrative, civil or criminal enforcement action brought for noncompliance with such technology-based permit effluent limitations if all the requirements of paragraph three (3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

14.20.3 Conditions Necessary for a Demonstration of Upset: A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An upset occurred and that ADOT can identify the specific cause(s) of the upset

- b. The permitted facility was being properly operated at the time of the upset
  - c. ADOT submitted notice of the upset as required in paragraph five (5) of Subsection 14.18.5 (Twenty-Four Hour Reporting) of this section
  - d. ADOT complied with any remedial measures required under 40 CFR 122.41(d), and
  - e. ADOT has taken appropriate measures including all reasonable steps to reduce or prevent any discharge or sewage sludge use or disposal that is in violation of the permit and that has a reasonable likelihood of adversely affecting human health or the environment per A.R.S. § 49-255.01(E)(1)(d)
- 14.20.4 Burden of Proof: In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.
- 14.21 Reopener Clause: [A.A.C. R18-9-A905(A)(3)(d), which incorporates by reference 40 CFR 122.44(c), and A.A.C. R18-9-B906, which incorporates by reference 40 CFR 122.62]
- 14.21.1 This permit shall be modified or revoked and reissued to incorporate any applicable effluent standard or limitation under sections 301(b)(2)(C) and (D), 304(b)(2), 307(a)(2) and 405(d), of the Clean Water Act, which is promulgated or approved after the permit is issued if that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant or disposal practice not limited in the permit.
  - 14.21.2 This permit may be modified under the provisions of A.A.C. R18-9-B906, and A.A.C. R18-9-A905, which incorporates by reference 40 CFR 122.
  - 14.21.3 This permit may be reopened based on newly available information, to add conditions or limits to address demonstrated effluent toxicity, or to implement any EPA-approved new Arizona water quality standard.
  - 14.21.4 ADEQ may require changes to the SWMP, a SWPPP, or this permit as needed to:
    - a. Address impacts on receiving water quality caused, or contributed to, by discharges from the storm sewer system;
    - b. Include more stringent requirements necessary to comply with new state or federal statutory or regulatory requirements or TMDLs; or
    - c. Include other conditions deemed necessary by ADEQ to comply with the goals and requirements of the Clean Water Act.
  - 14.21.5 ADEQ shall request all changes in writing, and shall establish the schedule for ADOT to develop the changes and shall offer ADOT the opportunity to propose alternative program changes to meet the objective of the requested modification. All changes required by ADEQ shall be made in accordance with 40 CFR 124.5, 40 CFR 122.62, or 40 CFR 122.63.
- 14.21 Permit Transfers: [A.A.C. R18-9-B905] This permit may not be transferred to a new owner or operator.
- 14.22 Minor Modification of Permits: [A.A.C. R18-9-B906(B)] ADEQ may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this Section,

without following public notice procedures under A.A.C. R18-9-A907 or R18-9-A908. Minor modifications may only:

- 14.22.1 Correct typographical errors
  - 14.22.2 Update a permit condition that changed as a result of updating an Arizona water quality standard or the most current version of Arizona’s 303(d) list and not attaining waters listed in the 305(b) Assessment Report
  - 14.22.3 Require more frequent monitoring or reporting by ADOT
  - 14.22.4 Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement
  - 14.22.5 Change the construction schedule for a discharger that is a new source. No change shall affect a discharger's obligation prior to discharge under A.A.C. R18-9-A905(A)(1)(e), which incorporates by reference 40 CFR 122.29, and
  - 14.22.6 Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with the permit limits
- 14.23 Termination of Permits: [A.A.C. R-9-B906(C)] The following are causes for terminating a permit during its term or for denying a permit renewal application:
- 14.23.1 Noncompliance by ADOT with any condition of the permit
  - 14.23.2 ADOT's failure in the application or during the permit issuance process to disclose fully all relevant facts or ADOT's misrepresentation of any relevant facts at any time
  - 14.23.3 A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination, or
  - 14.23.4 A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit (for example, a plant closure or termination of discharge by connection to a POTW)
- 14.24 Availability of Reports: [A.R.S. § 49-205] Except for data determined to be confidential under A.R.S. § 49-205(A), all reports prepared in accordance with the terms of this permit shall be available for public inspection at ADEQ offices. As required by A.R.S. § 49-205(B) and (C), permit applications, permits, and effluent data shall not be considered confidential.
- 14.25 Removed Substances: [Section 301 of the Clean Water Act] Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner so as to prevent any pollutant from the materials from entering Waters of the U.S.
- 14.26 Severability: [A.R.S. § 49-324(E)] The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of the provision to other circumstances and remainder of this permit shall not be affected.

- 14.27 Civil and Criminal Liability: [A.R.S. § 49-262, 263.01, and 263.02] Except as provided in permit conditions on "bypass" (Part 14.19) and "upset" (Part 14.20), nothing in this permit shall be construed to relieve ADOT from civil or criminal penalties for noncompliance.
- 14.28 Oil and Hazardous Substance Liability: [Section 311 of the Clean Water Act] Nothing in this permit shall be construed to preclude the institution of any legal action or relieve ADOT from any responsibilities, liabilities, or penalties to which ADOT is or may be subject under section 311 of the Clean Water Act.
- 14.29 State or Tribal Law: [A.A.C. R18-9-A904(C)] Nothing in this permit shall be construed to preclude the institution of any legal action or relieve ADOT from any responsibilities, liabilities, or penalties established pursuant to any applicable state or tribal law or regulation under authority preserved by section 510 of the Clean Water Act.
- 14.30 Penalties for Violations of Permit Conditions: Any permit noncompliance constitutes a violation and is grounds for an enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.
- 14.30.1 Civil Penalties: A.R.S. § 49-262 provides that any person who violates any provision of A.R.S. Title 49, Chapter 2, Article 2, 3 or 3.1 or a rule, permit, discharge limitation or order issued or adopted under A.R.S. Title 49, Chapter 2, Article 3.1 is subject to a civil penalty not to exceed \$25,000 per day per violation.
- 14.30.2 Criminal Penalties: Any person who violates a condition of this general permit, or violates a provision under A.R.S. Title 49, Chapter 2, Article 3.1, or A.A.C. Title 18, Chapter 2, Article 9 is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which may include the possibility of fines and/or imprisonment.

## DEFINITIONS

**ADEQ** means the Arizona Department of Environmental Quality

**ADOT** means the Arizona Department of Transportation.

**Aliquot** means a portion of a discrete sample used to produce a composite sample for analysis.

**Best Management Practices (BMPs)** means schedules of activities, prohibitions of practices, operation and maintenance procedures, and other management practices used to prevent or reduce pollution to Waters of the U.S. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**Clean Water Act (CWA)** means the federal water pollution control act amendments of 1972 (P.L. 92-500; 86 Stat. 816; 33 United States Code sections 1251 through 1376), as amended. [A.R.S. § 49-201(6)]

**Components** mean all elements of the SWMP including measures, stormwater best management practices, and measurable goals (associated frequencies, amounts, time-frames).

**Composite Sample** is a combined sample that is formed by combining a series of individual discrete samples of specific volumes at specified intervals. Composite samples characterize the quality of a stormwater discharge over a longer period of time, such as the duration of a storm event. Although these intervals can be time-weighted or flow-weighted, this permit requires the collection of flow-proportional composite samples. This means that discrete samples are collected and combined using aliquots in proportion to flow rather than time.

**Construction activity** is earth-disturbing activities such as, clearing, grading, excavating, stockpiling of fill material and other similar activities. This definition encompasses both large construction activities defined in 40 CFR 122.26 (b)(14)(x) and small construction activities in 40 CFR 122.26 (b)(15)(i) and includes construction support activities.

Construction activity also includes all support activities and areas used exclusively for ADOT construction projects including, but not limited to: equipment and other storage areas; material storage areas; excavated material disposal areas; borrow areas; access roads; and any mobile operations such as asphalt plants and concrete batch plants, and asphalt and concrete recycling (mixing and crushing).

**Control Measure** refers to any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

**Corrective Action** means any action taken to (1) modify, or replace any ineffective control measure used at the site; (2) mitigate any conditions that resulted in a discharge of pollutants above surface water quality standards; or (3) remedy a permit violation.

**De Minimis Discharge** means a discharge that is a low flow and/or low frequency event of relatively pollutant free water which is discharged with appropriate BMPs to reduce any pollutants to below the applicable surface water quality standards [18 A.A.C. 11, Article 1]. De Minimis discharges to Waters of the U.S. require permit coverage and shall not last for more than 30 days, unless approved in advance by ADEQ.

**Designated Use** means those uses specified in 18 A.A.C. 11, Article 1 for each surface water or segment whether or not they are attaining. [A.A.C. R18-11-601(5)]

**Discharge** means any addition of any pollutant to Waters of the U.S. from any point source.

**Discrete or Grab Sample** means an individual sample collected from a single location or over a period of time not exceeding 15 minutes. Analysis of a discrete or grab sample characterizes the quality of a discharge at a given time of the discharge.

**Drought** means weather conditions considered ‘severely’ or ‘extremely’ dry (*i.e.*, has a value of -1.50 or less) as evaluated by the Standardized Precipitation Index (SPI) which compares current cumulative precipitation to average conditions.

**Ephemeral Water** means a surface water that has a channel that is at all times above the water table, and that flows only in direct response to precipitation. [A.A.C. R18-11-101(22)]

**Erosion Control** means BMPs to prevent soil particles from detaching and being transported in stormwater; includes temporary and permanent BMPs.

**Flow-Proportional Composite Sample** is a sample that combines discrete samples collected over time, based on the flow of the discharge being sampled. There are two (2) methods used to collect this type of sample. One collects a constant sample volume at time intervals that vary based on stream flow. The other collects discrete samples that are proportioned into aliquots of varying volumes based on stream flow, at constant time intervals (*i.e.* flow-weighted composite sample).

**Illicit Connection** means any man-made conveyance that connects an illicit discharge directly to a municipal separate storm sewer.

**Illicit Discharge** means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a NPDES (*or* AZPDES) permit (other than the NPDES (*or* AZPDES) permit for discharges from the municipal separate storm sewer) and discharges resulting from fire-fighting activities. [40 CFR 122.26(b)(2)]

*Note: Illicit discharges do not include those not subject to Clean Water Act regulation, including exempt agricultural return flow.*

**Impaired Water** means a surface water that has been assessed by ADEQ or EPA under section 303(d) of the Clean Water Act, as not attaining a water quality standard for at least one (1) designated use, and is listed in Arizona’s 2004 303(d) and Other Impaired Waters List.

**Indian Country** means:

1. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation;
2. All dependent Indian communities within the borders of the United States, whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State; and
3. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian Tribe. (18 U.S.C. 1151)

**Industrial Activity** means the ten (10) categories of non-construction industrial activities defined in 40 CFR 122.26(b)(14)(i) through (ix) and (xi).

**Intermittent Surface Water** means a stream or reach of a stream that flows continuously only at certain times of the year, as when it receives water from a spring or from another surface source, such as melting snow. [A.A.C. R18-11-101(30)]

**Limit of Quantitation (LOQ)** is the lowest amount of analyte in a sample that can be quantitatively determined with suitable precision and accuracy.

**Low Impact Development (LID)** means a stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of on site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic pre-development hydrologic functions.

**Measurable Goal** means a quantitative measure of progress in implementing a component of a stormwater management program (e.g. frequencies, amounts, time frames).

**Method Detection Limit (MDL)** means the minimum concentration of an analyte that can be detected with 99 percent confidence that the analyte concentration is greater than zero, as defined under 40 CFR 136 or 9 A.A.C. 14, Article 6 methods. The procedure for determination of a laboratory MDL is prescribed under 9 A.A.C. 14, Article 6 methods or by 40 CFR 136, Appendix B (1998).

**Municipal Separate Storm Sewer System** means all separate storm sewers defined as "large," "medium," or "small" municipal separate storm sewer systems or any municipal separate storm sewers on a system-wide or jurisdiction-wide basis as determined by the Director under R18-9-C902(A)(1)(g)(i) through (iv). [A.A.C. R18-9-A901(23)]

**Municipal Separate Storm Sewer** means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, and storm drains):

1. Owned or operated by a state, city, town county, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the Clean Water Act (33 U.S.C. 1288) that discharges to Waters of the U.S.;
2. Designed or used for collecting or conveying stormwater;
3. That is not a combined sewer; and
4. That is not part of a publicly owned treatment works (POTW). [A.A.C. R18-9-A901(22)]

**National Pollutant Discharge Elimination System (or NPDES)** means the point source discharge permit program established by § 402 of the Clean Water Act. In Arizona, the program is administered as the Arizona Pollutant Discharge Elimination System, or AZPDES [A.A.C. R18-11-101(32)].

**No Exposure** means all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff.

**Non-stormwater Discharge** means any discharge which is not composed entirely of stormwater. Non-stormwater discharges include illicit discharges, non-stormwater discharges that are authorized under this permit, and non-stormwater discharges that are permitted under a separate AZPDES permit.

**Not Attaining** means a surface water is assessed as impaired, but is not placed on the 303(d) List because:

1. A TMDL is prepared and implemented for the surface water;

2. An action, which meets the requirements of A.A.C. R18-11-604(D)(2)(h), is occurring and is expected to bring the surface water to attaining before the next 303(d) List submission; or
3. The impairment of the surface water is due to pollution but not a pollutant, for which a TMDL load allocation cannot be developed. [A.A.C. R18-11-601(11)]

**Outfall** means a point source as defined by 40 CFR 122.2 at the point where a MS4 discharges to waters of the United States and does not include open conveyances connecting two (2) municipal separate storm sewers or pipes, tunnels or other conveyances which connect segments of the same stream or other Waters of the United States and are used to convey Waters of the United States. [40 CFR 122.26(b)(9)]

**Priority outfall** means:

- Any pre-existing mapped outfall within a regulated MS4.
- Discharges to any “impaired water,”
- Discharges to any outstanding Arizona water,
- Is known to have an illicit discharge that is ongoing or intermittent.

*Note: Outfalls do not include cross-drain structures or culverts installed under a road that function only to maintain the natural flow of surface waters and drainage. However, a structure that collects or diverts drainage that has contacted the road surfaces for discharge into a waterbody is considered an outfall under this permit.*

**Point Source** means any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants are or may be discharged to Waters of the U.S. Point source does not include return flows from irrigated agriculture.

**Pollutant** means fluids, contaminants, toxic wastes, toxic pollutants, dredged spoil, solid waste, substances and chemicals, pesticides, herbicides, fertilizers and other agricultural chemicals, incinerator residue, sewage, garbage, sewage sludge, munitions, petroleum products, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and mining, industrial, municipal and agricultural wastes or any other liquid, solid, gaseous or hazardous substances. [A.R.S. § 49-201(29)].

**Qualified Personnel** are persons (either ADOT’s employees or outside consultants), who are knowledgeable and possess the skills to assess conditions at the site that could impact stormwater quality and the effectiveness of the BMPs selected to control the quality of the stormwater discharges.

**Quantitation Level (QL)** is the concentration at which the entire analytical system gives a recognizable signal and acceptable calibration point. The QL is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all of the method-specified sample weights, volumes, and processing steps have been followed.

**Receiving Water** means a “Water of the United States” as defined in 40 CFR 122.2 into which the stormwater discharges.



**Redevelopment** refers to alterations of a property that change the footprint of a site or building in such a way that results in the disturbance of equal to or greater than one (1) acre of land. The term is not intended to include such activities as exterior remodeling.

**Representative Storm** means a storm event of greater than 0.1 inch of rainfall and at least 72 hours after the previously measurable (greater than 0.1 inch rainfall) storm event.

**Retrofit** means to modify an existing system of conveyances such that there is a practical and measurable increase in water quality protection and restoration.

**Sediment Control** means BMPs designed to intercept and settle out soil particles that have become detached and transported by water. Sediment control BMPs complement soil stabilization BMPs (erosion control).

**Stormwater Management Program (SWMP)** means a comprehensive program to manage the quality of stormwater discharged from the storm sewer system in all areas within Arizona, except for Indian Country. The term Stormwater Management Program is also used to refer to the written document that describes the Stormwater Management Program.

**Stormwater** includes stormwater runoff, snow melt runoff, and surface runoff and drainage. [A.A.C. R18-9-A901(36)]

**Surface Water** means a Water of the U.S. and includes the following:

1. A water that is currently used, was used in the past, or may be susceptible to use in interstate or foreign commerce;
2. An interstate water, including an interstate wetland;
3. All other waters, such as an intrastate lake, reservoir, natural pond, river, stream (including an intermittent or ephemeral stream), creek, wash, draw, mudflat, sandflat, wetland, slough, backwater, prairie pothole, wet meadow, or playa lake, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce, including any such water:
  - a. That is or could be used by interstate or foreign travelers for recreational or other purposes;
  - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - c. That is used or could be used for industrial purposes by industries in interstate or foreign commerce;
4. An impoundment of a surface water as defined by this definition;
5. A tributary of a surface water identified in subsections (1) through (4) of this definition; and
6. A wetland adjacent to a surface water identified in subsections (1) through (5) of this definition. [A.A.C. R18-11-101(43)]

**Total Maximum Daily Load (TMDL)** means an estimation of the total amount of a pollutant from all sources that may be added to a water while still allowing the water to achieve and maintain applicable surface water quality standards. Each total maximum daily load shall include allocations for sources that contribute the pollutant to the water, as required by section 303(d) of

the clean water act (33 United States Code section 1313(d)) and regulations implementing that statute to achieve applicable surface water quality standards. [A.R.S. § 49-231(4)]

**Outstanding Arizona Water** means a surface water that is classified as an outstanding state resource water by ADEQ under A.A.C. R18-11-112. [A.A.C. R18-11-101(28)]

**Waters of the United States (U.S.)** means:

1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters, including interstate “wetlands;”
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, “wetlands,” sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  - a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
  - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - c. Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as Waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (a) through (d) of this definition;
6. The territorial sea; and
7. “Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

**Wetland** means an area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. A wetland includes a swamp, marsh, bog, cienega, tinaja, and similar areas. [A.A.C. R 18-11-101(49)]

## ACRONYMS

AAC	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
ADOT	Arizona Department of Transportation
ARS	Arizona Revised Statutes
AZPDES	Arizona Pollutant Discharge Elimination System
BMP	Best Management Practice

BOD	Biochemical Oxygen Demand
CFR	Code of Federal Regulations
CGP	Construction General Permit
COD	Chemical Oxygen Demand
CWA	Clean Water Act
ERP	Enforcement Response Plan
IDDE	Illicit Discharge Detection and Elimination
LID	Low Impact Development
LOQ	Limit of Quantitation
MDL	Method Detection Limit
MS4	Municipal Separate Storm Sewer System
NOIs	Notice of Intents
NOTs	Notice of Terminations
NPDES	National Pollutant Discharge Elimination System
OAW	Outstanding Arizona Water
PAH	Polycyclic Aromatic Hydrocarbons
POTW	Publicly Owned Treatment Works
QA/QC	Quality Assurance/Quality Control
QL	Quantitation Level
RCRA	Resource Conservation and Recovery Act
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
SWQS	Surface Water Quality Standards
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
USEPA	US Environmental Protection Agency