APPENDIX C

Stormwater Management Program (SWMP) Requirements

The Stormwater Management Program (SWMP) shall be developed, maintained, and updated as necessary to reduce the discharge of pollutants to the municipal storm sewer system to the maximum extent practicable. The written plan shall describe the best management practices and pollutant controls established to reduce the discharge of pollutants, and shall, in addition to any specific requirements of this permit, address the following elements. If the permittee does not generally follow the format which follows, include a cross reference to where the following provisions may be found in the SWMP document.

The Permittee’s SWMP shall detail 1) the current status of the program with respect to the issues in this appendix, and 2) the approach and processes necessary to achieve the provisions of this permit throughout the permit term. The SWMP shall describe systems in place, goals and timelines to demonstrate compliance with Appendix A, and also address the following areas:

PUBLIC EDUCATION/OUTREACH  Describe on-going and planned outreach activities to educate the community (developers, contractors, homeowners, public, etc.) on stormwater best management practices. (Include the frequency and type of outreach, target audiences and the development and distribution of educational materials.)

PUBLIC INVOLVEMENT  Describe on-going and planned processes to involve the public in the SWMP and in activities to implement the SWMP.

ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) Describe the permittee’s comprehensive IDDE program as follows:

MEASURES TO CONTROL ILLICIT CONNECTIONS AND ILLEGAL DUMPING TO THE MUNICIPAL STORM SEWER SYSTEM

A description of a program to detect and eliminate illicit discharges and improper disposal to the storm sewer, including the following information:

- **Practices for Preventing Illicit Discharges**
  - *Illicit Discharge Ordinance:* A description of the ordinance(s) used to prohibit and eliminate illicit discharges to the storm sewer system. Include, as an attachment, a copy of the ordinance(s);
  - *Non-Stormwater Discharge Evaluation:* A description of the program to manage non-stormwater discharges to the municipal storm sewer system (such as approvals, permits, or discharge notifications), including a list of the types of non-stormwater discharges that are or will be allowed to discharge to the storm sewer system; and
  - *Non-Stormwater Discharge Records:* A description of the MS4’s system for tracking and recording non-stormwater discharges.

- **Practices and Procedures for Field Screening** (dry weather outfall monitoring)
  - *Outfall Inventory:* An inventory of major outfalls, organized by drainage area or a mapping system showing outfalls;
  - *Inspection Priorities and Schedule:* A description of the priorities and schedule for inspecting major outfalls and screening points; the priorities for inspection and the basis for those priorities; and the frequency and schedule of inspections for major outfalls;
  - *Field Screening Procedures:* A description of standard procedures and methods for inspecting and screening outfalls, documenting conditions, and reporting potential illicit discharges. Describe the system used to track and record findings; and
• **Staff Training (Screening and Investigation):** A description of training to educate and update inspectors and other field staff on detecting, investigating, and identifying illicit discharges (to include field screening procedures, field measurements, sampling methods, use of chain-of-custody protocols when analytical monitoring is used). Include the frequency and type of training.

➢ **Investigating Potential Illicit Discharges**
  • **Dry Weather Discharges:** The City shall develop and include in the SWMP a detailed field screening protocol for investigating dry weather discharges. This shall include criteria to identify, characterize and prioritize dry weather discharges; determine the source(s) and develop a schedule for their timely elimination. This shall include the rationale for selection of dry weather field screening locations and for performing appropriate follow-up analytical monitoring. Include visual and analytical monitoring procedures, and specify how and when decisions are made to sample;
  • **Existing Dry Weather Flows:** During the term of this permit, the COP shall re-evaluate any known dry weather discharges that have not been eliminated or investigated in the last 5 years;
  • **Illicit Discharge Investigation (Source Identification):** Describe the MS4’s practices and procedures to investigate potential illicit discharges and other sources of non-stormwater, including methods to identify possible sources (such as sampling procedures, storm sewer investigation practices, research of non-stormwater discharges, etc.). The IDDE provisions in the SWMP shall include field screening thresholds to indicate when an illicit discharge may be present and follow-up investigations are necessary;
  • **Industrial Facility Inspections:** Describe the inspection practices for industrial facilities to identify cross connections with sanitary sewer lines and other potential sources of illicit discharges or releases of toxic materials to the storm sewer system;
  • **Tracking and Reporting:** Describe the MS4’s process to summarize and report the results of dry weather field screening and analytical monitoring, including the identification and elimination of illicit connections and illegal discharges; and
  • **Illicit Discharge Elimination:** Describe the process for conducting follow-up source identification investigation, and the enforcement strategy to eliminate sources of illicit discharges and ensure compliance with illicit discharge ordinances. Include a description of the type of corrective and enforcement actions (notice of correction, notice of violation, fines, etc.) that may be initiated.

➢ **Illicit Discharge Public Awareness and Reporting Program**
  Practices to promote, publicize, and facilitate public reporting of illicit discharges to or from the municipal storm sewer system.

**MUNICIPAL FACILITIES**

**PROPER MANAGEMENT OF USED OILS AND TOXICS**
Describe practices used to facilitate the proper management and disposal of used oil and toxic materials generated by the MS4.

**CONTROLS FOR PESTICIDES, HERBICIDES, AND FERTILIZERS**
The SWMP shall describe a program to effectively minimize pollution from pesticide/herbicide use at city facilities. The Permittee shall only apply pesticides that are FIFRA approved for aquatic application in any area within or adjacent to a WUS, including ephemeral washes.
SPILL PREVENTION AND RESPONSE

Describe practices and procedures to prevent, contain, and otherwise manage spills to minimize discharges to the municipal storm sewer system.

MEASURES TO REDUCE POLLUTANTS FROM RESIDENTIAL AND COMMERCIAL AREAS

- **Drainage System Maintenance (structural controls)**
  Practices for the maintenance of stormwater collection and conveyance structures to reduce the discharge of pollutants to and from the municipal storm sewer system, including the following areas:
  - Drainage System Inventory/Maps;
  - Drainage System Monitoring Program;
  - Maintenance Priorities and Schedule; and
  - System Maintenance (drainage channels, washes, and retention basins).

- **Controls for New Developments and Significant Redevelopment**
  Planning procedures and post-construction practices to reduce the discharge of pollutants from newly developed and redeveloped areas to the MS4, including a brief summary of:
  - Post-construction Ordinances applicable to stormwater controls or quality;
  - Design and Maintenance Standards applicable to post-construction (including the standard, review and implementation processes);
  - Plan Review (including post-construction controls) and approval process;
  - Inspection Program (including practices, priorities, frequency, percentages, and timing); and
  - Enforcement Strategy/Actions (including types, procedures, timelines).

- **Operation and Maintenance of Public Streets, Roads, and Highways**
  Practices for operating and maintaining public streets, roads and highways to reduce the discharge of pollutants and from the municipal storm sewer system, including the following:
  - Drainage System Visual Monitoring;
  - Maintenance Priorities and Schedule;
  - System Maintenance Practices (drainage channels, washes, roadway catch basins/storm drain inlets and retention basins) and cleaning activities;
  - Street/Parking Lot Sweeping Program (frequency, priorities, schedule); and
  - Street Repair Practices (staff training and standard BMPs and procedures for repairs improvements in a manner that protects stormwater and storm drains).

- **Additional Practices to Reduce Pollutants from Residential and Commercial Areas**
  Describe additional practices underway or in place to reduce pollutants from commercial and residential areas to the municipal storm sewer system.
INDUSTRIAL SITES

MEASURES TO CONTROL POLLUTANTS
A description of a program to monitor and control pollutants in stormwater discharges from industrial facilities that contribute pollutants to the MS4, including the following information:

- **Identify Priorities and Implementing Controls**
  Procedures and priorities for conducting inspections and implementing control measures, including the following:

  - **Industrial Facility Inventory:** A process to develop and maintain an inventory of industrial facilities not operated by the MS4, which have the potential to discharge to the MS4. This is to include the facility name and address and the Standard Industrial Classification (SIC) code(s) which best reflects the principal products or services provided by each facility;

  - **Municipal Facility Inventory:** An inventory and brief description of municipally-owned and operated facilities (other than administrative buildings) that have a potential to contribute pollutants to the MS4 system. Include the name and address, the operational status (operating or closed), and the Standard Industrial Classification (SIC) code(s) which best reflects the services provided by each facility. Provide, as an attachment, the inventory of municipal facilities;

  - **High Risk Facilities:** Identification of industrial, municipal, or commercial facilities (or categories of facilities) that may be the most significant sources of pollutants or otherwise may have a high risk of contributing pollutants to the storm sewer system, including a description of the basis (criteria) for establishing these facilities as high risk facilities. Identification of risk may be based on the type of facility (i.e. nature of industrial activity), the products or services provided by the facility, proximity to receiving waters, receiving water quality, and other factors that indicate the potential to impact water quality; and

  - **Stormwater Management Evaluations (Municipal Facilities)**: A general plan for review of stormwater best management practices, BMPs, and maintenance procedures implemented at municipally operated facilities to minimize the discharge of pollutants from the site. Include a process to evaluate compliance with state (i.e., the requirement for AZPDES permits) stormwater requirement as applicable.

- **Inspections and Monitoring**
  Inspection of industrial facilities and monitoring of discharges associated with industrial facilities that may impact stormwater, including the following:

  - **Inspection Procedures:** A description of standard procedures for inspecting industrial facilities, documenting facility conditions, and reporting potential sources of pollutants or illicit discharges. Describe the system to document and retain the inspection findings;

  - **Industrial Facility Inspections – High Risk:** A description of the inspection program implemented for high risk industrial or commercial facilities (or categories of facilities) to identify and eliminate potential discharges of pollutants to the storm sewer system, verify implementation and maintenance of stormwater best management practices in compliance with municipal stormwater ordinances, and confirm ADEQ authorization to discharge stormwater associated with industrial activity, as applicable (i.e., NOI Authorization). Include information on the schedule for inspecting high risk facilities (i.e. frequency of inspections) throughout the permit term; and

  - **AZPDES Non-filers:** A description of the method for tracking and reporting industrial facilities that are not authorized by ADEQ (i.e. NOI Authorization) under the AZPDES Multi-Sector General Permit for Stormwater discharges associated with industrial facilities including the type of information that is reported to ADEQ.
Other Measures to Control Pollutants from Landfills, Municipal Waste Facilities, and Industrial Facilities
A description of any other practices implemented to control pollutants from landfills, municipal waste facilities, and industrial facilities.

CONSTRUCTION SITES

MEASURES TO CONTROL POLLUTANTS FROM CONSTRUCTION SITES
A description of a program to reduce pollutants in stormwater runoff from construction sites to the MS4, including the following information:

- **Reviewing Construction Site Plans**
  Procedures for site planning which incorporate consideration of potential water quality impacts, including the following practices:
  - Maintaining a construction project inventory;
  - MS4 Plan Review of construction sites* (i.e., what types of sites are reviewed; approvals or permits required; MS4 process summary);
  - Staff Training (with respect to the Plan Review process); and
  - Plan Approvals (or Permits): A description of the approval process to authorize new construction projects (such as municipal stormwater permits) upon verification that construction plans (stormwater pollution prevention or management plans) comply with municipal stormwater requirements for stormwater best management practices, and that the operator has obtained AZPDES authorization (NOI Authorization) to discharge stormwater associated with construction activity.

- **Structural and Non-Structural Stormwater Best Management Practices**
  Municipal requirements relating to structural and non-structural stormwater best management practice, including construction standards and ordinances as related to stormwater.
  - The MS4 shall establish standard procedures and practices for design & maintenance of post-construction stormwater controls (such as standards for open space preservation, on-site stormwater retention, and maintenance of pre-construction run-off rates and long-term maintenance controls.
  - The City shall continue to implement the requirement for new facilities to install and maintain on-site detention for a 100-year, 2 hour storm event in all areas of the Phoenix except those exempted by law or excluded under the technical appeals process. When possible, the City shall require such exempted facilities to install stormwater protection controls and BMPs.
  - The MS4 shall evaluate the potential for incorporating additional Low Impact Development (LID) practices into the City’s site planning and development processes.

- **Site Inspections and Enforcement**
  Procedures and priorities for inspecting construction sites and enforcing municipal ordinances, plan approvals (or permits), and design and maintenance requirements for stormwater controls, including the following practices:
  - Inspection Priorities;
  - Inspection Procedures;
  - Inspection Records;
- Inspector Training;
- Enforcement Processes and Actions; and
- Reporting of AZPDES Non-filers.

➢ Other Practices to Control Pollutants from Construction Sites

A description of any other practices (structural or non-structural practices) the MS4 employs to control pollutants from construction sites.

SWMP ATTACHMENTS:

As per the provisions of the permit, some of the following may not be initially developed or fully developed at the time of submittal of the revised SWMP. In this case, the permittee is to attach those available and provide a status of those that are not yet developed.

- Drainage system maps;
- Map/Inventory and location of structural control facilities (retention and detention basins, conveyances, major infiltration structures);
- Map/Inventory of major outfalls, with latitude and longitude and drainage area;
- Inventory of municipal facilities and operations with a potential for significant discharge of pollutants to stormwater;
- Map/Inventory of municipally-owned and operated “categorical” industrial facilities (facilities listed in 40 CFR 122.26(b)(14)(i) through (ix) and (xi), with SIC number and AZPDES permit number(s) (Refer to Part C.1.b);
- Identification of all open and closed landfills, hazardous waste treatment, storage, or disposal facilities, and facilities subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA);
- Copy of each ordinance addressing stormwater and non-stormwater issues, including construction activity, development/planning, post-construction, illicit discharges, connections, and dumping, industrial activity, used oil and waste disposal, sanitary sewer use, etc.; and
- Certification Statement (Refer to Section 9.2 and 9.12 of the permit).

ENDNOTES:

1. **Major Outfall**: means a municipal separate storm sewer outfall from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more, or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more). [40 CFR 122.26(b)(5)]

2. **Field Screening Procedures**: As set forth at 40 CFR 122.26(d)(1)(iv)(D).

3. **Stormwater Management Evaluation**: (Municipal Facilities) Industrial facilities listed at 40 CFR 122.26(b)(14)(i) through (ix) and (xi) that have the potential to discharge stormwater to waters of the U.S. or to a MS4 are subject to the AZPDES General Permit for stormwater discharges associated with industrial activity, including landfills, treatment works, and airports. These facilities are required to obtain AZPDES general or individual permit authorization, file a Notice of Intent (NOI) to discharge, develop and implement a SWPPP, perform facility inspections, monitor stormwater, etc.

Other commercial, industrial, or municipal facilities, such as waste transfer stations or sludge disposal sites, which have the potential to discharge to a MS4, are subject to municipal stormwater requirements (i.e. ordinances protecting the MS4). These facilities must implement stormwater best management practices to minimize discharges to the MS4. All municipally-owned or operated
facilities should be evaluated to ensure compliance with municipal and state stormwater requirements as applicable.

4. Site plan review and inspection requirements apply to construction projects disturbing one acre or more, or less than one acre if part of a larger common plan of development, except for sites which receive a stormwater permit exemption under 40 CFR 122.26(b)(15)(i)(A) or (B).