



City of Chandler

Small Municipal Separate Storm Sewer System Annual Report

July 1, 2005 through June 30, 2006

September 1, 2006



Chandler · Arizona
Where Values Make The Difference

September 19, 2006

Water Quality Compliance Section
Compliance Data Unit
Arizona Department of Environmental Quality
1110 West Washington
Phoenix, AZ 85007

RE: City of Chandler Small MS4 Annual Report – July 1, 2005 – June 30, 2006

Please find enclosed one (1) copy of the City of Chandler's Small Municipal Separate Storm Sewer (MS4) Annual Report for the reporting period July 1, 2005 through June 30, 2006. Should you have any questions please contact Jon Sherrill, Storm Water Program Coordinator at (480) 782-3503.

Sincerely,

Bryan Patterson
Public Works Director

Cc: Dan Cook - Public Works Deputy Director
Jeffrey Kramer – Assistant Public Works Director/Transportation & Operations
Jon Sherrill – Storm Water Program Coordinator
File

Mailing Address
Mail Stop 909
PO Box 4008
Chandler, Arizona 85244-4008

Public Works Department
Street Division
Telephone (480) 782-3500
Fax (480) 782-3495
www.chandleraz.gov

Location
Building C
975 East Armstrong Way
Chandler, Arizona 85249

Small MS4 Annual Report Form

Please refer to the attached instructions as you prepare your annual report.

A. General Information

Name of MS4: City of Chandler

Contact Name: Jon Sherrill

Telephone Number: (480) 782-3503 Email Address: jon.sherrill@chandleraz.gov

Annual Report Period: December 19, 2002 – June 30, 2004 July 1, 2004 – June 30, 2005
 July 1, 2005 – June 30, 2006 July 1, 2006 – June 30, 2007

B. SWMP Modifications and Additional Information. Attach a brief explanation if you check “yes” to any of the following statements.

- | | | |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|
| 1. Changes have been made or are proposed to the SWMP since the last annual report, including changes in response to ADEQ’s review. | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| 2. The MS4 has annexed lands. | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> |
| 3a. The MS4 discharges directly to an impaired water. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 3b. A water within 10 miles of the MS4’s jurisdiction has been identified as impaired. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 4a. The MS4 discharges directly to water for which a TMDL has been established. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 4b. A TMDL has been established for a water within 10 miles of the MS4’s jurisdiction. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 5. The MS4 has conducted analytical monitoring of stormwater quality. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 6. The MS4 is relying on another government entity to satisfy some permit obligations. | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |

C. Stormwater Management Program Status. Provide the status of every BMP and measurable goal in your SWMP as described in the instructions.

TABLE 1

Minimum Control Measure(s)	BMP	Measurable Goal (steps to measure progress)	New or Revised	Start Date	Implementation Status/ Frequency/ Achievement Date (completed, in progress, not started)
Public Education and Outreach	Newsletter Articles	2005 Annual Drinking Water Quality Report November 2005 City Scope Newsletter. Approximately 70,000 sent to households. Copies are included in Appendix A		May 2003	In progress, annual drinking water quality report and one article in City Scope. Distributed to residents by bulk mail or in utility bills.
Public Education and Outreach	Storm Water Brochure	Brochures are included in new resident packets, at City kiosk at Chandler Fashion Square Mall and handed out at City events. Distributed 5510 brochures during last reporting period. Copy of brochure included in Appendix B		August 2003	In progress, brochure distribution will be tracked during next reporting period.
Public Education / Public Involvement	Storm Water Webpage	Developed webpage on City website Copies of webpage content included in Appendix C		August 2003	In progress, website is periodically updated with new information, monitor number of visits to site
Public Education	Storm Water Signage	20 Signs Purchased Posted 2 signs at Denver basin, 1 sign each at Arrowhead and Galveston Basins		January 2004	In progress, signs will continue to be installed in City retentions during next reporting period
Public Education / Public Involvement	Storm Drain Placards	6,000 cast aluminum placards were purchased 73 placards were installed during the last reporting period.		July 2003	In progress, installation of the placards on storm drain inlets will continue during next reporting period.
Public Education	Landscape and Lawn Care	Assist in the management of irrigation runoff 437 low water use conversions 185 irrigation timer rebates		March 2003	In progress, continue tracking number of conversions and rebates
Public Education / Public Involvement	Conservation Calendar	Held 4 th grade art contest Created calendar and poster using art 8,300 – 2006 calendars and 500 posters distributed (Appendix D)	Revised	August 2003	In progress, calendars in production will be distributed through schools and City events. Art contest and calendar production will continue as funding allows

TABLE 1 (continued)

Minimum Control Measure(s)	BMP	Measurable Goal (steps to measure progress)	New or Revised	Start Date	Implementation Status/ Frequency/ Achievement Date (completed, in progress, not started)
Public Education / Public Involvement	Classroom Presentations	Number of students in classroom – no invites from teachers during this reporting period		May 2004	In progress, seek out opportunities to present storm water information in classroom
Public Education / Public Involvement	Hamilton High School Science Fair	Approximately 5,000 fair attendees, Attendees shown storm water related information through use of Enviroscope non-point source model, passed out 205 rain gauges, magnets and brochures		February 2004	In progress, participate in next Hamilton High Science Fair in February 2007
Public Education	STORM Membership	STORM website with stormwater related information, display boards used at public events illustrating the difference between sanitary and storm sewer and development of promotional items. STORM Annual Report can be found at www.azstorm.org		March 2003	In progress, continued yearly membership
Public Education	Rain gauges	1,222 rain gauges with "Please...only rain in the storm drain" , city website address and contract information were distributed at City sponsored events. These events include HOA meetings, art contest award ceremony, freeway opening and meetings.		April 2005	In progress, rain gauge distribution will be tracked during next reporting period
Public Education	Dog treat business cards	500 raw hide dog treats with "please pick up after your pet" printed on treat. Distributed 30 treats at Citizens Academy.		April 2005	In progress, dog treat distribution will be tracked during next reporting period
Public Education	Public Works @ Work, City cable show	8-minute segment on storm water system function and maintenance Aired 11 times per week between March 18 – May 27, 2005		March 2005	Completed

TABLE 1 (continued)

Minimum Control Measure(s)	BMP	Measurable Goal (steps to measure progress)	New or Revised	Start Date	Implementation Status/ Frequency/ Achievement Date (completed, in progress, not started)
Public Participation	Public Meetings	14 public meetings attended by 305 individuals Meetings dates, projects and attendance are included in Appendix E		June 2003	In progress, public meetings will documented in next annual report
Public Participation/Illicit Discharge Detection and Elimination	Storm Water Pollution Hotline	Phone number identified on City website and information distributed that residents can call with storm related issues or concerns. Approximately 15 calls were received.		November 2004	In progress, track calls during next reporting period
Illicit Discharge Detection and Elimination	Storm Water System Map	Collect as-built information on storm drain system, identify new system components		March 2003	In progress, continued collection of as-built information and inspection system
Illicit Discharge Detection and Elimination	Storm Drain Video	Video storm drains for illicit connections and infrastructure condition 43,916 feet of storm drain video inspected		May 2005	completed
Illicit Discharge Detection and Elimination/Post-Construction Stormwater Management	Plan Review	Plan reviews are completed to catch any illicit connections from wastewater discharge into the stormwater system.	Revised	March 2003	In progress, continue plan review for any illicit connections from wastewater discharge into the stormwater system.
Illicit Discharge Detection and Elimination/Pollution Prevention Good Housekeeping	Spill Prevention and Containment	Prevention of material spilled from entering storm drain systems A total of 175 incidents/spills were responded to and resolved Summaries of the spills and incidents responded to and spill response form are included in Appendix F		March 2003	In progress, report incidents/spills responded to during next reporting period

TABLE 1 (continued)

Minimum Control Measure(s)	BMP	Measurable Goal (steps to measure progress)	New or Revised	Start Date	Implementation Status/ Frequency/ Achievement Date (completed, in progress, not started)
Illicit Discharge Detection and Elimination	Dry Weather Field Screening	Two discharge points were inspected Arrowhead and Denver Basins were inspected weekly and material observed and amount removed was noted. Inspection and daily forms are included in Appendix G		March 2003	In progress, continued inspections and material removed will be noted during next reporting period
Construction Site Runoff Control	Grading and Drainage Permits	A grading and drainage permit is required for new projects. These detail the City's requirements for runoff control. 64 were issued during the reporting period. A list of the Grading and Drainage Permits Issued is included in Appendix H		March 2003	In progress, the number of permits issued will be noted during the next reporting period
Construction Site Runoff Control	Construction Site Inspections	Sites are inspected for infractions to the Grading and Drainage Permit, and County and/or City regulations and Standards. 69 Final Inspections were completed		March 2003	In progress, the number of inspections completed will be tracked during next reporting period
Construction Site Runoff Control	Construction Storm Water Handbook	City of Chandler Unified Development Manual – Available through City's website Provides a single source for construction site BMPs, sediment control, permit applications, inspections, and non-stormwater and water management issues.		August 2003	Completed February 2005

TABLE 1 (continued)

Minimum Control Measure(s)	BMP	Measurable Goal (steps to measure progress)	New or Revised	Start Date	Implementation Status/ Frequency/ Achievement Date (completed, in progress, not started)
Post Construction Storm Water Management	Property Owner Manual	City of Chandler Unified Development Manual – Available through City's website Provides a means to inform property owners about stormwater management, pollution prevention and maintenance requirements		November 2004	Completed February 2005
Post Construction Storm Water Management	Storm Drainage System Technical Design Manual	The manual outlines the design and policy for hydrology design, street drainage, storm drains, basins, and disposal of storm water and maintenance standards. Available as part of Unified Development Manual	Revised	March 2003	In progress, manual is reviewed and updated as needed
Post Construction Storm Water Management	One-year Warranty Finals	A one-year warranty inspection is completed developments and redevelopments to ensure that structures are constructed and operating properly. 58 One-Year Warranty Finals were completed. A copy of the One-Year Warranty List is included in Appendix I		March 2003	In progress, number of inspections will be tracked during next reporting period
Pollution Prevention and Good Housekeeping	Street Cleaning	69,384 total miles of streets swept. 2,545 tons of material removed		March 2003	In progress, report miles and tonnage of material removed during next reporting period
Pollution Prevention and Good Housekeeping	Illegal Dumping	158 illegal dumping calls were received and abated Summary Report Included in Appendix F		March 2003	In progress, number of calls responded to and abated will be tracked during next reporting period

TABLE 1 (continued)

Minimum Control Measure(s)	BMP	Measurable Goal (steps to measure progress)	New or Revised	Start Date	Implementation Status/ Frequency/ Achievement Date (completed, in progress, not started)
Pollution Prevention and Good Housekeeping	Employee Training	105 employees trained		March 2003	In progress, continue tracking employees trained
Pollution Prevention and Good Housekeeping	Cleaning Catch Basins and Outfalls	423 catch basins and scuppers were cleaned Summary of Work Orders Included in Appendix J Arrowhead and Denver Basins were inspected weekly, material observed and removed 925 pounds of material. 1400 catch basins and scuppers inspected. 1149 outlets cleaned, removed 75,970 pounds of material		March 2003	In progress, the number of inspections, units cleaned and material removed will be tracked during reporting period
Pollution Prevention and Good Housekeeping	Hazardous Material Storage	114 employees trained during 8 hour HAZWOPR Update		March 2003	In progress, continue tracking training
Pollution Prevention and Good Housekeeping	Household Hazardous Waste Collection	One event collected 48,890 pounds of household hazardous waste.		March 2003	In progress, continue tracking material collected

Note: If you have developed a stormwater ordinance during the last reporting period, include a description or citation of the ordinance, or simply attach a copy of the ordinance.

D. 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 the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Bryan D. Patterson
Signature

9-25-06
Date

Bryan D. Patterson
Name (printed)

Public Works Director
Title

Addenda

Section B – Part 1 – Changes have been made to SWMP

New Best Management Practices:

Per the ADEQ comment received in April 2006, The Conservation Art Contest has been added as a BMP to the Public Involvement/Participation minimum control measure.

Updated/Changed Best Management Practices

The plan review process is in place and consistently happening, however, specific data is still not conveniently available. Efforts to streamline data retrieval requests will continue the next reporting period. All site plans submitted to the City are reviewed. This process will be evaluated to ensure that the review includes construction site runoff control issues. The evaluation of the current plan review process and any proposed changes will occur during the next year (July 2006 to June 2007). Any new procedures, if developed, will be detailed in the SWMP renewal in December 2007.

No records are kept on the number of Technical Design Manual No. 3 distributed. The manual is now available as part of the City's Unified Develop Manual (UDM). The UDM is available on the City's website and no count is presently recorded to the number of visits or manuals downloaded. During the next reporting period the City's website will be reviewed to determine if number of visits and manuals downloaded can be counted.

A review of the dry weather flow records was completed as part of the report preparation. Although information is collected on date, location, and debris removed from outfalls, no clear records are kept as to the qualitative description of observed flows. During the next reporting period, a review of EPA, ADEQ and other available Illicit Discharge/Dry Weather monitoring programs will be reviewed. Any necessary changes to the monitoring program will be developed and implanted during the second half of the reporting period.

Section B – Part 2 The City Has Annexed Lands

During the reporting period the City of Chandler annexed approximately 109 acres of land. The majority of this land is undeveloped former agricultural fields or dairy farms and smaller developed residential properties. The map included details the areas that have been annexed. If necessary during and post development the following BMPs will be implemented in these areas:

- Public Meetings
- Stormwater System Map

- Plan Review
- Spill Prevention and Detection
- Grading and Drainage Permit
- Construction Site Inspections
- Construction Stormwater Handbook
- Property Owner Manual
- Storm Drainage System Technical Design Manual
- One-Year Warranty Inspection
- Street Cleaning
- Illegal Dumping

Section B – Code Sections

During the last reporting period the City received comments on the Storm Water Management Program from ADEQ. ADEQ commented that existing code sections did not explicitly prohibit non-stormwater discharges to the storm sewer system. The City will develop a code section that explicitly prohibits non-stormwater discharges to the storm sewer system. This code will also detail the enforcement and jurisdiction to ensure compliance. The City will provide ADEQ a draft of the proposed code for approval prior to adoption.

The development and approval by City Council can be a long process. The City will update the SWMP to include a plan and schedule for this process. The SWMP will be update with the following plan and process:

- Review existing codes from local MS4s – August 2006 to October 2006
- Development Draft ordinance – November 2006 to December 2006
- Submit Draft Code to City Management for Review – January 2007 to March 2007
- Submit Draft Code to ADEQ for Review – April 2007 to May 2007
- Address ADEQ Comments and Incorporate Any Changes – June 2007
- Review Draft Code with Public Works Subcommittee – July 2007 to September 2007
- Council Approval - October 2007

ADEQ also commented that existing code did not explicitly require construction site operators to practice sediment and erosion control and to control and properly dispose of wastes. The City of Chandler will develop a code section that explicitly requires construction site operators to practice sediment and erosion control and to control and properly dispose of wastes. This code will also detail the enforcement and jurisdiction to ensure compliance. The City will provide ADEQ a draft of the proposed code for approval prior to adoption.

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