



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



1110 West Washington Street Phoenix, Arizona 85007
(602) 771-2300 www.azdeq.gov

Small MS4 Annual Report

ID #: AZSM65730

MS4 Name: CITY OF CHANDLER MS4

Reporting Period: 01-Jul-2018 To 30-Jun-2019

Main Office

1110 W. Washington Street . Phoenix, AZ 85007
(602)771-2300

Southern Regional Office

400 W. Congress Street . Suite 433 . Tucson, AZ 85701
(520)628-6733

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Annual Report Summary

Company Information

Name : CITY OF CHANDLER-STORMWATER PROGRAM
PO BOX 4008
MAIL STOP 909
CHANDLER
AZ , 85244

Question: During this reporting period, was additional land annexed into the regulated MS4 area?

Answer: Yes

Total Area Annexed into the MS4 Since the Last Annual Report: 96.57 acres

Were Best Management Practices (BMPs) fully implemented in the annexed area? Yes

Mapping of storm sewer system, response to IDDE related concerns, enforcement of City code & ordinances, inspection and maintenance of drainage structures, post construction inspections and inspections of construction activity.

Question: Is stormwater sewer mapping 100 percent complete?

Answer: Yes

Provide the description of the measurable goal:

Public and private storm sewer structures will be added to the City's GIS system following final inspections and submittal of as-built information has been confirmed. Additional features may be added and/or revised when necessary. The number of structures added will be reported annually.

Question: Is outfall mapping 100 percent complete?

Answer: Yes

Number of outfalls mapped: 1

Provide the description of the measurable goal:

Mapping is current.

Question: Is identification of receiving waters information 100 percent complete?

Answer: Yes

Provide the description of the measurable goal:

Mapping is completed. The City will continue to add stormwater related structures to the GIS map during the next reporting period.

Question: Has an Illicit Discharge Detection and Elimination (IDDE) enforcement authority or other regulatory mechanism been established?

Answer: Yes

Name	Title/Code/Citation	Effective Date	Inactive Date
City Manager/ Designee (Chandler Code 1-8.9) Ordinance 3976	30-5 Prohibition against creating a public nuisance and, 45-8 prohibition on non-stormwater discharges	12/13/2007	
City Manager /Designee	Ordinance 3976, City Code Chapter 45-8	12/13/2007	

Question: Has a Construction Site Stormwater Runoff enforcement authority or other regulatory mechanism been established?

Answer: Yes

Name	Title/Code/Citation	Effective Date	Inactive Date
Ordinance 3976 - Adopts City of Chandler Manual on Stormwater Quality Protection. 45-8 Prohibition on non- stormwater discharges.	1-8 Code enforcement. City Manager/ Designee (Chandler Code 1-8.9) 30-5 Prohibition against creating a public nuisance. 30-6.5 Right of entry.	12/13/2007	

Question: Has a Post-Construction Stormwater Management enforcement authority or other regulatory mechanism been established?

Answer: Yes

Name	Title/Code/Citation	Effective Date	Inactive Date
City of Chandler Manual on Stormwater Quality Protection	Ordinance 3976	12/13/2007	

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Question: For each BMP in the Minimum Control Measure 1: Public Education and Outreach, what was completed during this reporting period?

Answer:

BMP Name: Stormwater Webpage

Category: Webpage

Personnel Position/Department: Stormwater Program Staff / Management Services and/or Public Information Officer / Communications and Public Affairs Staff

BMP Description :

The City of Chandler will maintain a stormwater webpage to promote education and communication on stormwater related topics.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Targeted Audience: General Public **Frequency:** 100 Percent per year

Milestone Description:

The targeted audience is the public. The information will be tracked and reviewed annually. Updates will be made as necessary. Webpage activity will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Stormwater Program | City of Chandler: Visits: 481 Page Views: 660

Stormwater Pollution Prevention | City of Chandler Visits: 134 Page Views: 440

Stormwater Management Program (PDF) Downloads: 52

Stormwater Brochure (PDF) Downloads: 12

Entire UDM Site (Pages 1052 - 1063): Visits: 12,353 Page Views: 23,172

UDM Home page (Page 1052): Visits: 6,755 Page Views: 12,565

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

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Milestone Description:

The City will continue to maintain a Stormwater Program Webpage and report webpage analytics during the next reporting period.

BMP Name: Regional Coordination

Category: Meeting

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City of Chandler will participate in regional coordination efforts promoting greater public education and outreach.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Targeted Audience: Residents **Frequency:** 6 Annually

Milestone Description:

The City will participate in Stormwater Outreach for Regional Municipalities (STORM) and/or other professional organizations (i.e. AZ Water; MAG). Participation in programs will be tracked and evaluated annually for effectiveness and modified as necessary.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

City staff participated in (7) AZ Storm meetings and (3) AZ Water meetings.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to participate in regional coordination meetings associated with AZ Storm and/or AZ Water during the next reporting period.

BMP Name: Educational Materials

Category: Educational Materials

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City of Chandler will promote an education program that increases knowledge on stormwater pollution prevention.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Targeted Audience: Residents **Frequency:** 1 Quarterly

Milestone Description:

The City will develop and distribute educational materials to promote increased stormwater awareness including newsletters, brochures, a stormwater webpage, storm drain inlet markers and promotional items on an annual basis. Typical topics may include residential pollution prevention, water conservation, leaking vehicles, pool drainage, household hazardous waste, pet waste, trash management, illegal dumping, restaurants, HOAs, recycling program, webpages and newsletter articles. Materials may be displayed or distributed at City locations or events. Target audience is primarily the public. Additional target audiences may be evaluated when necessary. Materials will be distributed, evaluated, tracked and modified when necessary. An example of materials distributed will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

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- CityScope Newsletters were sent to residents via monthly utility bills and to City facilities. The newsletters are also sent to City staff via email each month. 74,500 copies are printed each month with 71,000 in bills.
- 109 Stormwater Pollution Prevention brochures, 90 Pool Drainage Brochures and 108 City Code handouts were distributed to residents or businesses during IDDE related calls.
- The City purchased \$4,682.84 of eight different promotional items that consisted of a total of 3,333 items.
- Staff participated in 8 public education & outreach events that included a total of 5,166 educational items that included brochures (446 SWPP brochures) and (407 pool drainage brochures), Stormwater in the Desert books (102), Environmental Art Contest calendars, and twelve different promotional items that have a message directly related to stormwater pollution prevention.
- The Stormwater Program Webpage: Stormwater Program | City of Chandler: Visits: 481 Page Views: 660
 Stormwater Pollution Prevention | City of Chandler Visits: 134 Page Views: 440
 Stormwater Management Program (PDF) Downloads: 52
 Stormwater Brochure (PDF) Downloads: 12
 Entire UDM Site (Pages 1052 - 1063): Visits: 12,353 Page Views: 23,172
 UDM Home page (Page 1052): Visits: 6,755 Page Views: 12,565
- Storm Drain Inlet markers: 57 new inlet markers were observed during final inspections and 17 inlet markers were installed during the replacement of existing City of Chandler catch basins and scuppers.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to provide and distribute a variety of educational items during the next reporting period.

BMP Name: Educational Events

Category: Special Event

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City of Chandler will participate in educational events that provide opportunities to increase knowledge on stormwater related topics.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

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Targeted Audience: Residents /Visitors **Frequency:** 6 Annually

Milestone Description:

The City will participate in educational events, community events, festivals, workshops and open houses. The educational events are tracked and reviewed annually. Updates will be made as necessary. Attendance at events will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

City staff participated in 8 public education and outreach events during the reporting period. The City purchased \$4,682.84 of eight different promotional items that consisted of a total of 3,333 items.

- Safety and Veterans Expo (Veteran's Oasis Park) 11/03/18
- Woofstock 2018 (Tumbleweed Park) 11/17/18
- Community Fishing Clinic & Outdoor Safety Event (EEC at Veteran's Oasis Park) 2/9/19
- Hamilton Invitational Science and Engineering Fair (HISEF) Hamilton High School) 2/23/19
- Earth Day and Arbor Day Celebration (Veteran's Oasis Park) 4/13/19
- 16th Annual 4th Grade Environmental Art Contest Awards Ceremony (City Council Chambers) 4/30/19
- Fox Crossing HOA Meet and Greet Event (Fox Crossing Community) 5/4/19
- Mayor on the Move (Boys & Girls Club of the East Valley Compadre Branch) 5/14/19

14 different promotional items were distributed during the events.

A total of 5,166 promotional items were provided.

Educational items included brochures (446 SWPP brochures) and (407 pool drainage brochures), Stormwater in the Desert books (102), Environmental Art Contest calendars, and twelve different promotional items that have a message directly related to stormwater pollution prevention.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to participate in public education and outreach events during the next reporting period.

Question: Minimum Control Measure 1: Public Education and Outreach, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period? No

Provide a summary of compliance with the requirements for Minimum Control Measure1.

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The City maintains a robust public education and outreach program that includes a combination of activities that encourages both engagement and educating the public. Examples include: Participating in City and private outreach events, distribution of newsletters, regional coordination with not for profit organizations, social media platforms, public review opportunities, utility bill inserts, annual water quality reports, brochures, City code handouts, distribution of promotional items, Stormwater in the Desert books, Environmental Art Contest and storm drain inlet markers.

Question: For each BMP in the Minimum Control Measure 2: Public Involvement and Participation, what was completed during this reporting period?

Answer:

BMP Name: "Regional Coordination"

Category: Public Participation

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City of Chandler will participate in regional coordination efforts promoting greater public involvement and participation.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 6 Annually

Milestone Description:

The City will participate in Stormwater Outreach for Regional Municipalities (STORM) and/or other professional organizations (i.e. AZ Water; MAG). Participation in programs will be tracked and evaluated annually for effectiveness and modified as necessary. Participation will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

City staff participated in (7) AZ Storm meetings and (3) AZ Water meetings.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

City staff will continue to participate in Stormwater Outreach for Regional Municipalities and Arizona Water Association meetings during the next reporting period.

BMP Name: Annual SWMP Review

Category: Public Participation

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services and/or Public Information Officer / CAPA

BMP Description :

The City of Chandler will promote public involvement and participation in an annual review of the City's Stormwater Management Plan (SWMP).

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 1 Annually

Milestone Description:

The SWMP and Annual Reports will be posted on the City's Stormwater Program website year round. The City will promote a 30 day timeframe for the public to review the plan on an annual basis. The method for review will be evaluated for effectiveness and modified as necessary. Participation will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

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Public review of SWMP: The City provided the public with the an opportunity to review the Stormwater Management Program and webpage for 30 days from April to May 2019. Posts were created for Facebook, Twitter and Nextdoor. The City Facebook page had 14,190+ followers, had 79 engagements and reached 3,117 people on 4/18/19. Nextdoor had 53,201 members (35% of chandler households) and had 6,489 impressions and 4 "thanks"on 4/18/19. Twitter had 45,487 follower's, one retweet and three Likes on 4/18/19.

One resident had a question regarding standing water. The resident sent an email to staff on April 19, 2019. Staff responded to the resident via email on April 19, 2019 .

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to provide an opportunity for the public to review and comment on the City's Stormwater Management Program during the next reporting period.

BMP Name: Public Involvement and Participation

Category: Public Involvement

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City of Chandler will promote public involvement and participation for the public.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 6 Annually

Milestone Description:

The City will promote public involvement and participation through a variety of means which may include but not be limited to a community hotline, contact forms, social media, webpages, public meetings, City events/festivals, contests and training sessions. The City will follow public notice requirements for public meetings and track participation when possible. Public involvement and participation will be tracked and evaluated annually for effectiveness and modified as necessary. Activities will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

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Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Hotline: Received a total of 47 calls including; 21 IDDE Related Calls, 12 calls for general questions/concerns, 7 standing water related calls, 3 maintenance related calls, 1 rain event call, 1 safety related call, 1 call to remove ear buds from a storm drain and a call with questions/concerns regarding street sealing.

Public review of SWMP: The City provided the public with the an opportunity to review the Stormwater Management Program and webpage for 30 days from April to May 2019. Posts were created for Facebook, Twitter and Nextdoor. The City Facebook page had 14,190+ followers, had 79 engagements and reached 3,117 people on 4/18/19. Nextdoor had 53,201 members (35% of Chandler households) and had 6,489 impressions and 4 "thanks"on 4/18/19. Twitter had 45,487 follower's, one retweet and three Likes on 4/18/19.

Public education & outreach events: Staff participated in 8 public education and outreach events during the reporting period. Total attendance was estimated at 11,103 people and we estimated that we made direct contact with approximately 1,159 attendees at the events. 14 items different promotional items were distributed at events.

A total of 5,166 promotional items were provided.

Stormwater Webpage: Page Visits: 481 Page Views: 660, Pollution Prevention Page Visits: 134, Page Views: 440, SWMP (PDF) Downloads: 52, Stormwater Brochure (PDF) Downloads: 12.

Public Stuff Info: FY18/19: Total requests 5,936 & 45 for Stormwater requests.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to provide opportunities for the public to participate in the review and comment period associated with the Stormwater Management Program, as well as other public involvement and participation opportunities throughout the next reporting period.

Question: For Minimum Control Measure 2: Public Involvement and Participation, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period? No

Provide a summary of compliance with the requirements for Minimum Control Measure2.

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The City encourages public involvement and participation and Stormwater program staff make every effort to ensure that we are consistent with that. Program staff participated in numerous City and public outreach events where the public can participate and learn more about our program's and/or discuss issues that are important to them. Staff participated in 10 meetings associated with regional coordination efforts to engage the public, provided the public with opportunities to review the Stormwater Management Program and provide feedback to the City. Other examples include, but are not limited to, selecting free promotional items with pollution prevention related messages, reporting issues or concerns via the Stormwater program hotline, accessing the program webpage, and submitting questions, complaints and observations through the Lucity asset management software and/or Public Stuff APP.

Question: For each BMP in the Minimum Control Measure 3: Illicit Discharge Detection and Elimination Program, what was completed during this reporting period?

Answer:

BMP Name: Visual Stormwater Discharge Monitoring

Category: Wet Weather Monitoring

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City will monitor a minimum of 5 representative outfalls two times during each wet season. Selected outfalls will be evaluated annually and modified if necessary. Locations of structures inspected will be reported annually.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 4 Annually

Milestone Description:

The City will monitor a minimum of 5 representative outfalls two times during each wet season. Selected outfalls will be evaluated annually and modified if necessary. Locations of structures inspected will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

City staff completed a total of 5 Wet Weather Visual Stormwater Discharge Monitoring inspections on the following dates:

- 8/24/18
- 10/1/18
- 11/30/18
- 12/7/18
- 1/16/19

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to conduct Wet Weather Visual Stormwater Discharge Monitoring inspections during the next reporting period.

BMP Name: Illicit Discharge Response

Category: Written IDDE Procedures

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

To detect and eliminate illicit discharges and connections to the City's MS4.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 100 Percent per year

Milestone Description:

Illicit discharges will be responded to as soon as practicable. The majority of responses will occur on the same day as reported if possible. The number of calls associated with the response of an illicit discharge will be tabulated and reported within the annual report.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

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Staff responded to 131 IDDE related calls during the reporting period. Following is a breakdown by total number of calls by pollutant source and % of calls per pollutant source.

- 95 Pool Water/DE (72.52%)
- 10 Engine Fluids/Oil/Gas(7.63%)
- 8 Sediment (6.11%)
- 4 Concrete Washout (3.05%)
- 3 Water (2.29%)
- 2 Soapy Water(1.53%)
- 2 Pesticides (1.53%)
- 2 Water softener (1.53%)
- 1 Car wash chemicals (0.76%)
- 1 Grease (0.76%)
- 1 Antifreeze (0.76%)
- 1 Irrigation Water (0.76%)
- 1 Cleaning Fluids(0.76%)

Method of Discovery

- Telephone (74)
- Field Observation (41)
- Public Stuff APP (10)
- Email (4)
- Internal notification (2)

Staff sent 7 letters, issued 107 Notice to Comply forms, distributed 90 pool drainage brochures, 109 stormwater pollution prevention brochures and 108 City code handouts.

We experienced a 11.5% reduction in the number of IDDE related calls during this reporting period.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to respond to IDDE related calls and maintain applicable statistics to evaluate the program during the next reporting period.

BMP Name: Storm Sewer System Mapping

Category: GIS System

Personnel Position/Department: GIS Services Staff / Development Services

BMP Description :

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The City of Chandler's GIS system will incorporate modifications to the storm sewer system map as new public and private structures are added into the City's system.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 6 Annually

Milestone Description:

GIS features will be added into Chandler's existing system following final inspections and submittal of as-built information has been confirmed. Additional features may be added and/or revised when necessary. The number of structures added will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

663 Stormwater related structures were added to the City's GIS System during this reporting period.

ASSET	COC	OTHER	SUB	TOTAL
CATCH BASINS	361	752	11	
SCUPPERS	131	932		
DRYWELLS	28	082		
MANHOLES	163	652		
DETENTION MANHOLES	04	040		
OUTLETS	2	3638		
INTERCEPTORS	28	284		
RETENTION BASINS	00			
BUBBLER BOXES	03	434		
EQUALIZER PIPES	07	7		
SPILLWAYS	43	7		
INLETS	01	1		
CLEANOUTS	01	313		
PIPE SEGMENTS	392	362		
TOTALS	1145	49	663	

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

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The City will continue to add and track stormwater related structures in the City's GIS system during the next reporting period.

BMP Name: Illicit Discharge Response

Category: Implement IDDE Program

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City of Chandler will investigate illicit discharges and attempt to identify their source.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 100 Percent per year

Milestone Description:

The City will investigate illicit discharges immediately as noted by City staff, the general public, or complaints received. Investigations will follow SOPs outlined in the IDDE program, and will be resolved as quickly as possible. The number of incidents responded to will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

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Staff responded to 131 IDDE related calls.

- 95 Pool Water/DE (72.52%)
- 10 Engine Fluids/Oil/Gas (7.63%)
- 8 Sediment (6.11%)
- 4 Concrete Washout (3.05%)
- 3 Water (2.29%)
- 2 Soapy Water(1.53%)
- 2 Pesticides (1.53%)
- 2 Water softener (1.53%)
- 1 Car wash chemicals (0.76%1)
- 1 Grease(0.76%)
- 1 Antifreeze (0.76%)
- 1 Irrigation Water (0.76%)
- 1 Cleaning Fluids (0.76%)

- 109 Stormwater Pollution Prevention brochures were provided
- 108 copies of City Code handouts were provided
- 107 Notice to Comply forms were issued
- 90 Pool brochures were provided

7 certified letters were sent to responsible parties

11.5 % decrease in the number of IDDE related calls as compared to FY 17/18. We also experienced a decrease of nearly 7 % of pool discharges from FY 17/18 to FY 18/19.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to respond to all IDDE related calls that are observed and/or received during the next reporting period.

BMP Name: IDDE Staff Training

Category: Staff Training

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City of Chandler will provide training for City staff on the illicit discharge detection and elimination program.

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Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 20 Percent per year

Milestone Description:

Appropriate City staff will be trained on the IDDE program. The number of employees trained will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

The City maintains a training program for field staff that includes pollution prevention and/or IDDE topics.

163 employees received completed stormwater related training during the reporting period.

One team member attended and presented a section of the Stormwater Outreach for Regional Municipalities 2019 Construction Seminar on March 6, 2019 hosted by Arizona Department of Transportation (ADOT).

Additionally, three program staff members attended the Stormwater Outreach for Regional Municipalities 2019 Construction Seminar on April 9, 2019 hosted by the City of Queen Creek.

Conducted training for the City's 3 Pre-Treatment staff (Wastewater Quality) on May 23, 2019

Three stormwater program staff members participated in and completed the American Stormwater Institute - Qualified MS4 Stormwater Compliance Professional Training class on June 4-5, 2019 in Queen Creek.

75 employees and 12 different City Divisions completed the Stormwater Management Awareness Online Training (March to June 2019)

78 employees and 9 different City Divisions completed the Illicit Discharge Detection and Elimination Online Training (March to June 2019)

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

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Milestone Description:

The City will continue to provide applicable training associated with pollution prevention and /or IDDE to City staff during the next reporting period.

BMP Name: Visual Dry Weather Outfall Monitoring

Category: Dry Weather Screening

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City of Chandler will conduct visual dry weather outfall monitoring to ensure there are no illicit discharges, ineffective BMPs, or maintenance concerns.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 4 Annually

Milestone Description:

Inspections of City structures identified as dry weather screening points will occur twice per year. The location and/or frequency of inspections may be modified as determined by conditions in the field on an annual basis. Locations of structures inspected will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

City staff completed a total of four Visual Dry Weather Outfall Monitoring inspections on the following dates:

- 11/17/2018
- 1/30/2019
- 4/16/2019
- 6/12/2019

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to conduct Visual Dry Weather Outfall Monitoring inspections during the next reporting period.

BMP Name: Legal Authority Review

Category: Legal Review

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services and/or Law Department

BMP Description :

The City of Chandler will review and update procedures when necessary to ensure they are compliant with the new permit.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 1 Annually

Milestone Description:

The City will review City codes and other regulations for compliance with the new permit and update if necessary.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 09/27/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

The City Law Department, Environmental Management Division and Stormwater Program staff conducted a review of City code sections associated with the Stormwater Management Program beginning in April 2018.

An Enforcement Response Plan (ERP) was created. The Public Works & Utilities Department Director approved and signed the ERP on September 27, 2018.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will review the Stormwater Management Program, BMP's, applicable procedures and process's during the next reporting period.

Question: For Minimum Control Measure 3: Illicit Discharge Detection and Elimination Program, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period? No

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Provide a summary of compliance with the requirements for Minimum Control Measure3.

663 Stormwater related structures were added to the City's GIS System during this reporting period.

ASSET	COC	OTHER	SUB	TOTAL
CATCH BASINS	36175	211		
SCUPPERS	13193	2		
DRYWELLS	28082			
MANHOLES	16365	2		
DETENTION MANHOLES	04040			
OUTLETS	2	3638		
INTERCEPTORS	28284			
RETENTION BASINS	000			
BUBBLER BOXES	03434			
EQUALIZER PIPES	0	7	7	
SPILLWAYS	43	7		
INLETS	01	1		
CLEANOUTS	01313			
PIPE SEGMENTS	39236	2		
TOTALS	114549	663		

Question: Were staff trained in IDDE Awareness and Response?

Answer:

Yes

Sr.No.	Date of Training Event	Training Subject	Number of Employees Trained	Frequency of Training
1	07/01/2018	IDDE Online Training	78	One time event
2	07/01/2018	Stormwater Management Awareness Online Training	75	One time event

Question: Minimum Control Measure 1: Illicit Discharge Detection and Elimination Program, Provide the details of the Illicit Discharge Detection and Elimination (IDDE) incidents that occurred during this reporting period.

Answer:

Number of IDDE incidents reported in this reporting period: 131

Number of IDDE incidents responded to in this reporting period: 131

Sr.No.	Enforcement Actions	Enforcements Issued	Enforcements Resolved	Enforcements Unresolved
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1	NOV	0	0	0
2	NOC	107	107	0
3	Stop Work	0	0	0
4	Admin Order	0	0	0
5	Admin Fines	0	0	0
6	Civil Penalties	0	0	0
7	Criminal Action	0	0	0
	Total	107	107	0

Question: Were there any unpermitted discharges to the MS4?

Answer: No

Question: Were any samples collected to characterize illicit discharge(s) in this reporting period?

Answer: No

Number of Illicit Discharges Sampled are:

The City of Chandler did not collect samples to characterize the illicit discharges. The discharges observed during the reporting period were not of sufficient quantity to allow for sample collection or the material discharged was known and did not need additional sampling to characterize.

Question: For each BMP in the Minimum Control Measure 4: Construction Activity Stormwater Runoff Control, what was completed during this reporting period?

Answer:

BMP Name: Erosion and Sediment Control Plan

Category: Erosion/ Sediment Control

Personnel Position/Department: Development Services Staff / Development Services

BMP Description :

Require the submittal of an Erosion and Sediment Control Plan for development projects that exceed one acre or greater in disturbed area

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016
Targeted End Date: 09/29/2021
Frequency: 75 Percent per year

Milestone Description:

Plans will be reviewed throughout the permit term.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

144 Erosion and Sediment Control Plans were received and reviewed during the reporting period.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to review Erosion and Sediment Control Plans during the next reporting period.

BMP Name: Construction Activity Stormwater Runoff Control

Category: Control Wastes

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

Requirements to control wastes such as discarded building materials, paints, fertilizers, concrete wash out, chemicals, litter, and sanitary wastes.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016
Targeted End Date: 09/29/2021
Frequency: 75 Percent per year

Milestone Description:

The goal of the program is to prevent pollution of stormwater in the MS4 from construction site activities and wastes.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

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Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Number of inspections conducted during the reporting period: 237

Number of active construction sites: 102

Number of active construction sites inspected: 102

Number of re-Inspections: 39

Number of violations: 39

Number of complaints received: 5

Number of complaints Resolved: 5

Number of brochures distributed: 45

Number of non-compliance referrals to ADEQ for follow-up: 1

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to conduct construction site inspections during the next reporting period.

BMP Name: Inspections

Category: Inspections

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City of Chandler will maintain a construction inspection program.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 75 Percent per year

Milestone Description:

The City will perform construction inspections. Procedures will be reviewed annually and updated as necessary. The number of inspections conducted will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

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Number of inspections conducted during the reporting period: 237

Number of Active construction sites: 102 / Number of Active construction sites inspected: 102

Number of Re-Inspections: 39

Number of violations: 39

Number of Complaints received: 5

Number of Complaints Resolved: 5

Number of non-compliance referrals to ADEQ for follow-up: 1

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to conduct construction site inspections during the next reporting period.

BMP Name: Educational Materials for Construction Activity Stormwater Runoff Control

Category: Construction Operator Training

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City of Chandler will review and distribute educational materials for construction activity stormwater runoff control.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 1 Annually

Milestone Description:

The City will review the Construction Activity Stormwater Runoff Control program educational materials and/or brochures annually and update them as necessary.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

45 brochures were distributed during the reporting period.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to distribute brochures to active construction sites during the next reporting period.

BMP Name: Construction Plan Review

Category: Site Plan Review

Personnel Position/Department: Development Services Staff / Development Services

BMP Description :

The City of Chandler will maintain a construction plan review program.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 75 Percent per year

Milestone Description:

The City will perform construction plan reviews. Procedures will be reviewed annually and updated as necessary.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

City staff received and reviewed 154 civil plan sets during the reporting period.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to review civil plans submitted during the next reporting period.

BMP Name: Inventory

Category: Inventory

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services and/or Development Services

BMP Description :

The City of Chandler will maintain an inventory of construction sites.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

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Targeted End Date: 09/29/2021

Frequency: 1 Annually

Milestone Description:

The City will maintain an inventory of construction sites. Procedures will be reviewed annually and updated as necessary.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

102 active construction site locations were observed and inspected during the reporting period.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to maintain an inventory of construction sites during the next reporting period.

Question: For Minimum Control Measure 4: Construction Activity Stormwater Runoff Control, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period? No

Provide a summary of compliance with the requirements for Minimum Control Measure4.

The City has a well established Construction Activity Stormwater Runoff Control program in place. The commingling of administrative procedures including plan review, an updated and comprehensive inventory of sites inspected, along with the distribution of outreach materials, staff knowledge and expertise in the application and installation of best management practices and administrative documents such as Stormwater Pollution Prevention Plans, site plans, etc., is a valuable asset to the City and the construction industry, which has assisted the City as well as improving compliance of construction activity within the MS4.

Question: Were any construction activity operator training events conducted?

Answer:

Yes

Sr.No.	Date of Training Event	Training Subject	Number of Employees Trained	Frequency of Training
1	04/09/2019	AZ STORM Construction Stormwater Seminar	46	One time event

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2	06/04/2019	Qualified MS4 Compliance Training	3	One time event
3	03/06/2019	AZ STORM Construction Stormwater Seminar	18	One time event

Question: Minimum Control Measure 4: Construction Activity Stormwater Runoff Control, Provide the details of the construction activity complaints and inspections that were conducted during this reporting period.

Answer:

Number of active construction sites in this reporting period: 102

Has an inspection frequency been developed and implemented? YES

Number of active construction sites inspected at least weekly: 1

Number of active construction sites inspected at least monthly: 3

Number of active construction sites inspected at least one time every six months: 5

Number of active construction sites inspected at least annually: 100

Number of active construction sites not inspected: 0

Number of active construction sites that required re-inspections in this reporting period: 39

Number of construction activity complaints received in this reporting period: 5

Number of construction activity complaints that were resolved or responded to: 5

Sr.No.	Enforcement Actions	Enforcements Issued	Enforcements Resolved	Enforcements Unresolved
1	NOV	0	0	0
2	NOC	39	39	0
3	Stop Work	0	0	0
4	Admin Order	0	0	0
5	Admin Fines	0	0	0
6	Civil Penalties	0	0	0

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7	Criminal Action	0	0	0
	Total	39	39	0

Question: For each BMP in the Minimum Control Measure 5: Post-Construction Stormwater Management in New Development and Redevelopment, what was completed during this reporting period?

Answer:

BMP Name: Operations & Maintenance

Category: O&M Procedures

Personnel Position/Department: Stormwater Program Staff / Management Services and/or Development Services

BMP Description :

The City will conduct post construction inspections during final inspections and/or 1-year warranty inspections and/or proactive inspections or if field observations or complaints are received.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 25 Percent per year

Milestone Description:

The City will document and notify business's, HOA's and other responsible parties upon observations of post construction issues.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

City staff conducted proactive inspections of 8,143 inspections City storm drain structures.

Conducted maintenance on 2,154 storm drainage structures.

Conducted 7 final inspections.

Resolved 31 post construction related issues.

Provide a summary of activities planned for next reporting period

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BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to conduct and track final inspections and proactive inspections during the next reporting period.

BMP Name: Site Plan Review

Category: Site Plan Reviews

Personnel Position/Department: Development Services Staff / Development Services

BMP Description :

The City of Chandler will review civil plan submittals to ensure compliance with City standards and requirements.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 75 Percent per year

Milestone Description:

The City will perform a technical evaluation and review of building and site plans and design and construction documents to ensure compliance with City development ordinances and International Construction Codes, including but not limited to, architectural, structural, electrical, plumbing, mechanical, fire safety, health, and other applicable codes.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

The City's Development Services Division reported that they reviewed 154 civil plan sets.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to review site plans during the next reporting period.

BMP Name: Final Inspections

Category: Structural/Non-Structural BMP

Personnel Position/Department: Stormwater Program Staff / Management Services and/or Development Services

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BMP Description :

The City of Chandler will implement an inspection program that focuses on City storm sewer system structures.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 75 Percent per year

Milestone Description:

The City will conduct final, 1 year warranty and proactive inspections to identify potential concerns or deficiencies. Private structures found to be in need of maintenance or in disrepair will be addressed with the property owner. Inspection process and procedures will be reviewed and updated as necessary. The type and number of structures inspected will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

City staff conducted proactive inspections of 8,143 inspections City storm drain structures.

Conducted maintenance on 2,154 storm drainage structures.

Conducted 7 final inspections.

Resolved 31 post construction related issues. City staff conducted proactive inspections of 8,143 inspections City storm drain structures.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to conduct inspections of City storm sewer structures during the next reporting period.

BMP Name: Inventory GIS System

Category: Inventory

Personnel Position/Department: GIS Services Staff / Development Services

BMP Description :

The City of Chandler will maintain an up to date inventory of post-construction structural control measures.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 75 Percent per year

Milestone Description:

The City will maintain an inventory of post-construction structural control measures in the GIS system. Structures will be added into Chandler's existing system following final inspections and submittal of as-built information has been confirmed. Additional features may be added and/or revised when necessary. The number of structures added will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

663 Stormwater related structures were added to the City's GIS System during this reporting period.

ASSET	COC	OTHER	SUB	TOTAL
CATCH BASINS	361	75	21	11
SCUPPERS	131	93	2	1
DRYWELLS	28	0	8	2
MANHOLES	163	65	2	1
DETENTION MANHOLES	04	04	0	0
OUTLETS	2	36	3	8
INTERCEPTORS	28	28	4	4
RETENTION BASINS	00	0	0	0
BUBBLER BOXES	03	43	4	3
EQUALIZER PIPES	07	7	0	7
SPILLWAYS	43	7	0	0
INLETS	01	1	0	1
CLEANOUTS	01	31	3	1
PIPE SEGMENTS	392	36	2	6
TOTALS	1145	49	6	63

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to add stormwater related structures to the City's GIS System during the next reporting period.

BMP Name: Post-Construction Educational Materials

Category: Educational Materials

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

The City of will review and update educational materials for post construction management.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 1 Annually

Milestone Description:

The City will review educational materials for post construction management. Educational materials will be reviewed and updated as necessary.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

The City's Technical Design Manual #3 dated May 2018 is a guidance document. The manual includes information associated with the design, planning, hydrology and drainage policies related to the preparation of drainage studies and development of construction plans for stormwater drainage systems.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to maintain and update the Technical Design Manual #3 during the next reporting period.

Question: For Minimum Control Measure 5: Post-Construction Stormwater Management in New Development and Redevelopment, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period? No

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Provide a summary of compliance with the requirements for Minimum Control Measure 5.

The City's Post construction Stormwater Management in New Development and Redevelopment control measure's include proactive inspections and maintenance of City owned storm sewer system structures, City staff conducted proactive inspections of 8,143 inspections City storm drain structures, conducted maintenance on 2,154 storm drainage structures, conducted 7 final inspections and resolved 31 post construction related issues.

Question: Minimum Control Measure 5: Post-Construction Stormwater Management in New Development and Redevelopment, Provide the details of the Post-Construction Stormwater controls used during this reporting period

Answer:

Number of sites that required Post-Construction Stormwater controls in this reporting period: 31

Number of Post-Construction Stormwater controls inspected in this reporting period: 8143

Sr.No.	Enforcement Actions	Enforcements Issued	Enforcements Resolved	Enforcements Unresolved
1	NOV	0	0	0
2	NOC	31	31	0
3	Stop Work	0	0	0
4	Admin Order	0	0	0
5	Admin Fines	0	0	0
6	Civil Penalties	0	0	0
7	Criminal Action	0	0	0
	Total	31	31	0

Question: For each BMP in the Minimum Control Measure 6: Pollution Prevention and Good Housekeeping, what was completed during this reporting period?

Answer:

BMP Name: Street Sweeping

Category: Maintenance Schedule

Facility Information:

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Household Hazardous Waste Collection Facility

Armstrong Yard

Personnel Position/Department: Public Works & Utilities Staff / Public Works & Utilities

BMP Description :

The City will maintain a street sweeping program

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 1 Weekly

Milestone Description:

The City will track street sweeping metrics including lane miles swept and amount of materials removed. The amount of material removed and lane miles swept will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

67,277 lane miles were swept during the reporting period.

2,163 tons of debris was removed from paved areas.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to conduct street sweeping activities on arterial and collector streets and at the Armstrong yard during the next reporting period.

BMP Name: Operations and Maintenance of Storm Sewer System

Category: O&M Procedures

Facility Information:

Household Hazardous Waste Collection Facility

Armstrong Yard

Personnel Position/Department: Stormwater Program Staff / Management Services and/or Stormwater Maintenance Staff / Public Works & Utilities

BMP Description :

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The City of Chandler will conduct maintenance of the City storm sewer system.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 1 Daily

Milestone Description:

The City storm sewer system structures identified during proactive inspections will be maintained and work orders will be generated and tracked when maintenance needs are identified. The number of structures maintained will be reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

Armstrong Yard: 3 catch basins in the equipment yard have been inspected and maintained.
- North west entrance gate: Catch basin maintained one time and storm drain insert replaced one time.
- South side of yard: Catch basin maintained two times.
- West end of yard (in vector wash bay): Catch basin maintained five times and storm drain insert replaced two times.

Household Hazardous Waste Collection Facility:

- 3 storm water interceptors were inspected and monthly
- 2 times annually (Fall and Spring) Waste Water Collection Division conducts maintenance of the interceptors with vector truck.
- HHW Collection Center: catch basin (spill containment) is inspected monthly and maintained annually as needed.
- Stormwater is contained on site in 3 retention basins. The HHW Basin is protected under cover and is strictly for spill containment.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

City staff will continue to inspect and/or maintain and /or replace the storm drain inserts when necessary during the next reporting period.

BMP Name: Site Inspections

Category: Inspections

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Facility Information:

Household Hazardous Waste Collection Facility

Armstrong Yard

Personnel Position/Department: Stormwater Program Staff and/or Environmental Management Staff / Management Services

BMP Description :

An inventory of city owned facilities will be collected and ranked according to potential environmental hazard or risk.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 1 Annually

Milestone Description:

A list of City owned facilities will be established and an annual prioritized inspection work plan will be developed. The inventories will identify activities performed at each facility, chemicals stored, and inspection guidelines based on each type of facility. Facilities inspected will be tracked and reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

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A total of 32 locations were inspected. 17 specific for Pollution Prevention and Good Housekeeping and 15 for overall environmental compliance including Pollution Prevention and Good Housekeeping.

* Facilities had comprehensive environmental compliance audits completed in 2018 by outside consultant.

- Fire Station #1 - 10/22/2018 and 5/23/2019
- Fire Station #2 - 11/8/2018*
- Fire Station #4 - 5/23/2019
- Fire Station #5 - 5/23/2019
- Fire Station #6 - 11/8/2018*
- Fire Station #7 - 5/23/2019
- Fire Station #9 - 5/30/2019
- Fire Station #10 - 5/23/2019
- Fire Support - 11/8/2018*
- Center for the Arts - 11/8/2018*
- Police Property and Evidence - 11/8/2018*
- PD West Substation - 11/8/2018* and 5/30/2019
- PD South Substation - 11/8/2018*
- City Works Yard (Armstrong Yard) - 12/17/2018* and 6/20/2019
- Surface Water Treatment Plant - 12/12/2018*
- Apache Water Production Facility, Basha Water Production Facility, Bushway Water Production Facility, Frye Water Production Facility -12/17/2018*
- Lift Stations (Old Pecos, Riggs, Manganero, Sunbird, Golf Course and Kyrene) - 11/28/2018
- Airport Water Reclamation Facility - 1/11/2019*
- Arrowhead Basin Pump Station - 4/24/2019
- Denver basin Pump Station - 4/24/2019
- Recycling Solid Waste Collection and Household Hazardous Waste Facility - 12/8/2018*
- Arrowhead Park Maintenance - 1/15/2019*
- Snedigar Park Maintenance - 1/15/19* and 4/25/2019
- Veteran Oasis Park Maintenance - 1/15/2019*

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to conduct facility inspections during the next reporting period.

BMP Name: Training

Category: Training

Facility Information:

Household Hazardous Waste Collection Facility

Armstrong Yard

Main Office

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Personnel Position/Department: Stormwater Program Staff / and/or Environmental Management Staff / Management Services

BMP Description :

The City of Chandler will provide training on Pollution Prevention and Good Housekeeping Techniques.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 1 Annually

Milestone Description:

Appropriate City staff will participate in stormwater training focused on Pollution Prevention and Good Housekeeping Practices. Participation will be tracked and evaluated for effectiveness.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

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The City maintains a training program for field staff that includes pollution prevention and/or IDDE topics.

163 employees received training:

One team member attended and presented a section of the Stormwater Outreach for Regional Municipalities 2019 Construction Seminar on March 6, 2019 hosted by Arizona Department of Transportation (ADOT).

Additionally, three program staff members attended the Stormwater Outreach for Regional Municipalities 2019 Construction Seminar on April 9, 2019 hosted by the City of Queen Creek.

Conducted training for the City's 3 Pre-Treatment staff (Wastewater Quality) on May 23, 2019

Three stormwater program staff members participated in and completed the American Stormwater Institute - Qualified MS4 Stormwater Compliance Professional Training class on June 4-5, 2019 in Queen Creek.

75 employees and 12 different City Divisions completed the Stormwater Management Awareness Online Training (March to June 2019)

78 employees and 9 different City Divisions completed the Illicit Discharge Detection and Elimination Online Training (March to June 2019)

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to conduct and/or provide training opportunities for applicable staff during the next reporting period.

BMP Name: Implement Controls

Category: Maintenance Activities

Facility Information:

Household Hazardous Waste Collection Facility

Armstrong Yard

Personnel Position/Department: Stormwater Program Staff / Management Services and/or Stormwater Maintenance Staff and/or Streets Division Staff / Public Works & Utilities

BMP Description :

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The City of Chandler will contain loose bulk materials such as dirt, street sweeping debris and other materials in separate three sided bins.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 1 Weekly

Milestone Description:

The City will maintain bulk material bins and evaluate the effectiveness and need for additional bins and modify as necessary.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

The Streets wash bay (Armstrong Yard) was maintained by a contractor a total of 59 times. The stormwater maintenance crew inspected the sumps in the wash bay a total 46 times and conducted maintenance a total of 10 times during the reporting period.

The Fleet Service's wash bay was maintained one time by a contractor.

Streets Division staff monitor and maintain the bulk material bins throughout the year.

Household Hazardous Waste Collection Facility:

- 3 storm water interceptors were inspected and monthly
- 2 times annually (Fall and Spring) Waste Water Collection Division conducts maintenance of the interceptors with vector truck.
- HHW Collection Center: catch basin (spill containment) is inspected monthly and maintained annually as needed.
- Stormwater is contained on site in 3 retention basins. The HHW Basin is protected under cover and is strictly for spill containment.

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

A contractor and or City staff will continue inspecting and maintaining the wash bay during the next reporting period.

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BMP Name: Inventory and Prioritization of Municipal Operations and Site Inspections

Category: Inventory

Facility Information:

Household Hazardous Waste Collection Facility

Armstrong Yard

Personnel Position/Department: Environmental Management Staff / Management Services

BMP Description :

An inventory of city owned facilities will be collected and ranked according to potential environmental hazard or risk.

Is another government entity responsible for this BMP ? No

Measurable Goals:

Start Date: 09/30/2016

Targeted End Date: 09/29/2021

Frequency: 1 Annually

Milestone Description:

A list of City owned facilities will be established and an annual prioritized inspection workplan will be developed. The inventories will identify activities performed at each facility, chemicals stored, and inspection guidelines based on each type of facility. Facilities inspected will be tracked and reported annually.

Were milestones/measurable goals achieved for this reporting period? Yes

Actual BMP Start Date: 07/01/2018

Date:

Provide a description of BMP effectiveness, including metrics used to determine effectiveness.

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A total of 32 locations were inspected. 17 specific for Pollution Prevention / Good Housekeeping and 15 for overall environmental compliance including Pollution Prevention and Good Housekeeping.

The following inspections were completed during the reporting period:

- Fire Station #1 - 10/22/2018 and 5/23/2019
- Fire Station #2 - 11/8/2018*
- Fire Station #4 - 5/23/2019
- Fire Station #5 - 5/23/2019
- Fire Station #6 - 11/8/2018*
- Fire Station #7 - 5/23/2019
- Fire Station #9 - 5/30/2019
- Fire Station #10 - 5/23/2019
- Fire Support - 11/8/2018*
- Center for the Arts - 11/8/2018*
- Police Property and Evidence - 11/8/2018*
- PD West Substation - 11/8/2018* and 5/30/2019
- PD South Substation - 11/8/2018*
- City Works Yard (Armstrong Yard) - 12/17/2018* and 6/20/2019
- SWTP - 12/12/2018*
- Apache WPF, Basha WPF, Bushway WPF, Frye WPF - 12/17/2018*
- Lift Stations (Old Pecos, Riggs, Manganero, Sunbird, Golf Course and Kyrene) - 11/28/2018
- AWRF - 1/11/2019*
- Arrowhead Basin Pump Station - 4/24/2019
- Denver basin Pump Station - 4/24/2019
- RSWCC/HHW - 12/8/2018*
- Arrowhead Park Maintenance - 1/15/2019*
- Snedigar Park Maintenance - 1/15/19* and 4/25/2019
- Veteran Oasis Park Maintenance - 1/15/2019*

Provide a summary of activities planned for next reporting period

BMP does not apply for next reporting period: No

Milestone Description:

The City will continue to conduct inspections of City owned facilities during the next reporting period.

Question: For Minimum Control Measure 6: Pollution Prevention and Good Housekeeping, Did the program implement any additional BMPs during this reporting period?

Answer:

Did the program implement any additional BMPs during this reporting period? No

Provide a summary of compliance with the requirements for Minimum Control Measure6.

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The City maintains a solid Pollution Prevention and Good Housekeeping program. The following best management practices have been implemented during the reporting period: Street sweeping: 67,277 lane miles swept / 2,163 tons of debris removed, City staff conducted proactive inspections of 8,143 inspections City storm drain structures, conducted maintenance on 2,154 storm drainage structures. 163 employees were provided with the following training opportunities; Inspections, IDDE, Stormwater pollution prevention and construction inspections.

Question: Was staff training conducted?

Answer:

Yes

Sr.No.	Date of Training Event	Training Subject	Number of Employees Trained	Frequency of Training
1	04/23/2019	IDDE Online Training	78	One time event
2	06/04/2019	Qualified MS4 Stormwater Compliance Professional Training	3	One time event
3	05/23/2019	Stormwater Pollution Prevention & IDDE Training for Pre-Treatment staff	3	One time event
4	04/23/2019	Stormwater Awareness Online Training	75	One time event

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CERTIFICATION OF SUBMISSION

DAVID IVERHELST

You validated your identity by answering your personal security question and password on myDEQ at **10:25 AM** on **09/26/2019**. At this time, you certified the summary information above by checking that you agreed to the following statement:

Certify your submission:

By checking this box I certify under penalty of law that this submittal was prepared by me, or under my direction or supervision of personnel appropriately qualified to properly gather and evaluate the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I understand that all information submitted to ADEQ is public record unless otherwise identified by law as confidential. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

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