Arizona Pollutant Discharge Elimination System (AZPDES) Stormwater Phase II MS4 Permit Program

City of Yuma Stormwater Management Program (SWMP)

In Compliance with the
Arizona Pollutant Discharge Elimination System (AZPDES)
General Permit (Permit No. AZG2021-002) for Discharge from
Small Municipal Separate Storm Sewer Systems (MS4s)
to Waters of the United States

Last Updated: August 22, 2023

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Introduction

The City of Yuma Stormwater Management Program (SWMP) was last revised on September 7, 2021, to satisfy the following:

1. Remarks sent by the Arizona Department of Environmental Quality (ADEQ) in a letter dated September 20, 2009
2. Comments sent by ADEQ in an audit letter dated April 5, 2013
3. All meetings held between the City of Yuma and ADEQ in October 2015, December 2015 and April 2017 to discuss and address the issue of impairment of the Colorado River.
4. Comments sent by ADEQ in a letter dated June 29, 2017 as well as the need to prevent or reduce discharges of pollutants to Waters of the United States. The Program specifically considers the six Minimum Control Measures (MCMs) outlined in the ADEQ General Permit AZG2016-002 for Small Municipal Separate Storm Sewer Systems (MS4s) and an Additional Control Measure (ACM) to address the prevention of introduction of 303(d) listed pollutants to the Colorado River.
5. Resolution of nine program deficiencies identified during an ADEQ audit inspection conducted on May 1, 2018 that constitute violation of the MS4 permit; and
6. ADEQ Notice of Deficiency letter Number SWGP18-0350 dated December 26, 2018.
7. Comments received from ADEQ digital system for the 2018-2019 annual report.
8. Update to meet AZG2021-002 Requirement.

The best management practices (BMPs) presented here have been proposed because they address the MCMs, are appropriate for the City of Yuma's stormwater system, are measurable, are anticipated to make improvements in the City's stormwater quality, and are achievable. For each BMP, the appropriate measurable goals are delineated along with a schedule that includes an indicated frequency of planned actions, interim milestones, and a date by which the BMP implementation was/will be established. Standard Operating Procedures (SOPs) have been added to MCM No. 3 (Illicit Discharge Detection and Elimination), MCM No. 4 (Construction Site Runoff Control), MCM No. 5 (Post-Construction Runoff Control), and ACM No. 1.

Listing of Receiving Waters:

1- Colorado River

2- East Main Canal

Process & Schedule for Maintaining up to date Stormwater Atlas:

The City maintains a record of its stormwater collection system that shows all components of the Municipal Separate Storm Sewer System, hereafter called MS4. This document, known as the City of Yuma Stormwater Atlas, is available to the public. The Atlas shows the Waters of the United States and is updated annually to reflect changes to the system resulting from development and capital improvement program construction.

Listing of Discharges that Cause Exceedance of Selenium:

The City developed Additional Control Measure number 1 (ACM No. 1) to address the issue of impairment of the Colorado River (River) for exceedance of selenium as determined by the 2016 ADEQ 303(d) list. Part of Additional Control Measure (ACM) No. 1 is the Analytical Monitoring Program or Plan (AMP) that addresses testing of stormwater collected at the Colorado River, visual monitoring of outfalls, and listing of discharges that cause exceedance of selenium per Surface Water Quality Standards.

Description of Practices to Achieve Compliance with Water Quality Based Effluent Limitations or Surface Water Quality Standards:

The six minimum control measures (MCMs) outlines how the City will reduce discharges from its MS4 to the Waters of the United States to the maximum extent practicable. The AMP, which is part of the Additional Control Measure No. 1 (ACM No. 1) details the comprehensive plan that the City is implementing as not to cause or contribute to exceedance of selenium.

Limitations of Surface Water Quality Standards:

The City's SWMP, including the ACM No. 1, outlines how the City reduces discharges from its MS4 to the Waters of the United States to the maximum extent practicable. The AMP details the comprehensive plan that the City has implemented so as to not cause or contribute to exceedance of water quality standards.

Description of Practices to Achieve Requirements of Reducing Pollutants to the Maximum Extent Practicable (MEP):

The City's SWMP outlines control measures and best management practices with the measurable goals to achieve the requirement of reducing pollutants, to the MEP, from reaching the Waters of the United States.

Description of Practices to Achieve Compliance with Applicable TMDL and Surface Water Analytical Monitoring Program for Impaired Waters:

The ACM No. 1, through its AMP, outlines all steps required to comply with the applicable Total Maximum Daily Load (TMDL) and surface water quality standards for the impairment of selenium as set by ADEQ 2018 303(d) list. The purpose of the AMP is to develop a water quality monitoring plan to prevent and reduce the discharge of stormwater pollutants, and in particular, any discharges that cause exceedance in selenium levels from the City's MS4 based on the latest surface water quality standards (SWQS) provided by ADEQ.

Protocol of Annual Program Evaluation:

The City has developed a protocol, included in this SWMP as Appendix B, to evaluate the success of the best management practices implementation. This item will be part of the annual report.

Identification of City Personnel Responsible for SWMP Implementation:

Each control measure of this SWMP identifies the responsible department and staff member/position responsible for implementation of the corresponding control measure.

MCM 1: Public Education and Outreach

Public education and outreach is an important MCM for which the City of Yuma has extensive resources and experience. The City has a long history of designing and implementing active education and outreach programs. In order to reach its citizens with targeted messages regarding the City's SWMP and their role in it, the City has employed print media, cable television, radio, posting regular stormwater articles in English and Spanish language newspapers, and the City's website.

Targeted pollutants are floatables including trash, sewage, sediment, and illicit discharges including oil and grease. These pollutants were selected because an informed public can make a significant reduction in these pollutants. The City will assess other pollutants during the permit period and will address them in the City's education program as appropriate. The target audience is both the City's resident and transient populations. It is estimated that this education program will reach approximately 50,000 full time residents of the City of Yuma over the 5-year program period. This represents about 40% of the City's current population.

Responsible Department: City Administration

Responsible Position: Dave Wostenberg, P.E., City Engineer

MCM 1: Public Education and Outreach
BMP 1: Distribute educational materials about stormwater

The City, as part of its public education and outreach activities, has distributed and is continuing to distribute printed educational materials to City residents. These materials, which are an effective medium for educating the general public about stormwater pollution in construction sites and illicit discharges and illegal dumping into the MS4. The materials content includes the following messages:

1. 24"X36" Construction poster in both English and Spanish is designed to target development community. The post, titled "Stormwater and the Construction Industry" shows by text and photos the recommended and not recommended best management practices in construction sites to eliminate and reduce stormwater pollution.
2. 8.5'X11" brochure, in both English and Spanish, titled "After the Storm-Citizen's Manual to Understand Stormwater Pollution". The brochure, that targets City residents, shows in text and photos stormwater pollution from construction sites, solutions to stormwater pollution from residential areas, such as garden waste, pet waste and septic systems, and solutions to stormwater pollution from commercial areas.
3. 5"X7" postcard, in both English and Spanish, titled "Stormwater Pollution Found in Your Area". The postcard, that targets residents and commercial facilities, works as a tool to raise the public awareness to protect the stormwater collection system by not dumping motor oil, oil filters, anti-freeze/transmission fluids, paint, cooking grease, pet waste, trash, pesticides and fertilizers, excessive dirt and any non-stormwater substance into a catch basin or stormwater drain or inlet.

Permit Requirement Citation: Sections 6.1.1, 6.1.2 and 6.1.3

Activity/Method of Distribution: Distribute bilingual educational materials about stormwater to City residents through Engineering Department, Public Work Department, City Hall front desks, and stormwater trainings.

Objective: Educate the general public and development community on the City's SWMP; provide contact numbers and addresses for any questions. In addition, this approach is to raise a general level of awareness of actions the public can take to help protect overall water quality and specifically limit impacts on stormwater runoff.

Interim Steps and Schedule:

Make educational materials available to public	Ongoing throughout the permit period. Last updated March 2021.

Measurable Goals: Printed educational materials about construction site runoff, illicit discharges and illegal dumping into the MS4 have been available to the public since December 2012, and are distributed using existing outlets at City buildings, meetings attended by the general public and by request.

Assessment of Effectiveness: The number of potential violations of construction sites and illicit discharges and illegal dumping will be used as a measure to assess the overall effectiveness of this BMP.

MCM 1: Public Education and Outreach
BMP 2: Disseminate educational stormwater messages on cable television

The City of Yuma telecasts the announcement about stormwater to inform City residents of stormwater pollution.

Permit Requirement Citation: Section 6.1.1, 6.1.2 and 6.1.3
Activity: Produce and telecast Public Service Announcements (PSAs) about stormwater issues for the City News program on local cable television.

Objective: Inform the general public about stormwater pollution prevention methods and issues via cable television.

Implementation Steps and Schedule:

Develop PSAs	July 2003 – July 2004
Telecast PSAs	August 2004; ongoing throughout the permit period. Message updated in July 2013.
PSA running periodically	Updated yearly

Measurable Goals: Produce one stormwater PSA for telecast annually and run each month, varying times and days of the week to ensure reaching as broad an audience as possible. Include in overall assessment of the cable television programming to evaluate whether the message has been received and if the subject matter is effective.

MCM 1: Public Education and Outreach
BMP 3: Disseminate stormwater messages in local newspaper(s)

In the past, the City has included public interest information on the City Page in the Yuma Sun. The City publishes, annually, educational information about stormwater for inclusion in the daily English and Spanish local newspapers.

Permit Requirement Citation: Sections .1.1, 6.1.2 and 6.1.3

Activity: Produce and print stormwater pollution prevention educational message in local newspapers.

Objective: Inform the general public, residential community and homeowners about stormwater issues via the newspaper.

Implementation Steps and Schedule:

Prepare stormwater messages for newspaper	September 2013
Print stormwater message in newspaper	November 2016 and ongoing throughout the permit period. Done annually in February

Measurable Goals: Publish a message about stormwater program in the Yuma Sun and Baja Del Sol. Stormwater messages will be printed at least annually. Information regarding the SWMP and NOI will be included.

MCM 1: Public Education and Outreach
BMP 4: Disseminate stormwater message with links on the City's website

The City maintains a website. Adding stormwater program information is practical and cost-effective for the City.

Permit Requirement Citation: Sections 6.1.1, 6.1.2 and 6.1.3

Activity: Implement, maintain, and update as necessary stormwater educational messages on the City of Yuma website with links to appropriate web pages (such as those of the EPA and ADEQ) and with a link to the e-mail of the City's contact person.

Objective: Provide useful information about the SWMP to the public via the City of Yuma website.

Implementation Steps and Schedule:

Coordinate and produce a draft of the website	April 2004 – June 2004
Public information added to the website	August 2004
Update the website	June 2009; ongoing throughout the permit period.
Update the website	Updated on June 2018.
Update the website	Update website as needed

Measurable Goals: Stormwater information, including copies of the SWMP and NOI, with links to SWMP, has been available on the City of Yuma website since August 2004. The City updates the information to keep it current and changes the methods of publicizing, if necessary, to increase website utilization as appropriate. Website was last updated on fiscal year 2021.

MCM 2: Public Involvement/Participation

To meet the requirements of the General Permit, prior to submitting its first annual report to ADEQ, the City of Yuma held a public hearing at a regular City Council meeting, complying with public notice requirements offering an opportunity for the public to give advice and guidance on BMPs and the overall SWMP. Also, during the renewal of this permit in the future, or on the schedule for renewal as established by ADEQ, the City will provide an opportunity for the public to provide input into the SWMP for the next permit cycle and will meet all public notice requirements. The SWMP is available at City website at:
https://www.yumaaz.gov/government/engineering/stormwater-management-program
For public accessibility, the City has posted a copy of its SWMP and Notice of Intent (NOI) on its website. Annual reports are also available to the public and the City will follow all public notice requirements as required by permit.

The City of Yuma recognizes the benefits of direct involvement in the City's SWMP by its citizens. It is the City's experience that many residents are dedicated to providing input to the City on a wide range of issues.

Responsible Department: Engineering Department

Responsible Position: Dave Wostenberg, P.E., City Engineer

MCM 2: Public Involvement/Participation
BMP 1: Continue compliance with state and local public notice requirements

The City complies with state and local public notice requirements.

Permit Requirement Citation: Sections 6.2.1, 6.2.2. 6.2.3, 6.2.4 and 6.2.5

Activity: Comply with public notice requirements for any newly created or revised ordinances; public discussion of the SWMP and NOI with the City Council or any other opportunity for public input into the program.

Objective: Make the public aware of new ordinances and allow the public to participate in adoption of ordinances that affect the implementation of the SWMP.

Implementation Steps and Schedule:

Continue compliance with applicable public notice requirements	Ongoing throughout the permit period

Measurable Goals: Continued compliance with public notice requirements throughout the permit period, documenting public meetings, notices provided and comments or input received, reporting in an annual summary of activities to the State.

MCM 2: Public Involvement/Participation
BMP 2: Conduct Annual Stormwater Catch Basin cleanup Program at Priority Area

City of Yuma forces began conducting an annual cleanup program for catch basins at the Priority Area (PA) in April-June 2015. Three areas in the PA have been identified in the monitoring program. The program started in fiscal year (2014-2015) with the target of cleaning all catch basins in the PA at least every three years. The current cycle started in May 2018 and last through May 2021.

Permit Requirement Citation: Sections 6.2.1, 6.2.2, 6.2.3, 6.2.4, and 6.2.5

Activity: Conduct annual stormwater storm water collection system cleanup program at Priority Area.

Objective: In the past, the City has coordinated with volunteers to conduct cleanup events with the assistance of other public agencies. Attempts to get volunteers through the Yuma Clean and Beautiful Commission to clean outfalls at the River were not successful due to safety concerns. The City Engineering and Utilities Departments implemented a plan to cleanup stormwater catch basins at the Priority Area over a period of three years.

Implementation Steps and Schedule:

Clean 111 catch basins & Storm Drain System, in Priority Area 1 (Madison Avenue).	Complete in June 2021
Clean 58 catch basins & Storm Drain System, in Priority Area 2 (9th Avenue).	Completed by June 2020
Clean 76 catch basins & Storm Drain System, in Priority Area 3 (17th Avenue)	Completed by June 2020
Clean 76 catch basins & Storm Drain System, in Priority Area 4 (19th Avenue)	Completed by June 2020
Clean 56 catch basins & Storm Drain System, in Priority Area 5 (Pacific Avenue)	Completed by June 2022
Clean 111 catch basins & Storm Drain System, in Priority Area 1 (Madison Avenue).	Completed by June 2023

Measurable Goals: Cleaning all manholes and catch basins with potential to discharge into the Colorado River. Goal is to minimize and eliminate the introduction of pollutants into the MS4 and the Colorado River. The Utilities Department cleans storm drain system to include catch basins, manholes and pipe. This is done in a three (3) year cycle.

MCM 2: Public Involvement/Participation

BMP 3: Hold a public hearing on the SWMP and NOI

The City held a public hearing to gather comments on the SWMP after it was submitted to ADEQ. ADEQ will be notified of any changes or modifications to the SWMP coming from public comments.

Permit Requirement Citation: Sections 6.2.1, 6.2.2, 6.2.3, 6.2.4, and 6.2.5

Activity: Allow the public to provide input on the initial SWMP.

Objective: Involve the public in implementing the SWMP, receiving comments and amending the SWMP if appropriate.

Implementation Steps and Schedule:

Hold public hearing	April 2004
Receive and incorporate the public's comments into the SWMP as appropriate; notify the ADEQ of modifications	June 2004
New public hearing held on permit	After ADEQ adopted the new municipal permit on 9/30/2016
Develop the SWMP and submit it to ADEQ	September 2023

Measurable Goals: Held a public hearing in April 2004 and gathered public input. No comments were received for the permit. City did not hold a public hearing for the new permit.

MCM 2: Public Involvement/Participation
BMP 4: Update the City Council on the City's SWMP annually

City staff updates the City Council, after filing of the Annual Report to ADEQ, in an effort to educate the Council and maintain program support.

Permit Requirement Citation: Sections 6.2.1, 6.2.2 and 6.2.3

Activity: Update the City Council annually on the status of the SWMP's development and implementation and when permit is renewed (or based on a schedule set by ADEQ).

Objective: Educate and involve the Council and the public in developing and implementing the SWMP.

Implementation Steps and Schedule:

Provide a Council update on the SWMP	September 2004
Provide a Council update on the SWMP	September 2005
Provide a Council update on the SWMP	September 2006
Provide a Council update on the SWMP	September 2007
Council update on permit renewal	November 2007 or based on renewal schedule from ADEQ.
Provide a Council update on the SWMP	Annually in October/November timeframe.
Provide a Council update on the SWMP	Provided by City Engineer in November 2019
Provide a Council update on the SWMP	Provided by City Engineer in 2021
Provide a Council update on the SWMP	Provided by City Engineer-December 2022

Measurable Goals: Update the City Council annually to provide input into the annual report for the following year and for any amendments to the SWMP. Document comments from the general public and report on input received in each annual report.

MCM 3: Illicit Discharge Detection and Elimination Program

Content of IDDE Program:

Introduction

Program Elements

Program Evaluation

Detection Methods

Allowable non-Stormwater Discharges

Unpermitted Discharges to the MS4

Staff Training

Responsible Departments and Personnel

Enforcement Response Plan

Standard Operating Procedure

Introduction:

The City of Yuma recognizes the potential for illicit discharges to its MS4 and is committed to addressing this concern. The BMPs are targeted toward known and potential illicit discharges. The Yuma City Code contains many references to garbage, refuse, and nuisances, but no disposal ordinances are specific to the City's MS4.

Program Elements:

The City has implemented this Illicit Discharge Detection and Elimination Program (IDDE Program) to systematically find and eliminate sources of non-stormwater to its MS4. Procedures of the IDDE program will be implemented to prevent illicit connections and discharges to the MS4. As a minimum this program will include the following elements:

1. Visual Dry Weather Monitoring: The City has annual dry weather monitoring inspection program that inspects all outfalls at least once annually. This monitoring is conducted at least 72 hours after a storm event that resulted in a discharge from the MS4. Table Appendix E of this document provides documentation and findings of dry weather monitoring in the annual report.
2. Visual Stormwater Discharge Monitoring. The City has four stormwater outfalls at the Colorado River: Madison Ave outfall, 9th Ave outfall, 17th Ave outfall and 19th Ave outfall. Outfalls are representative of its stormwater discharges to conduct visual stormwater discharges. Visual monitoring will be monthly per Section 6.3.7 and the Analytical Monitoring Program (AMP).
3. The City will follow its Enforcement Response Plan (ERP) to schedule follow-up monitoring to identify suspected illicit discharges to ensure that they do not recur.

Program Evaluation:

The City will utilize the ERP and the protocol of annual SWMP evaluation to evaluate indicators of functionality of this program and track its success. Indicators of program success are outlined in this IDDE program detailing actions required to locate and remove illicit discharges.

Because of the annual influx of winter visitors, the City has experienced issues with improper disposal of sewage from recreational vehicles (RVs). The City also has experienced illegal dumping of other materials, such as used oil and grease, in some areas of the City.

For purposes of permit compliance, the City has developed and implemented an ordinance, with enforcement strategies, that has prohibited the discharge of non-stormwater substances into the public drainage system/MS4 and identified incidental non-stormwater discharges that are allowable.

Detection Methods and Indicators for Tracking Program Success:

The City is utilizing the following detection methods:

1. Dry weather monitoring of outfalls
2. Wet weather monitoring of outfalls
3. A complaint hotline to receive reports from the public to detect illicit discharges.
4. During their field inspections, Public Works crews and Community Development building Inspectors will report any illicit discharge or illegal dumping to the MS4. (Opportunistic Inspections).
5. The City keeps registers to document its dry-weather monitoring program, hotline complaints and complaints reported by staff. The City also has an investigation system for tracing illicit discharges and illegal dumping with full coordination of Code Enforcement staff in Public Works and Community Development Departments. If required, the City will send samples of any non-stormwater substance detected in its MS4 to a State-approved laboratory for testing.
6. Indicators of this IDDE program include opportunistic inspections by City staff during their regular duties, building and engineering inspectors reports to hotline and email to storm@yumaaz.gov. Response time to inspection, time from discovery to elimination, removal of illicit discharges, enforcement level and classification of violation are detailed in Appendix F of this document “Enforcement Response Plan”.

Allowable non-Stormwater Discharges:

Through the public education minimum control measure, the City educates the public and City employees on the hazards of illegal discharges and dumping in the drainage system.
The City considers the following discharges, which are listed in Section 6 of the Permit to be allowable non-stormwater discharges:

1. Water line flushing,
2. Landscape irrigation,
3. Diverted stream flows,
4. Rising ground water,
5. Uncontaminated ground water infiltration,
6. Uncontaminated pumped ground water,
7. Discharges from potable water sources,
8. Foundation drains,
9. Air conditioning condensate,
10. Irrigation water,
11. Springs,
12. Water from crawl space pumps,
13. Footing drains,
14. Lawn watering,
15. Individual residential car washing,
16. Discharges from riparian habitats and wetlands
17. De-chlorinated swimming pool discharges
18. Street wash water, and
19. Discharges or flows from emergency firefighting activities.

Unpermitted Discharges to the MS4

The City of Yuma developed this procedure, as part of the IDDE Program, to actively identify industrial facilities and activities that discharge to the MS4 without an MSGP current permit coverage.

This procedure started by targeting the Priority Area (P.A.) as identified in the Analytical Monitoring Plan (AMP). The P.A. is the area in the City of Yuma with drainage connection to the Colorado River. The River has been designated since 2008 as impaired for Selenuim. The City utilizes the list in Appendix C to achieve the goal of identifying unpermitted industrial discharges to the MS4.

This procedure includes the following:

1. Number of facilities contacted each year in the annual report
2. Facility name and location
3. Type of activity and SIC code to the extent know
4. Proof of MSGP coverage

5. Connection to the MS4
6. Affected stormwater outfall
7. City of Yuma Pretreatment Information
8. City of Yuma Staff involved

Staff Training

The City provides annual training for all staff involved in identifying, reporting and mitigating illicit discharges into the MS4 system. This includes, but is not limited to, Public Works staff, Building Safety Inspectors, Engineering Inspectors and Utilities staff. Frequency and type of employee training is reported in the annual report.

Responsible Departments and Personnel:

Responsible Departments: Department of Public Works and Engineering Department

Responsible Positions: Joel Olea, Director of Public Works & Dave Wostenberg, City Engineer

Enforcement Response Plan (ERP)

The Enforcement Response Plan is a standalone document available on the City of Yuma website at https://www.yumaaz.gov/home/showpublisheddocument/3229/637581416051530000

List of Industrial Unpermitted Discharges to the MS4 Priority Area

Number	Facility Name and Location	Type of Industrial Activity-SIC Code	MSGP Approval Number	Connection to COY System	MS4 Component and Outfall	City Staff/Comment
1	Agricultural chemicals facilities	2873				Not available
2	Local and Highway Passenger Transportation facilities	4111				Not available
3	Asphalt paving and roofing facilities	2951				
4	Scrap Recycling Facilities	5093				
4-1	ABC Metals Recycling: 1389 S Arizona Ave, Yuma, AZ 85364					
5	Printing and Publishing Facilities	2711				
5-1	Yuma Printing Company: 1400 S Ave B, Yuma, AZ 85364					
5-2	Sun Graphics 2125 S Arizona Ave, Yuma, AZ 85365					
5-3	Zinn Printing 386 E 16th Street, Yuma, AZ 85364					
6	Automobile salvage yards	5015				
6-1	West Coast Golf Carts 731 S 4th Ave, Yuma, AZ					
7	Hazard waste Facilities	HZ				
7-1	AA Sydcol, LLC 2264 E 13th Street, Yuma, AZ 85365					

Standard Operating Procedure (SOP)

This SOP describes the procedures that can be used to support Chapter 194 of Yuma City Code "1Illicit Discharge Detection and Elimination (IDDE)". The IDDE program is intended to protect the City Municipal Separate Storm Sewer System (MS4) from illicit discharges and illegal dumping. This SOP offers the below steps to identify, locate and eliminate or reduce the illicit discharge and dumping into the City MS4. This SOP will be revised with the SWMP as necessary. The City is implementing the following steps:

1. Locate important areas and locations likely to have illicit discharges with proximity to the City MS4 and surface waters. The following will be classified as priority areas:

    a) All stormwater outfalls at the Colorado River. This area includes all drainage areas that contribute to outfalls at the River. Use of previous drainage studies and land use will be utilized to better identify drainage areas.

    b) Shopping malls, educational facilities, exposed areas with proximity to Colorado River or with potential of discharging into the River.

    c) Areas within 2.5 miles of the Colorado River.

    d) Areas with historical or previous citizen complaints of dumping and littering; and

    e) As designated by the City Engineer.

2 Perform annual inspections of all stormwater outfalls at the surface waters per the Dry Weather Outfall Inspection Form.

3 Perform selenium and sediment monitoring per approved Analytical Monitoring Program, for any illicit discharge incident or during dry weather monitoring at outfalls at the Colorado River.

4 All important areas mentioned above have been included in the current stormwater map/atlas.

5 Review and consider information collected when illicit discharge was initially identified in a previous incident or dry weather inspection.

6 Use visual inspections of upstream points as a second step (first step is the dry weather monitoring inspection) and document all results for future references.

7 Review procedures to remove the source of an illicit discharge.

8 Refer potential septic system failures to the local health office for enforcement.

9 Suspend public access to storm drain if threats to public health or serious physical harm to the public or the environment are possible.

10 Perform opportunistic inspections by Public Works and Utilities staff crews while they are conducting their regular duties in and around the stormwater collection system. Staff is encouraged to contact dispatcher, supervisor, or code enforcement if they see evidence of an illicit discharge or illegal dumping into the storm drain.

11 Perform inspections by Building Safety staff, take photos and send email to storm@yumaaz.gov documenting the case. This email is monitored by the Engineering Inspection Supervisor, with backup monitoring by the Development Engineering Manager and City Engineer.

12 Hotline at 928-373-4520 (Engineering front desk) is available to receive reports of illicit discharges and illegal dumping into the MS4.

13 When a complaint is received it is dispatched to Engineering Inspections or the Engineering Development Manager. Engineering staff will contact the appropriate City staff for follow-up until the case is resolved per the Enforcement Response Plan. Engineering will document the case per table in Appendix E.

14 Evaluate the IDDE program effectiveness and update the SWMP, as needed.

15 Plan, coordinate and perform a campaign to clean the Priority Area with City and public participation.

MCM 3: Illicit Discharge Detection and Elimination
BMP 1: Develop an illicit-discharge ordinance

The City has developed and adopted an illicit-discharge ordinance that addressed all of the requirements outlined in the AZPDES requirements. The ordinance forms the basis for the overall illicit-discharge-elimination program.

Permit Requirement Citation: Section 6.3(2)

Activity: Develop, finalize, and adopt a City ordinance that prohibits illicit discharges to the City of Yuma stormwater system, defining enforcement strategies and inspection procedures.

Objective: Empower the City to seek out and eliminate illicit discharges to the stormwater system. Define and prohibit illicit discharges to the City of Yuma's stormwater system. Allow for right of entry and inspection to find illicit discharges. Establish penalties for dumping, spills, and willful illicit connections.

Implementation Steps and Schedule:

Develop the illicit-discharge ordinance	January 2004 – November 2004
Adopted IDDE ordinance (Ordinance Number O2005-15)	March 2005
Added new SOP & new forms for inspections	Added in September 2013. Updated October 2014.
Review SOP for effectiveness	Throughout Permit period. Last updated September 2018
New IDDE program with proposed Enforcement Response Plan (ERP). Enforcement component of Ordinance O2005-15 will be revised to be consistent with the ERP.	Completed by end of September 2018

Measurable Goals: Implementation of ordinance O2005-15 with enforcement strategies, as revised by the current Enforcement Response Plan (ERP), that prohibits illicit discharges to the City's MS4, empowers the City to take appropriate action to detect and eliminate illicit discharges and to address illegal dumping into the MS4 and provides for corrective actions, since March 2005. The ERP is providing faster response and better enforcement.

Assessment of Effectiveness: The number of potential violations of construction sites and illicit discharges and illegal dumping will be used as a measure to assess the overall effectiveness of this MCM.

The City evaluates and report the overall effectiveness of the program based on the tracking measures outlined in Part 6.3.7 and 6.3.8 in the annual program evaluation and in the annual report.

MCM 3: Illicit Discharge Detection and Elimination
BMP 2: Create an outfall inspection program

The City inspects all stormwater outfalls during dry weather as a part of the overall program to detect and eliminate illicit discharges. Illicit discharges found during inspections will be investigated and eliminated.

Permit Requirement Citation: Section 6.3.9

Activity: Visually inspect stormwater outfalls during dry weather to identify the possible existence of illicit discharges or illegal dumping activities.

Objective: Identify possible illicit discharges to the City's stormwater system and investigate the source of such discharges for the purpose of eliminating them.

Implementation Steps and Schedule:

Inspect 25% of the City's jurisdictional boundary for stormwater outfalls	May 2009 – June 2010
Inspect 25% of the City's jurisdictional boundary for stormwater outfalls	May 2010 – June 2011
Inspect 25% of the City's jurisdictional boundary for stormwater outfalls	May 2011 – June 2012
Inspect 25% of the City's jurisdictional boundary for stormwater outfalls	May 2012 – June 2013
Inspect Priority Area as identified in MCM No. 3 of the SWMP	May 2013-June 2014
Inspect Priority Area as identified in MCM No. 3 of the SWMP	Completed June 2015
Inspect Priority Area as identified in MCM No. 3 for 111 catch basins in Madison Avenue area	Completed in June 2016
Inspect Priority Area as identified in MCM No. 3 for all catch basins	Completed in June 2017
Inspect all stormwater outfalls and surface waters including Colorado River outfalls	One third completed in June 2018
Inspect all stormwater outfalls and surface waters including Colorado River outfalls	Completed Monthly July 2021-June 2022
Inspect all stormwater outfalls and surface waters including Colorado River outfalls	Completed Monthly July 2022-June 2023

Measurable Goals: Dry weather inspection of all known stormwater system outfalls performed at least once annually, and initiate investigation of illicit discharges and illegal dumping activities within 15 working days of discovery. Evaluate inspection program annually to ensure that procedures are effective and make adjustments to inspection protocols as needed. Per the SOP for MCM No. 3 inspection of outfalls at priority area and all outfalls at surface waters will be conducted annually using the new Dry Weather Visual Monitoring Form. Program started in 2015 and with all stormwater collection system in the P.A cleaned. The cleaning program is triennial. Goal is to minimize the introduction of pollutants from precipitants into stormwater collection system to the Colorado River.

MCM 3: Illicit Discharge Detection and Elimination
BMP 3: Develop a stormwater map that shows all outfalls

The City has developed an outfall map that noted the locations of stormwater system outfalls. The mapping effort was coordinated with the outfall inspection effort.

Permit Requirement Citation: Section 6.3.1

Activity: Update the City of Yuma stormwater map, with all outfalls per the new CIP projects and names and locations of Waters of the United States.

Objective: Create a complete and current map of stormwater facilities in the City of Yuma that supports the program to detect and eliminate illicit discharges.

Implementation Steps and Schedule:

Update the current stormwater map for 50% of the jurisdictional boundary	January 2008 – June 2010
Update the current stormwater map for 50% of the jurisdictional boundary	July 2010 – July 2012
Complete an outfall map with all new locations	August 2012- December 2012
Update Stormwater map for accurate inventory	Completed in July 2014
Update Stormwater map to show priority areas per SOP of MCM No. 3	Next updating cycle (2014-2015)
Update Stormwater map for accurate inventory	Expected by 2nd quarter of 2019
Update Stormwater map for accurate inventory	Continuously updating throughout year

Measurable Goals: Update City of Yuma stormwater system map showing all outfalls to Waters of the United States annually. The stormwater system map has been updated effective July 2014. The Map will be modified to show the priority areas mentioned in the SOP of MCM No. 3, and annually to reflect changes resulting from CIP-constructed projects and new development

MCM 3: Illicit Discharge Detection and Elimination
BMP 4: Develop and distribute educational materials about illicit discharges

The City has developed and distributed educational materials to the public. The educational materials target the residential population and cover topics such as how to correctly maintain septic systems and dispose of household hazardous waste.

Permit Requirement Citation: Section 6.3

Activity: Educational materials regarding the hazards of illegal discharges to the stormwater system have been produced and distributed to the public, utilizing the public education tools developed in MCM 1. Distribute educational materials to City employees via informational letter or other means.

Objective: Inform the public of the hazards associated with illegal discharges to the stormwater system.

Implementation Steps and Schedule:

Develop and produce the materials	July 2004 – January 2005
Distribute the materials	January 2008; ongoing throughout the permit period. Last distribution in July 2013.
Educational letter about stormwater industrial pollution to businesses in the Priority Area	Sent by the end of 2016. New letter sent in November 2018.
Educational Postcard distributed to Priority Areas.	Sent yearly in March

Measurable Goals: Generate, revise, produce or procure educational materials regarding illegal discharges as needed and distribute these materials utilizing methods identified in MCM 1. Increase the awareness of stormwater pollutants from illicit discharges among business owners and the public.

MCM 3: Illicit Discharge Detection and Elimination
BMP 5: Develop and implement complaint-receipt procedures

The City realizes that once the public awareness of illicit discharges is raised, citizen complaints are likely to increase. The City has developed a comprehensive complaint-receipt program that includes all aspects of the City's SWMP. The complaint phone number has been advertised in public education materials noted in MCM 1, and a newly implemented email address will be incorporated as materials are updated.

Permit Requirement Citation: Section 6.3

Activity: Develop complaint-tracking system to log and follow up in response to public inquiries and complaints concerning illicit discharges and dumping.

Objective: Effectively enforce the illicit discharge and illegal dumping ordinance through receipt of public input on potential hazards and problem sites.

Implementation Steps and Schedule:

Develop written procedures for handling complaints	January 2004 – December 2004
Implement a program to receive and follow up on complaints	January 2008; ongoing throughout the permit period
New complaint-receipt record	Developed in September 2013. Will be updated after creation of inventory in the Priority Area. Inventory of P.A on-going
New Reporting Template	Using new IDDE form 2023

Measurable Goals: In September 2013 a complaint-receipt program tracking the nature of concern and investigation follow-up for each complaint was in place. Analyze nature, location, and frequency of complaints to determine if procedures and outreach program is effective in addressing such hazards.

MCM 4: Construction Site Runoff Controls

Content of Construction Site Runoff Control Program

Introduction

Program Elements

Program Evaluation

Responsible Departments and Personnel

Standard Operating Procedure

SWPPP Plan Review Checklist

Introduction:

The City of Yuma recognizes the potential for construction site runoff into its MS4 and is committed to addressing this concern. The BMPs of this MCM are targeted toward construction sites that disturb one or more of acres including sites less than one acre that are part of a common plan of development or sale. The Yuma City Code contains many references to erosion control and sediment transportation from construction sites, construction waste, and debris or dust generated from construction sites, therefore the City developed the construction site control runoff program.

Program Elements:

The City has implemented this program to systematically reduce stormwater generated from construction sites to the MS4 or the Waters of the United States. Procedures of this program are intended to prevent and reduce discharges of stormwater runoff from construction sites to the MS4. As a minimum this program includes the following elements:

1. City Ordinance Number O2006-38 (Yuma City Code Chapter 156). This ordinance provides mechanism that requires the use of sediment and erosion control practices.
2. An inventory of all construction activities under the umbrella of this program. A spreadsheet created by Development Engineering Manager as part of data base. Development engineers enter the information of construction sites that fall under this program. The information of the construction inventory includes project name, location if in the Priority Area, disturbed area in acres, if SWPPP is submitted, proof of NOI and other information. This inventory gets updated weekly.
3. Procedures for site inspections and enforcement of sediment and erosion control measures. Procedures of inspections and enforcement are detailed in Sections 156-08 and 156-09 of the Yuma City Code. Site inspection checklists are provided as part of this program. It is required that owners of construction projects or contractors are the responsible parties to perform site inspections. The City has the enforcement authority per Section 156-09 of the Yuma City Code. Section 4 of the SWMP also documents regulatory authority.
4. Inspection of construction sites for City Ordinance shall be every 14 calendar days and after any storm that drops 0.5” of precipitation. For sites within 0.25 miles from Colorado

River inspection frequency is every 7 calendar days and after any storm that drops 0.5" of precipitation. The inspection checklist provided as a part of this program includes the following:

a. Phase of construction
b. Proximity to Colorado River
c. Size of construction activity; and
d. History of non-compliance of site operator

5. The Enforcement Response Plan (ERP) describes all follow-up actions, such as re-inspection and enforcement, to ensure compliance.
6. Construction operators are required to implement sediment and erosion control best management practices (BMPs). In addition to the design requirements mentioned in Section 156-07 of the Yuma City Code, construction operators are required include the following:
    a. Minimize the amount of disturbed area and protect natural resources;
    b. Stabilize sites when projects are complete, or operations have temporarily ceased;
    c. Protect slopes on the site of the construction activity;
    d. Protect storm drain inlets and armor all newly-constructed outlets;
    e. Use perimeter controls at the site; and
    f. Inspect stormwater controls and BMPs every 14 calendar days or after 0.5" of precipitation. For construction sites within 0.25 miles from the Colorado River inspection frequency is every 7 calendar days and after 0.5" of precipitation.
7. Construction operators are required to implement measures to control waste from construction sites falling under the umbrella of this program. Waste generated from construction sites includes but not limited to discarded building materials, paints, fertilizers, concrete wash out, chemicals, litter, and sanitary wastes. Construction waste shall be removed or retained on the construction sites without exposure to stormwater for a period not exceeding 14 calendar days.
8. Written procedures for plan review is available as part of this program.

Program Evaluation:

The City will utilize the ERP and the protocol of annual SWMP evaluation per Section 8.1 of the Permit to evaluate indicators of functionality of this program and track its success.

Responsible Departments and Personnel:

Responsible Departments: Engineering Department and Department of Community Development

Responsible Positions: Dave Wostenberg, P.E., City Engineer & Randall Director of Building Safety

Standard Operating Procedures (SOP)

This SOP describes the procedures to be used to support Chapter 156 of Yuma City Code "Erosion and Sediment Control." This SOP offers procedures for inspections and enforcement of control measures at construction sites that fall under the umbrella of Ordinance O2006-38. This SOP will be revised with the SWMP as necessary. For construction sites located within ¼ mile of the impaired segment of Colorado River, refer to AMC No. 1 on this SWMP. Since July 2018, the City started implanting the following steps:

1. Prior to inspection, the City inspector will:
    a) Contact owner/contractor superintendent or project manager.
    b) Bring camera, project file, and Personal Protective Equipment in accordance with City Policy.
    c) Bring the SWPPP Construction Site Inspection Checklist for private development or CIP projects.
    d) Review previous inspection reports to determine reoccurring problems.
    e) Identify if the project is located within ¼ mile of the Colorado River's impaired segment.
2. At the construction site, and before starting inspection, the City inspector will:
    a) Ensure that the project information sign is installed per City Construction Standard No. 8-100 (Work Zone Identification Sign) with the AZPDES approval number and date.
    b) Verify that SWPPP plans and narrative report, NOI and Permit No. AZG2013-001, as updated, are on site and accessible.
    c) Verify that all routine inspections, required by Contractor, are conducted with reports available on site and accessible. Routine inspections per Section 156-08 of the Yuma City Code are required but not exceeding 14 calendar days from the previous inspection and within 24 hours of a previous storm 0.5 inches or more.
    d) Review previous inspection reports to determine reoccurring problems.
    e) Review SWPPP changes or modifications from last inspection and whether such changes and modifications are updated in the SWPP report and plans.
    f) Review status of any corrective actions or deficiencies by, State or City, listed in the latest inspection report.
    g) Discuss with the owner representative, Contractor superintendent or project manager any complaint or incident that has occurred after the latest inspection.
3. At the construction site the City inspector will, at minimum, perform the following:
    a) Record time that inspection of BMPs starts and weather information such as temperature, rainfall within the last 72 hours, wind and clearness or cloudiness of sky.
    b) Determine if the site has evidence of release of any discharge from its boundaries.

c) Determine if all BMPs are installed correctly and maintained adequately per the SWPPP report and plans. BMPs include erosion control measures, sediment control measures and good housekeeping measures.

d) Take photographs BMPs. The photo must indicate date and time of inspection and comment on the BMP.

4. Before leaving the site, the City inspector will:

a) Discuss with the owner, contractor or project manager of the SWPPP the effectiveness of current controls and if modifications are needed.

b) Identify a time frame for making modifications on site and SWPPP report and plans.

c) Discuss with the owner, contractor or project manager any compliance or enforcement issues.

5. As a follow up after inspection, the City inspector will:

a) Check the adequacy of SWPPP Construction Site Inspection Checklist for private development.

b) Send documents to building inspectors for certificate of occupancy coordination.

c) City Engineering inspectors will conduct SWPPP inspections per CIP projects' Checklist. Records will be sent to City Engineer.

d) Follow up on corrective actions and SWPPP report and plans modifications; and

e) Contact City code enforcement and State for compliance and enforcement if needed.

6. City Engineer will evaluate the SOP and program effectiveness and update the SWMP, as needed.

STORMWATER POLLUTION PREVENTION PLAN REVIEW CHECKLIST
CITY OF YUMA ENGNINEERING DEPARTMENT

155 W. 14th Street
Yuma, Arizona 85364
Phone (928) 373-4500 Fax: (928) 373-4501

City Reference Ordinance Number O2006-38

Project Name _____

Application No. _____

Review Date _____

By: _____

Ordinance No. O2006-38 Reference	***Description***	***Location in SWPPP***	***For City Use***
156-04 C	Each application shall bear the name and address of the owner or developer of the site		
156-04 C	Identify the name of the consulting firm retained to design the SWPPP		
156-04 D	Each application shall include a statement any land clearing, construction, or development is in accordance with ESCP.		
156-05 A	Other types of water quality permits required.		
156-06 C	The ESCP shall include:		
	1. A map identifying soil type, vegetation cover and resources protected under this ordinance.		
	2. Temporary sediment basins if needed.		
	3. Temporary sediment basins shall be designed to contain the higher of either V = CPA or V = 3600 X Area		
	4. Construction schedule.		
	5. All erosion and sediment control measures necessary to meet this ordinance.		
	6. Sediment calculations		
	7. Soil conditions.		
	8. Provisions for maintenance of control facilities.		
	9. Statement that the ESCP is a part of the SWPPP required by the City.		
156-07 A	Grading, erosion and sediment control practices, and waterway crossings shall be		

	constructed in accordance with the design criteria.		
156-07 B	Clearing and grading of natural resources shall be dealt with as per design criteria.		
156-07 C	Clearing shall not begin until all sediment control devices have been installed and have been stabilized.		
156-07 D	Phasing shall be required on all sites disturbing greater than 40 acres, with the size of each phase to be established as a part of the plan review process and as approved by the City Engineer.		
156-07 E	Erosion control requirements shall include:		
	1. Soil stabilization shall be completed within 14 days of clearing.		
	2. If seeding or another vegetative erosion control method is used, such erosion control method shall become established within 3 weeks.		
	3. Special techniques on steep slopes or in drainage ways shall be used to ensure stabilization. The techniques must meet the design criteria.		
	4. Soil stockpiles must be stabilized or covered at the end of each workday if a major storm is expected.		
	5. The entire site must be stabilized.		
	6. Techniques shall be employed to prevent dust blowing at the site.		
	7. Techniques that retard and divert upland runoff shall be employed.		
156-07 F	Sediment control requirements may include:		
	1. Sediment basins, traps or tanks.		
	2. Provision of long term stormwater management, if required.		
	3. Protection for site adjacent properties.		
156-07 G	Waterway and watercourse protection requirements shall include:		
	1. Temporary stream crossing must be installed.		
	2. Stabilization of the watercourse channel throughout construction.		
	3. All on-site stormwater conveyance channels must be designed as per requirements.		
	4. Techniques to prevent erosion at all outlets.		
156-07 H	Construction site access requirements shall include:		

	1. Temporary stabilized access road provided at all sites.		
	2. Other measures to ensure that sediment is not tracked onto public streets during construction.		
156-08 A	Site inspections for SWPPP compliance will be conducted.		
156-08 A	Plans for grading, stripping, excavating and filling work shall be maintained at the site during the progress of the work.		
156-08 B	Regular inspections in writing of all control measures as per approved SWPPP.		
156-08 D	An approved copy of SWPPP must be maintained at site always.		

CITY OF YUMA
ENGINEERING DEPARTMENT

Construction Site Inspection Checklist
Per City of Yuma Ordinance Number O2006-38

Project Name: _____

C.I.P. Number: _____

City PPR Number _____ for Private Development

AZCON Number: _____

Date & Time of Inspection: _____

Inspected By: _____

Inspection Frequency: Once every: (circle one) 7days 14 days After-storm

Weather at time of inspection: _____

Phase of Construction: _____

Proximity to Colorado River: _____ miles

Size of Construction: _____ acres

History of non-compliance of site operator: _____

No.	Description	Yes	No	N/A
1	Has there been an absence of rain since the last inspection?			
2	Are all significant erodible slopes protected from erosion through acceptable practices?			
3	Are all work areas reasonably clean and free from spills, leaks, or other deleterious materials?			
4	Are all BMPs identified in the SWPPP report installed in the proper location and according to specifications?			
5	Are all BMPs in good repair and maintained in functional order?			

6	Are all on-site traffic routes restricted to areas designated in the SWPPP for those uses?			
7	Is sediment, debris, or mud being cleaned from public roads at intersections with site access roads?			
8	SWPPP reflects current site conditions?			
9	Is entrance/exit maintaining the specified dimensions in the SWPPP and reasonably clean from sediment?			
10	Are storm drain inlets within the project's area properly protected from stormwater or any construction-related discharges?			
11	Is there any potential of discharge in the COY stormwater collection system or any other publicly-owned system?			
12	Is trash/litter from work areas collected and disposed of in covered dumpsters?			
13	Are storm drains inlet protection devices in good working order and being properly-maintained?			
14	Is there any evidence of illicit discharges or illegal dumping at the project's site?			
15	Do you suspect that discharges may have occurred since last inspection?			
16	Area additional BMPs required			
17	Are there any discharges at the time of the inspection?			

Description of Required Corrective Actions:

Recommendations:

MCM 4: Construction Site Runoff Controls

BMP 1: Develop and adopt an erosion and sediment control ordinance

Since September 2006, the City adopted an erosion and sediment control ordinance that has formed the basis of the City's construction site runoff control program. The ordinance addresses construction site waste management as well as the other components listed in the AZPDES municipal permit language.

Permit Requirement Citation: Section 6.4

Activity: Establish an enforceable City ordinance to require erosion and sediment runoff controls at construction sites that disturb one acre or more. Include construction site waste management requirements in the ordinance.

Objective: Reduce polluted stormwater runoff from construction sites that disturb one acre or more.

Implementation Steps and Schedule:

Draft ordinance language	January 2004 – May 2005
Have the group of stakeholders review the draft ordinance language	June 2004 – May 2006
Adopted the final ordinance (Ordinance Number O2006-38)	June 2006
Implement ordinance requirements	October 2006
Implement ordinance at private development	On-going
New Enforcement Response Plan underway. Enforcement component of Ordinance O2006-38 will be revised to be consistent with the ERP.	Completed in the end of September 2018

Measurable Goals: Adoption of a construction site management control program including necessary ordinance, with inspection and enforcement strategies such as fines not to exceed $1000 or by maximum imprisonment for ten days or both.

MCM 4: Construction Site Runoff Controls
BMP 2: Develop policies and procedures for plan review

After adoption of the construction ordinance, City staff began reviewing plans for sites which result in a land disturbance or one acre or more complying with the ordinance. The City developed SOP and procedures that addressed plan reviews and trained plan review staff.

Permit Requirement Citation: Section 6.4

Activity: Develop and implement policies and procedures for stormwater runoff control plan review and integrate them into existing plan review process.

Objective: Ensure that construction site runoff is addressed before the City issues a construction permit.

Implementation Steps and Schedule:

Develop policies and procedures for plan review	September 2005 – December 2005
Train staff	December 2005 – February 2006; as needed for new staff
Begin plan reviews	October 2006; ongoing throughout the permit period
Developed new SWPPP Plan Check Review List	January 2013
Proof of SWPPP inspections	City implements since January 2015. Construction Site Runoff Control Program with ERP implementation in effect since July 2018

Measurable Goals: SWPPP plans and reports to be reviewed by staff to achieve the goal of reducing construction site runoff into the City MS4. City has SOPs for CIP and private projects with inspection records for private and CIP construction projects.

MCM 4: Construction Site Runoff Controls
BMP 3: Develop and adopt technical guidance materials

The City adopted Standard Construction Specifications and the Erosion Control Drainage Design Manual for Maricopa County, Arizona, as amended as technical guidance materials that define the design requirements for stormwater runoff control measures as well as construction site pollution prevention. The materials have been made available to the development community.

Permit Requirement Citation: Section 6.4

Activity: Update the technical guidance materials for designing and maintaining stormwater runoff control plans in coordination with the implementation of the City construction site runoff program.

Objective: Reduce the potential for stormwater pollutant discharge from construction sites.

Implementation Steps and Schedule:

Research other technical guidance materials	January – March 2005
Develop materials specific to Yuma	April 2005 – July 2005
Adopt the technical guidance materials and distribute to them development community	October 2006
Included BMPs in updated Construction Standards	May 2019

Measurable Goals: Assist architects, engineers and designers in designing and selecting effective BMPs for construction SWPPP plans.

MCM 4: Construction Site Runoff Controls
BMP 4: Develop a construction site inspection and enforcement program

The City developed an SOP, written policies and procedures for inspecting construction sites and enforcing stormwater runoff controls. This includes implementing inspection checklists or reports, and enforcement tools. City inspectors receive regular training for inspection of site BMPs.

Permit Requirement Citation: Section 6.4

Activity: Prepare standard procedures for inspecting sites and enforcing stormwater runoff controls; train inspectors for these procedures; conduct inspections.

Objective: Effectively inspect construction sites for compliance with stormwater runoff controls.

Implementation Steps and Schedule:

Develop policies and procedures	July 2006– September 2006
Train inspector	January 2006 – February 2006
Ongoing inspection and enforcement program	October 2006; ongoing throughout the permit period
Update inspection and enforcement program by adding Standard Operating Procedures (SOP)	Update by September 2013
Review SOP for effectiveness and modify as necessary	Completed in September 2018
Review SOP for effectiveness and modify as necessary	Will be done as needed

Measurable Goals: Evaluate as part of the overall program review prior to permit renewal, recommending and adopting changes as appropriate. To help achieving the implementation of construction site runoff control ordinance an SOP was added to improve inspection and enforcement of construction sites.

MCM 4: Construction Site Runoff Controls
BMP 5: Develop and implement complaint-receipt procedures

The City developed a comprehensive complaint-receipt program that includes all aspects of the City's SWMP. The monitored complaint hotline number, (928) 373-4520, is advertised in public education materials noted in MCM 1. A monitored complaint email address, storm@yumaaz.gov, has recently been created and will be added to education and information materials as they are updated.

Permit Requirement Citation: Section 6.4

Activity: Respond to public inquiries and complaints concerning stormwater runoff controls on construction sites that disturb one acre or more.

Objective: Effectively enforce the stormwater runoff control ordinance.

Implementation Steps and Schedule:

Develop written procedures for handling complaints	December 2005 – July 2006
Implement a program to receive and follow-up on complaints	October 2006; ongoing throughout the permit period
Opportunistic Inspections by Public Works crews encouraged. All City staff involved in inspections and code enforcement are trained annually.	Last training in October 2021

Measurable Goals: Creating a complaint record and implementation system for construction site is an essential component in the implementation of construction site runoff control. Complaints from the public and through city crew can help reduce pollutants from construction site runoff.

MCM 4: Construction Site Runoff Controls
BMP 6: Develop educational materials for the development community

To better inform the development community about the stormwater development requirements, the City developed training materials that detailed the stormwater requirements. An educated development community about stormwater pollution will be more likely to comply with the ordinance.

Permit Requirement Citation: Section 6.4

Activity: Prepare educational materials for the Yuma development community regarding the construction site runoff control ordinance and technical guidance materials; distribute these materials to developers and contractors. Inform the general public of construction site runoff management program to engage them in reporting concerns.

Objective: Inform developers and construction contractors about construction site runoff controls and City ordinances as well as engage the general public in reporting potential problems or concerns.

Implementation Steps and Schedule:

Develop stormwater educational materials.	June 2005 – November 2005
Distribute them to the development community and the public.	December 2008, ongoing throughout the permit period

Measurable Goals: To educate development community to become a helpful factor in achieving the goals or reducing construction site runoff and the ultimate goals of the SWMP.

MCM 5: Post-Construction Site Runoff Control

The Yuma City Code contains ordinances about retaining stormwater for new construction. These ordinances establish methods and standards for retention basins for new construction within the City, and were adopted to control post-construction flooding rather than the quality of stormwater runoff. This MCM addresses the effects of post-construction and re-development into the MS4 from a water quality perspective.

Responsible Department: Engineering Department

Responsible Position: Dave Wosterberg, P.E., City Engineer Standard Operating Procedure (SOP)

This SOP describes the procedures used to support Chapter 195 of Yuma City Code "Post-Construction Stormwater Runoff." and to ensure that post-construction and developed sites that fall under this Section are:

1. Having SWPPP designed per the Plan Review Checklist; and
2. Being inspected to ensure that the measures indicated in the SWPPP are installed adequately and meeting their intended design goals.

This SOP will be revised with the SWMP as necessary. For post-construction and developed sites located within ¼ mile of the impaired segment of Colorado River, refer to AMC No. 1 in this SWMP.
Below are the required procedures for inspections and enforcement of BMP control measures at post-construction and developed sites that fall under the umbrella of Section 195 of Yuma City Code:

1. Prior to inspection, the City inspector will:
   a) Contact owner/contractor superintendent or project manager
   b) Bring camera, project file and PPE to the site
   c) Bring the SWPPP post-construction inspection Checklist
   d) Review previous inspection reports to determine reoccurring problems
2. At the post-construction site the City inspector will, at minimum, inspect the following:
   a) Record starting time, ambient temperature, rainfall within the last 72 hours, wind and clearness or cloudiness of sky
   b) Ensure that the site does not have evidence of releasing any discharge from its boundaries
   c) Take photographs of effective BMPs and BMPs that need evaluation or replacement. The photo must indicate date and time of inspection and comment on the BMP.
3. Before leaving the site, the City inspector will:
   a) Discuss with the owner the effectiveness of current controls and if modifications are needed in the SWPPP

b) Identify a time frame for making modifications on site and SWPPP report and plans
c) Discuss with the owner any compliance or enforcement issues needed
d) Ensure that all BMPs are installed correctly and performing their intended goals

4. After conducting the inspection, the City inspector will:
   a) Fill the SWPPP checklist and fax or email to the owner within 3 working days
   b) Follow up on corrective actions and SWPPP report and plans modifications
   c) Contact City code enforcement for compliance and enforcement if needed, and
   d) Evaluate the SOP and program effectiveness and update the SWMP

MCM 5: Post-Construction Site Runoff Control
BMP 1: Develop and adopt a post-construction stormwater runoff ordinance

The City developed a post-construction stormwater runoff program that includes several education components. A cornerstone of this program is development and adoption of an ordinance to form the basis for the post-construction stormwater runoff program.

Permit Requirement Citation: Section 6.5

Activity: Create and adopt an ordinance that addresses post-construction runoff from new development and redevelopment projects, identifying approved BMPs for structural and non-structural controls that impact new and redevelopment projects as defined in General Permit Part V, Section B.5.

Objective: Minimize impacts of new or redevelopment projects on stormwater quality through effective controls for stormwater discharge management.

Implementation Steps and Schedule:

Identify the program's goals, including BMPs appropriate for the City, BMP design goals, and BMP maintenance policies; Develop draft ordinance language	August 2006 – June 2007
Allow the public to have input on the ordinance and revise, if necessary	July – August 2007
Adopted the ordinance (Ordinance Number O2007-78)	September 2007. adopted in September 2007 and went into effect on 2/18/2008.
New Enforcement Response Plan underway. Enforcement component of Ordinance O2006-38 will be revised to be consistent with the ERP.	Completed by the end of September 2018

Measurable Goals: Adoption of a post-construction site and re-development site management control program including the necessary ordinance, with inspection and enforcement strategies. In September 2007, the City adopted the final post-construction stormwater runoff ordinance to address new and redevelopment projects the Permit. The adoption of this ordinance meets the requirements of SWMP by reducing runoff from post-construction and re-development sites.

MCM 5: Post-Construction Site Runoff Control
BMP 2: Develop and adopt technical guidance materials

The City adopted Standard Construction Specifications and the Erosion Control Drainage Design Manual for Maricopa County, Arizona, as amended, as technical guidance materials that define the design requirements for post-stormwater runoff control measure. The materials are available to the development community and on the City website.

Permit Requirement Citation: Section 6.4

Activity: Develop and adopt technical guidance materials that address the design, installation, and maintenance of structural post-construction stormwater runoff BMPs.

Objective: Reduce the pollutants in post-construction site runoff to the maximum extent practicable.

Implementation Steps and Schedule:

Draft the technical guidance materials	May 2007 – August 2007
Adopt the technical guidance materials	October 2007

Measurable Goals: Assist architects, engineers and designers in designing and selecting effective BMPs for post-construction SWPPP plans.

MCM 5: Post-Construction Site Runoff Control
BMP 3: Develop policies and procedures for plan review

The City established an SOP and written policies and procedures for plan review of new development projects for post-construction BMPs. These policies and procedures are utilized in the plan review process. The SOP was developed in June 2013; updated in June 2018 and SWPPP plan check review was also developed to ensure achieving the goals of this MCM.

Permit Requirement Citation: Section 6.4

Activity: Develop an SOP and policies and procedures for post-construction stormwater runoff plan review for all new development and redevelopment projects that affect one acre or more as defined in the Permit.

Objective: Effectively implement a program to reduce pollutants in post-construction stormwater runoff to the maximum extent practicable for new or redevelopment projects as defined in the Permit.

Implementation Steps and Schedule:

Develop policies and procedures for plan review	June 2007 – October 2007
Train the plan review staff	October 2007
Implement the plan review program	April 2008; ongoing throughout the permit period
Develop SOP and SWPPP plan review checklist	Completed in June 2013 and reviewed annually, last updated July 2018.

Measurable Goals: Assist city plan review staff to review post-construction SWPPP to achieve the goals of the SWMP.

MCM 5: Post-Construction Site Runoff Control
BMP 4: Develop an inspection and enforcement program

The City developed an SOP and written policies and procedures for inspecting post-construction stormwater systems and enforcing the City's post-construction site runoff control ordinances. This includes creating inspection checklists/reports and enforcement tools. The City created a structural BMP inspection and maintenance program to ensure the longevity of measures. In September 2013, an updated SWPPP inspection checklist and related SOP were developed to ensure achieving the goals of this MCM. The SOP is reviewed and updated annually.

Permit Requirement Citation: Section 6.5

Activity: Develop an ongoing post-construction BMP inspection program in support of BMP 1 to ensure effective construction and long-term performance of controls.

Objective: Ensure the longevity of the post-construction BMPs and ensure compliance with the ordinance.

Implementation Steps and Schedule:

Develop inspection and enforcement program policies and procedures, including as-built inspections and ongoing inspections	June 2007 – September 2007
Train the inspection staff	Last conducted in June 2018
Create an ongoing inspection and maintenance program	April 2008
Update inspection and enforcement program by adding Standard Operating Procedures (SOP)	Updated by September 2018
Review effectiveness of SOP and modify if necessary	On-going
Development of long-term structural BMP inspection and maintenance program	Completed in 2019

Measurable Goals: To help reduce pollutants from post-construction and re-developed sites and in particular to areas connected to the MS4. Inspection and enforcement will enhance implementation of post-construction runoff and water quality.

MCM 5: Post-Construction Site Runoff Control
BMP 5: Create educational materials for the development community

To better inform the development community about the new development requirements, the City created training materials that detail the new requirements. If the development community is educated about this issue, it will be more likely to comply with the ordinance.

Permit Requirement Citation: Section 6.5

Activity: Create educational materials that outline the requirements of the post-construction stormwater runoff control program.

Objective: Educate the development community including architects, engineers and the general public on the stormwater runoff control program.

Implementation Steps and Schedule:

Develop the educational materials	July 2007 – November 2007
Distribute the materials to the development community	November 2007; ongoing throughout the permit period
Develop informative letter to development community	Draft prepared in May 2016. Sent in December of 2016. Similar letter sent in September 2018.
Develop informative letter to development community	Letter send September 2020

Measurable Goals: To assist in design and implementation of post-construction SWPPP and in coordination with BMP 1 of this MCM, the City developed education and guidance materials including information about project designs which minimizes water quality impacts on approved structural or non-structural BMPs for new or redevelopment projects as defined in General Permit.

MCM 6: Pollution Prevention/Good Housekeeping

The City of Yuma recognizes that to be successful any stormwater management plan requires diligent good housekeeping and pollution prevention. The Yuma City Code already contains many pollution prevention components, and the City is committed through policy and procedure to good housekeeping for stormwater management.

The City also realizes that evaluating and refining good housekeeping and pollution prevention is beneficial, and the City is committed to the BMPs and schedules described as follows:

Waste from operations and facilities will be collected and disposed properly to an approved landfill unless a hazardous waste is detected. Hazardous waste such as oil, fuel, antifreeze, chemicals, pesticides, paint or other non-stormwater or street-related debris will be handled and disposed of appropriately as per Federal, State and local environmental regulations.

The City has updated its operations and maintenance program to include:

1. Inventory of municipal streets operations
2. Facilities located in the Priority Area (P.A) have higher priority due to its hydraulic connection to an impaired surface water (Colorado River). Stringent requirements are detailed in Additional Control Measure No. 1 (ACM No. 1) for preventing and reducing pollutants in stormwater from getting into the River from illicit discharges, construction site runoff, and post-construction site runoff control.
3. The City has developed Stormwater Pollution Prevention Plans (SWPPP) for all its MSGP covered facilities with emphasis for facilities within the P.A.:
    a. Figueroa Waste Water Treatment Plant
    b. Fleet Maintenance Shop
    c. Desert Dunes Waste Water Treatment Plant
    d. Desert Hills Golf Course Maintenance Facility.
    e. Police Department Evidence Facility at Kyla Avenue

In 2011 the City of Yuma performed an assessment, in the P.A., to determine which City owned facilities had the potential to discharge stormwater. The above facilities were determined to require coverage under the AZPDES programs. The above facilities currently manage SWPPP with the following activities:

1. All facilities are inspected quarterly, with a comprehensive annual inspection and testing.
2. SWPPP for these facilities are updated annually, with priority status updated and inspection frequency modified as required.
3. SWPPP plans contain the appropriate best management practices (BMPs) and control measures. The intent of the BMPs and control measure is to reduce and eliminate the discharge of pollutants from the facility into the MS4 or the Waters of the US.

4. Annual training is provided to the staff at these facilities to incorporate pollution prevention and good housekeeping techniques into daily operations and maintenance activities.

5. All SWPPPs for these facilities include maintenance schedules, long-term inspections procedures for structural control such as retention basins and storm underground structure. Non-structural controls are revised and maintained for the same goal.

Responsible Departments: Public Works Department

Responsible Position: Joel Olea, Director of Public Works

MCM 6: Pollution Prevention/Good Housekeeping
BMP 1: Evaluate street sweeping practices

An important activity in keeping floatables and sediment out of the stormwater system is street sweeping. The City evaluates its street sweeping practices from the standpoint of stormwater runoff and makes changes if necessary.

Permit Requirement Citation: Section 6.6

Activity: Evaluate street sweeping practices and schedule to determine effectiveness in addressing public street runoff impacts on stormwater quality.

Objective: Evaluate the City's street sweeping program to determine if operations should be revised in order to minimize pollutant discharges to the MS4. Develop new schedule or equipment changes if necessary to achieve performance goals established in the evaluation.

Implementation Steps and Schedule:

Review the street sweeping program	December 2008 – May 2009
Develop recommended changes for street sweeping program if appropriate	June 2009; continue street sweeping through permit period.. Training held in May 2018

Measurable Goals: Review of City street sweeping program; recommendations on changes or modifications to street sweeping procedures, equipment, schedules and priorities, completed by May 2009. Latest review of street sweeping was completed with staff training in May 2018.

MCM 6: Pollution Prevention/Good Housekeeping
BMP 2: Train City employees about pollution prevention

The SWMP contains regular training programs staff training on pollution prevention.

Permit Requirement Citation: Section 6.6

Activity: Train City of Yuma employees regarding general water quality issues as well as on the City's pollution prevention program.

Objectives: Inform City employees of water quality issues related to City operations; reduce pollution from municipal operations and empower employees to carry out their responsibilities day to day with the goal of minimizing impacts on water quality.

Implementation Steps and Schedule:

Develop a training program	December 2004 – June 2005
Begin training of staff	June 2005
Complete all staff training based on BMP 3 outcomes	November 2007
Train staff	Last done October 2021

Measurable Goals: Develop and implement employee training program; train employees twice annually. Evaluation of training is required to assess achieving the goals of the SWMP.

MCM 6: Pollution Prevention/Good Housekeeping
BMP 3: Develop and implement a municipal pollution prevention program

The City implemented this BMP in a staged approach. The City identified all municipal maintenance and operations activities and municipal facilities and then evaluated each for its potential to contribute to pollutant loading. To reduce the potential for pollutant loading, pollution prevention plans and activities were specified where needed.

Permit Requirement Citation: Section 6.6.

Activity: Evaluate City operations and maintenance activities and as well as City-owned facilities to determine if stormwater pollutants are being reduced to the maximum extent practicable.

Objective: Reduce the potential for pollutant discharge from municipal operations and maintenance activities as well as City-owned facilities.

Implementation Steps and Schedule:

Identify City operations and maintenance activities and facilities and prioritize for evaluation	January 2008 – August 2008
City Street Operations and Cleaning of 56 catch basins in the Pacific Ave at Priority Area	June 30, 2017
BMPs for Priority Area and Cleaning of the second catch basins segment at the Priority Area	June 30, 2018
Priority Areas 2,3 and 4 were cleaned	Spring of 2020
Priority Area 1 cleaned	Spring of 2021
Priority Area 5 cleaned	Spring of 2022
Priority Area 1 cleaned	Spring of 2023

Measurable Goals: Evaluate a minimum of eight City operations and maintenance activities and facilities over the permit period. Modify procedures for operations and maintenance activities as appropriate. Develop pollution prevention plans for City-owned facilities evaluated, as appropriate, providing employee training on pollution prevention plans. Catch basins at Colorado River were cleaned over three years program. In 2020 P.A.s two, three and four were cleaned. New cycle of stormwater collection system at P.A was continued in 2023. New construction standards for BMPs at the P.A will be introduced.

Additional Control Measure (ACM) No. 1: Specific BMPs for Reducing the Discharge of 303 (d)-Listed Pollutants

In its 2016 303 (d) Impaired Waters list, ADEQ designated the Colorado River segment from Main Canal (All American Canal) to Mexico border (a total of 32.2 mile segment) as impaired for high selenium concentration. The impairment has been categorized as "Impaired surface waters where a Total Maximum Daily Load (TMDL) analysis is required". The TMDL was scheduled, by ADEQ, to be initiated during year (2010). No TMDL is established up to June 30, 2012.

In January 2013 ADEQ conducted an audit of the City. A letter dated 4/5/2013 summarized the requirements of the audit visit. Part of the requirements from ADEQ was for the City to perform monitoring of 303(d) listed receiving water; provide sampling data collected from the Colorado River and to submit this data to ADEQ.

To meet the requirements of Part V.A.4 of General Permit Number AZG2002-002, Section 7.2 of the then permit, and the 4/5/2013 ADEQ letter, the SWMP was modified by adding this measure with its BMPs and measurable goals, to address reducing the discharge of 303(d)-listed pollutants from the City's MS4 to the waters of the U.S.

The City of Yuma recognizes the benefits of prevention and reduction of the discharge of 303 (d)-listed pollutants on scarce water resources, environment and health.

The City will implement the following BMPs to achieve this ACM:

1. Delineation of drainage areas and preparation of inventory of all stormwater collection system elements that contribute stormwater runoff to impaired waters. from City's MS4.
2. Incorporate BMPs that will capture discharges that may contribute to lower dissolved oxygen contents and/or higher concentrations of selenium from construction sites with potentials of discharge into impaired waters.
3. Incorporate post-construction design BMPs in the newly-constructed stormwater collection system to capture discharges that may contribute to lower dissolved oxygen contents and/or higher concentrations of selenium.
4. Educate development community about reduction of discharges from construction and developed sites to impaired waters.
5. Develop and implement surface water quality Monitoring Program that will perform visual monitoring, to the maximum extent practicable, of discharges of any storm that drops 0.1" of rain with potential of reaching the River. Monitoring is performed for selenium..
6. Monitoring Plan approved by ADEQ on 6/30/2017.
7. The City began testing in August 2017.

Responsible Department: Engineering Department

Responsible Position: Dave Wostenberg, P.E., City Engineer

Standard Operating Procedure (SOP)

The intent of this SOP is to describe the procedures that can be used to reduce the contribution of 303 (d) listed-pollutants from the City Municipal Separate Storm Sewer System (MS4) to Colorado River (River). This SOP offers the below steps to achieve this goal:

1. Require owners with construction sites that disturb one or more acres and located within ¼ mile of the River to develop and submit SWPPP and Monitoring Plan to the City. Owners must submit the same to ADEQ and obtain approval prior to start of construction.
2. Require owners to inspect construction sites that disturb one or more acres within ¼ mile of the River per the AZG 2013-001 or the current AZPDES Construction General Permit.
3. Perform selenium and sediment monitoring and any possible element or compound that may contribute to exceedance of selenium levels.
4. Require owners with post-construction discharge potential to install BMPs that will reduce selenium concentration.
5. Add areas within ¼ mile of the River to the stormwater map.
6. Use visual inspections of upstream points as a second step and document all results for future references.
7. Create a new Monitoring Program, containing its own SOP that utilizes visual monitoring to the maximum extent practicable. Testing will be required for all 303 (d) listed pollutants in the River.
8. Conduct inspections during dry weather periods using the Dry Weather Outfall Inspection Form.
9. Add new BMPs to reduce the introduction of the 303 (d) –listed pollutants to the Erosion Control Drainage Design Manual for Maricopa County, Arizona, as amended and to City Standards, and
10. Evaluate the program effectiveness and update the SWMP.

ACM 1: Specific BMPs for Reducing the Discharge of 303 (d)-Listed Pollutants
BMP 1: Delineation of Drainage Areas & Preparation of Inventory of Stormwater Collection System Elements with Discharge Potentials to Impaired Waters

This BMP is for delineating areas that may contribute runoff to impaired waters to identify the elements of the MS4 that may contribute to further deterioration of impaired waters. The City is delineating drainage areas with stormwater collection system connecting to the Colorado River outfalls. An inventory will be prepared of such affected collection system. The stormwater map will be updated with the same information.

Permit Requirement Citation: Section 1.4

Activities:

1. Delineate area (Priority Area) with potential to discharge into the River through City MS4,
2. Identify, in the Priority Area, elements of the stormwater collection system;
3. Create new inventory for above elements; and
4. Update the stormwater map taking into consideration newly-constructed CIP projects.

Objective: Delineate drainage areas that contribute to stormwater runoff, identify stormwater collection system at these areas, create inventory and update all elements of the stormwater collection system with potentials of discharging into Colorado River to prevent and reduce the discharge of 303 (d)-listed pollutants and other pollutants from the MS4 to the affected segment of Colorado River.

Implementation Steps and Schedule:

Delineate drainage areas that contribute runoff to the Colorado River	90% complete by 6/30/2014
Identify elements of MS4 emptying into the Colorado River	100% complete by 6/30/2014
Create new inventory for MS4 emptying into the Colorado River	June 2015
Update stormwater map to include priority areas	Completed in July 2017
Create an inventory for P.A including industrial facilities	Created starting in June 2015. 100% Expected by first half of 2019

Measurable Goals: Prepare an updated written inventory of all stormwater collection system that contributes stormwater runoff to the Priority Area of the Colorado River by the end of December 2015. P.A is added to the stormwater map with more details expected in the stormwater atlas of 2015. Inventory was reflected in stormwater map of 2015 with the latest constructed CIP, private projects and priority areas in these areas.

ACM 1: Specific BMPs for Reducing the Discharge of 303 (d)-Listed Pollutants
BMP 2: Reduce and Prevent Discharges of 303(d)-listed Pollutants from Construction Sites into Impaired Waters:

This BMP requires construction sites under the umbrella of the stormwater regulations to design and install BMPs that will prevent and reduce, to the maximum extent practicable, the introduction of 303(d)-listed pollutants from construction sites to the Colorado River or the MS4 with connection to the River.

Permit Requirement Citation: Section 1.4

Activities:

1. Delineate Priority Area (P.A.)
2. Require projects within P.A. that disturb one or more acres to submit SWPPP for approval,
3. Provide BMP plan for any construction, regardless of the area, that is located within 50 feet or less from the City stormwater collection system and in particular catch basins in the P.A.
4. Incorporate inspection requirement for at least 7 calendar days and within 24 hours of any 0.1 inch rain event
5. Apply requirements for both private and public projects
6. Monitoring Program to include recommended BMPs for construction sites

Objective: Delineate drainage areas that contribute to construction stormwater runoff, incorporate plan review requirements in the pre-development meetings, review SWPPP by City and get ADEQ approval for the same, include regular inspections requirements per AZPDES requirements. Requirements apply for both private and public projects.

Implementation Steps and Schedule:

Delineate areas within ¼ mile from the Colorado River	100% completed by 6/30/2014
Plan review requirements (SWPPP)	Went into effect since July 2012
Regular Inspection Program	December 2012
Require monitoring of any discharge results from 0.1” storm.	Visual monitoring to City stormwater outfalls at River started July 2014.
Requirements to apply for both public and private projects	In effect since July 2012. On-going throughout permit period.
Include BMPs for construction sites in the Monitoring Program	Completed recommended BMPs in 2019

Measurable Goals: Prepare and implement BMPs to reduce the introduction of selenium in the Colorado River as a result of Construction site activities. BMPs will utilize in-place City standard and new recommended BMPs will be selected per Analytical Monitoring Program.

ACM 1: Specific BMPs for Reducing the Discharge of 303 (d)-Listed Pollutants
BMP 3: Reduce and Prevent Discharges of 303(d)-listed Pollutants from Post-Construction Sites into Impaired Waters:

This BMP requires newly-developed sites under the umbrella of the stormwater regulations to design and install BMPs to prevent and reduce, to the maximum extent practicable, the introduction of 303(d)-listed pollutants from post-construction and re-development to the River or the MS4 with connection to the River.

Permit Requirement Citation: Section 6.5

Activities:

1. Delineate Priority Area (P.A.)
2. Incorporate plan review requirements in the building permit process for sites that disturb one or more acres,
3. Provide BMP plan for any post-construction discharge, regardless of the area, that is located within 50 feet or less from the City stormwater collection system and in particular catch basins in the P.A.
4. Specify permanent BMPs in the Monitoring Program for new facilities; and
5. Make Requirement consistent with AZPDES current post construction regulations.

Objective: Delineate Priority Area (P.A.) that contributes to stormwater runoff from newly-developed sites and sites with potential of discharging into the River. Identify stormwater collection system at these areas, create inventory and update all elements of the stormwater collection system with potentials of discharging into the River to prevent and reduce the discharge of 303 (d)-listed pollutants and other pollutants from the MS4 to the River.

Implementation Steps and Schedule:

Delineate drainage areas that contribute runoff to the Colorado River	June 2014
Identify elements of MS4 connected to the Colorado River	June 2014
Create new inventory for MS4 connected to the Colorado River	December 2014
Update stormwater map including new CIP projects in the same area	December 2014
Create new BMPs in the Monitoring Program	Completed BMPs in 2019

Measurable Goals: Create a post-construction program through plan review and implementation of other City post-stormwater regulations to reduce and prevent pollutants from stormwater runoff to the River. BMPs will depend on type of monitoring adopted in the Monitoring Program.

ACM 1: Specific BMPs for Reducing the Discharge of 303 (d)-Listed Pollutants
BMP 4: Educate Businesses, Development Community, Business Owners and Residents about Reduction of Stormwater Pollution to Impaired Waters:

This BMP increases the awareness of business owners, the development community and residents within the Riverfront area to reduce, to the maximum extent practicable, the introduction of stormwater pollutants and 303(d)-listed pollutants from locations with drainage potentials to the River.

Permit Requirement Citation: Section 6.5

Objective: Increase the awareness among residents and business owners about the reduction and prevention of stormwater pollutants at the area with potentials of draining into the River.

Implementation Steps and Schedule:

Delineate drainage areas that contribute runoff to the Colorado River through stormwater collection system	July 2014
Identify elements of MS4 emptying into the Colorado River	June 2015
Send educational letter to residents and businesses	Annually
Educational letters to development community and business owners about stormwater pollution effect on the impaired waters	Sent June 2013 and expected to continue once annually.
Training session for City staff about stormwater pollution in the P. A	Three training sessions for Building Safety, Utilities, Public Works and Engineering were completed through June 2018

Measurable Goals:
Educate residents, development community and business owners about the reduction and prevention of stormwater pollution into impaired waters. Legal issues will also be addressed in the education.

ACM 1: Specific BMPs for Reducing the Discharge of 303 (d)-Listed Pollutants
BMP 5: Introduction of Surface Water Quality Monitoring Program for Colorado River at Riverfront

In its 2006/2008 303 (d) Impaired Waters list, ADEQ designated the Colorado River (River) segment from the Main Canal to Mexico border (a 32.2-mile segment) as impaired due to high selenium levels and low dissolved oxygen. The impairment has been categorized as "Impaired surface waters where a Total Maximum Daily Load (TMDL) analysis is required". The TMDL was scheduled, by ADEQ, to be initiated during 2010. No TMDL has been established as of the date of this plan.

In January, 2013 ADEQ conducted a site visit audit review of the City's SWMP. (A letter dated 4/5/2013 has summarized the requirements of the audit visit). During the audit visit ADEQ required the City to establish a monitoring program and perform testing for 303(d) listed pollutants that discharge into the Colorado River (River) impaired segment; provide sampling data collected from the River and to submit this data to ADEQ.

To meet the requirements of the 2002 MS4 permit Part V.A.4 and Section 7.2 of the current permit, the City modified its SWMP by adding Additional Control Measure No. 1 (ACM No. 1) to address the issue of the impaired segment of the River as designated by ADEQ. Also, to address the 4/8/2013 ADEQ letter, the City added this Monitoring Program to prevent the exceedance of the 303(d)-listed pollutants to the River from the City's MS4.

As defined in Section 1.4.5 (a) of the Permit if a municipality discharges to a water for which a TMDL has been established then the municipality must monitor to determine if the stormwater controls are adequate to maintain compliance with the Permit's waste load allocation or load allocation. Since 2013 and in a cooperative effort with ADEQ, the City started developing a water quality monitoring plan to assess the effect of discharges of selenium and dissolved oxygen into the River. On June 29, 2017 and after rounds of review comments and meetings, ADEQ approved the Analytical Monitoring Plan (AMP) submitted by the City. In 2018 low dissolved oxygen has been removed from the 303(d) list and only selenium remains as the listed pollutant.

Permit Requirement Citation: Section 1.4.5 (a)

Activities: Create water quality monitoring program to reduce the discharge of selenium in the affected segment of Colorado River.

Objective: The purpose of this Program is to develop a water quality monitoring plan to prevent and reduce the discharge of stormwater pollutants, and in particular, the 303(d) listed pollutants (selenium) from the City's MS4. The City has multiple stormwater outfalls within the limited area that has a physical connection to the River. These 4 stormwater outfalls at the River: Madison Avenue, 9th Avenue, 17th Avenue and 19th Avenue.

The City recognizes its stewardship as a municipality to protect surface water resources; however, guidance from higher jurisdictions, such as ADEQ and EPA, is essential to satisfy such a role. Therefore, and per 40 CFR 122.34 and Section 1.4.5 (a) of the Permit, the City has chosen to conduct analytical monitoring based on testing by methods approved by EPA.

Implementation Steps and Schedule:

Develop water quality monitoring program	Part of the 2013-2014 Annual Report to ADEQ
Start Monitoring at River designated outfalls	July 2017 and on-going
Document and report to ADEQ	By 11/30/2017 and annually
Update monitoring program as needed	Update BMPs by evaluation or guidance by ADEQ
Update stormwater map to include detailed priority area information on each panel of the stormwater atlas	Atlas currently includes P.A. Parts of P.A added during 2015-2016 reporting period. All P.A by 2019.
Update stormwater map	Updated during permit period

Measurable Goals: Reduce the discharge of selenium by conducting regular monitoring at river outfalls.

ANNEXED LANDS TO THE MS4 WITHIN THE URBANIZED AREA

Per Permit Section 12 (a), the City must implement the SWMP in all new areas within the urbanized area, per the most recent Decennial census, added to the City portion for the MS4 not later than one year from addition of the new areas. MCM No. 1 through MCM No. 6 including ACM No. 1 are being implemented in annexed areas each year. Since all of these areas are county islands inside the City no new MCM or change in the MCMs is needed.

Also per Section V.G.1 (e) of the Permit no BMP is needed as of today to be implemented to address issues in the newly annexed lands. This statement is being provided each annual report. The similarity of land use and the common requirements within the City and Yuma County that requires on-site retention of all stormwater generated on site to infiltrate and percolate into the ground combine to make the quality of stormwater in the City and county islands quite similar. This will reflect no or minimal impact on the MS4.

Reporting Period 2003-2004

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Fruit Growers Supply	8.62	Commercial/light industrial	Stormwater on-site retention. No BMP required.
8th Street ESCH Properties	1.96		
YRMC 24th Street apartments east of Avenue C	18.86	Residential	Stormwater is retained on site through onsite and local retention basis. No BMP required. Development can be considered part of Ave C drainage system with no potential of discharging into Ave C.
Gila Ridge Road	6.4	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Avenue 3 ½ E and 36th Street	20.1	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Schoenherr Trust	30.0	Commercial/light industrial	Stormwater on-site retention. No BMP required.

Produce & Marine Industrial Park	314.3	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Hall Brothers	17.42	Residential	Stormwater on-site retention. No BMP required.
Avenue 9E and I-8	47.1	Commercial/ industrial	Stormwater on-site retention. No BMP required.
First Assembly of God Church	2.7	Commercial	Stormwater on-site retention. No BMP required.
American Cooling	9.1	Commercial	Stormwater on-site retention. No BMP required.

Reporting Period 2004-2005

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Trail Estates Unit # 4	20.0	Residential subdivision	Stormwater on-site retention. No BMP required.
Savant Estates	40.1	Residential subdivision	Stormwater on-site retention. No BMP required.
Barkley Property	28.3	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Trail Estates Units 5 & 6	93.1	Residential subdivision	Stormwater on –site retention. No. BMP required.
Pacific Avenue	10.1	Commercial	Stormwater on site retention. No BMP required.
40th Street and Avenue C	206.8	Residential subdivision	Stormwater is retained on site through onsite and local retention basis. No BMP required. Development can be considered part of Ave C drainage system with no potential of discharging into Ave C.

Reporting Period 2005-2006

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Yuma Storage	2.9	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Gila Ridge Road	107.3	Commercial/light industrial	Stormwater on-site retention. No BMP required.
1421 S. Avenue B	5.5	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Gila Ridge Road & Ave 4E	108.5	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Dr. Flores	1.7	Commercial	Stormwater on-site retention. No BMP required.
Castle Dome Avenue	232.8	Commercial	Stormwater on-site retention. No BMP required.
Avenue C and 12th Street	3.9	Residential	Stormwater on-site retention. No BMP required.
Marine Corps Air Station Boundary No. 2	75.5	Military	Stormwater on-site retention. No BMP required.
Marine Corps Air Station Boundary No. 2	948.1	Military	Stormwater on-site retention. No BMP required.
3rd Street subdivision	10.2	Residential subdivision	Stormwater on-site retention. No BMP required.
Country Lane (36th Street and 4th Avenue Extension)	36.9	Commercial	Stormwater on-site retention. No BMP required.
16th Street and Pacific Avenue (Kjar)	9.0	Commercial	Stormwater on-site retention. No BMP required.
Strenitzke Property at 32nd Street between Avenue 3 ½ E and Avenue 5E	12.3	Light industrial	Stormwater on-site retention. No BMP required.

Reporting Period 2006-2007

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
East of Avenue 8E, west of Avenue 8 ½ E, north of 44th Street and south of 42nd Street	104.0	Light industrial/commercial	Stormwater on-site retention. No BMP required.

Reporting Period 2007-2008

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
County island bounded by Arizona Avenue on west, Pacific Avenue on east between 34th Street and 36th Street	11.0	Light industrial	Stormwater on-site retention. No BMP required.
County island bounded by 10th Street on north, 12th Street on south, 1st Avenue on west and railroad track on the east	48.6	Commercial	Area drains to Pacific Avenue drainage area. Pacific Avenue discharges into the River and is being addressed into the Additional Control Measure No. 1
Area bounded by railroad track on north, 28th Street on south between Avenue 4 ½ E and Avenue 4 ¾ E	26.2	Light industrial	Stormwater on-site retention. No BMP required.
Area at the southeast intersection of 48th Street and Avenue 6E bounded on east by Avenue 6 ¼ E and at the south by 52nd Street	80.1	Light industrial	Stormwater on-site retention. No BMP required.

Reporting Period 2008-2009

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Northeast corner of the intersection of 16th Street & Arizona Avenue.	17.00	Commercial/light industrial	Stormwater on-site retention. No BMP required.
East of Arizona Avenue and south of 20th Street	34.28	Commercial/light industrial	Stormwater on-site retention. No BMP required.
East and west of the intersection of 8th Street and Avenue B	28.02	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Southwest corner of the intersection of 36th Street and Avenue C	19.34	Livingstone Ranch Residential subdivision	Stormwater is retained on site through onsite and local retention basis. No BMP required. Development can be considered part of Ave C drainage system with no potential of discharging into Ave C.
Northwest corner of the intersection of 48th Street and Avenue 6E	37.96	Residential subdivisions	Stormwater is retained on site through onsite and local retention basis. No BMP required. Development is located in the Mesa area where good hydrology exists.
North of 8th Street between Avenue C and Avenue D	61.0	Residential/Commercial	Stormwater on-site retention. No BMP required.
West of Avenue B and south of 1st Street	0.34	Residential	Stormwater on-site retention. No BMP required.

Reporting Period 2009-2010

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Area bounded by Pacific Ave on east, 22nd Street on south, railroad track on north and Arizona Ave on west	3,812.5	Commercial/light industrial	Stormwater on-site retention. No BMP required.

Area bounded by Ave 5E on west, Ave 6E on east, railroad track on south and 24th Street on north	282.3	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Area bounded by Maple Ave on east, one block to the west, 16th Street on north	20.0	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Area bounded by Arizona Ave on west, Pacific Ave on east, 18th Street on north	162.2	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Area between Ave 3E and Ave 4E at 24th Street	70.9	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Area between Pacific Ave and Maple Avenue north of 18th Street	63.4	Commercial/light industrial	Stormwater on-site retention. No BMP required.

Reporting Period 2010-2011

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Area bounded by 32nd Street on north at Avenue 3 ½ E	43.6	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Area bounded by 40th Street on north at Avenue 4 ½ E	5.0	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Area bounded by Avenue B on west and 30th Street on south	6.40	Residential	Stormwater on-site retention. No BMP required.
Area located at the southeast corner of the intersection of 16th Street and Pacific Avenue	2.0	Commercial	Stormwater on-site retention. No BMP required.
Area bounded by 32nd Street on north and Avenue 8 ½ E on west	16.0	Commercial	Stormwater on-site retention. No BMP required.
Area bounded by Union Pacific Rail Road right of way on north at Pacific Avenue	6.7	Commercial	Stormwater on-site retention. No BMP required.

Reporting Period 2011-2012

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Area bounded by railroad track on north and by Arizona Avenue on east and 20th Street on west	27.0	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Southwest corner of the intersection of Avenue 4E and 32nd Street	27.7	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Triangular area at the north side of the intersection of Pacific Avenue and 22nd Street	6.7	Commercial/light industrial	Stormwater on-site retention. No BMP required.

Reporting Period 2012-2013

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Area bounded by Ave B on east, 31st Drive on west and 27th Street on north	2.1	Commercial/light industrial	Stormwater on-site retention. No BMP required.
Southwest corner of the intersection of Avenue C and 24th Street bounded by Ave C ½ on west and 28th Street on south	155.3	Commercial/light industrial	Stormwater on-site retention. No BMP required.

Reporting Period 2013-2014

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Area bounded by 45th Ave and 46th Drive on east, Ave D on west, 8th Street and 12th Street on south, and 5th Street on north	142.0	Commercial/light industrial	Stormwater on-site retention. No BMP required.

Reporting Period 2014-2015

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Area bounded by Ave 10E at east, Salida Del Sol Ave on west, 40th Street on south, and 36th Street on north	64.0	Commercial/light industrial	Stormwater on-site retention. No BMP required.

Reporting Period 2015-2016

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Area bounded by Ave B at west, north of Sonic Restaurant, south of Tuscany Plaza	5.0	Commercial	Stormwater on-site retention. No BMP required.

Reporting Period 2016-2017

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Area at the northeast corner of the intersection of Ave B and 15th Street	25.0	Commercial	Stormwater on-site retention. No BMP required.
Area at the intersection of Pima Lane and 8th Street	0.5	Residential	Stormwater on-site retention. No BMP required.

Reporting Period 2017-2018

Description of Land Annexed	Total Area in Acres	Land Use	Need for Implementation of New BMP
Area at the northeast corner of the intersection of 24th Street and Ave 5-1/2 E	114	Commercial	Stormwater on-site retention. No BMP required.
Area at the southeast corner of the intersection of 40th Street and Ave 3E	3.27	Commercial	Stormwater on-site retention. No BMP required.

Reporting Period 2018-2019

Total Area in Acres	Need for Implementation of New BMP
51.32	BMPs as required by Permit

Reporting Period 2019-2020

Total Area in Acres	Need for Implementation of New BMP
74.33	BMPs as required by Permit

Reporting Period 2020-2021

Total Area in Acres	Need for Implementation of New BMP
11.58	BMPs as required by Permit

Reporting Period 2021-2022

Total Area in Acres	Need for Implementation of New BMP
37.10	BMPs as required by Permit

Reporting Period 2022-2023

Total Area in Acres	Need for Implementation of New BMP
40.55	BMPs as required by Permit

APPENDIX A

STANDARD OPERATING PROCEDURES

Appendix A1

Standard Operating Procedure for Illicit Discharge Detection and Elimination Program

This SOP describes the procedures that can be used to support Chapter 194 of Yuma City Code "Illicit Discharge Detection and Elimination (IDDE)". The IDDE program is intended to protect the City Municipal Separate Storm Sewer System (MS4) from illicit discharges and illegal dumping. This SOP offers the below steps to identify, locate and eliminate or reduce the illicit discharge and dumping into the City MS4. This SOP will be revised with the SWMP as necessary. The City is implementing the following steps:

1. Locate important areas and locations likely to have illicit discharges with proximity to the City MS4 and surface waters. The following will be classified as priority areas:
    A. All stormwater outfalls at the Colorado River. This area includes all drainage areas that contribute to outfalls at the River. Use of previous drainage studies and land use will be utilized to better identify drainage areas.
    B. Shopping malls, educational facilities, exposed areas with proximity to Colorado River or with potential of discharging into the River.
    C. Areas within 2.5 miles of the Colorado River.
    D. Areas with historical or previous citizen complaints of dumping and littering; and
    E. As designated by the Director of Public Works.
2. Perform annual inspections of all stormwater outfalls at the surface waters per the Dry Weather Outfall Inspection Form.
3. Perform selenium and sediment monitoring per approved Analytical Monitoring Program, for any illicit discharge incident or during dry weather monitoring at outfalls at the Colorado River.
4. All important areas mentioned above have been included in the current stormwater map/atlas.
5. Review and consider information collected when illicit discharge was initially identified in a previous incident or dry weather inspection.
6. Use visual inspections of upstream points as a second step (first step is the dry weather monitoring inspection) and document all results for future references.
7. Review procedures to remove the source of an illicit discharge.
8. Refer potential septic system failures to the local health office for enforcement.
9. Suspend public access to storm drain if threats to public health or serious physical harm to the public or the environment are possible.

10. Perform opportunistic inspections by Public Works and Utilities staff crews while they are conducting their duties in and around the stormwater collection system. Staff is encouraged to contact dispatcher, supervisor, or code enforcement if they see evidence of an illicit discharge or illegal dumping into the storm drain.
11. Perform inspections by Building Safety staff, take photos and send email to storm@yumaaz.gov documenting the case. This email is monitored by the Engineering Inspection Supervisor, with backup monitoring by the Development Engineering Manager and City Engineer.
12. Hotline at 928-373-4520 (Engineering front desk) is available to receive reports of illicit discharges and illegal dumping into the MS4.
13. When a complaint is received it is dispatched to Engineering Inspections or the Engineering Development Manager. Engineering staff will contact the appropriate City staff for follow-up until the case is resolved per the Enforcement Response Plan. Engineering will document the case per table in Appendix E.
14. Evaluate the IDDE program effectiveness and update the SWMP, as needed.
15. Plan, coordinate and perform a campaign to clean the Priority Area with City and public participation.

Appendix A2

Standard Operating Procedure for Construction Site Runoff Control Program

This SOP describes the procedures to be used to support Chapter 156 of Yuma City Code "Erosion and Sediment Control." This SOP offers procedures for inspections and enforcement of control measures at construction sites that fall under the umbrella of Ordinance O2006-38. This SOP will be revised with the SWMP as necessary. For construction sites located within ¼ mile of the impaired segment of Colorado River, refer to AMC No. 1 on this SWMP. The City is implementing the following steps:

1. Prior to inspection, the City inspector will:
   - A. Contact owner/contractor superintendent or project manager
   - B. Bring camera, project file, and Personal Protective Equipment in accordance with City Policy.
   - C. Bring the SWPPP Construction Site Inspection Checklist for private development or CIP projects.
   - D. Review previous inspection reports to determine reoccurring problems.
   - E. Identify if the project is located within ¼ mile of the Colorado River's impaired segment.

2. At the construction site, and before starting inspection, the City inspector will:
   - A. Ensure that the project information sign is installed per City Construction Standard No. 8-100 (Work Zone Identification Sign) with the AZPDES approval number and date.
   - B. Verify that SWPPP plans and narrative report, NOI and Permit No. AZG2021-002, as updated, are on site and accessible,
   - C. Verify that all routine inspections, required by Contractor, are conducted with reports available on site and accessible. Routine inspections are conducted every 14 calendar days and within 24 hours of a previous storm 0.5 inches or more
   - D. Review previous inspection reports to determine reoccurring problems,
   - E. Review SWPPP changes or modifications from last inspection and whether such changes and modifications are updated in the SWPP report and plans,
   - F. Review status of any corrective actions or deficiencies by State or City listed in the latest inspection report,

G. Discuss with the owner representative, Contractor superintendent or project manager any complaint or incident that has occurred after the latest inspection,

3. At the construction site the City inspector will, at minimum, perform the following:

   A. Record time that inspection of BMPs starts and weather information such as temperature, rainfall within the last 72 hours, wind and clearness or cloudiness of sky.

   B. Determine if the site has evidence of release of any discharge from its boundaries,

   C. Determine if all BMPs are installed correctly and maintained adequately per the SWPPP report and plans. BMPs include erosion control measures, sediment control measures and good housekeeping measures

   D. Take photographs of BMPs. The photo must indicate date and time of inspection and comment on the BMP.

4. Before leaving the site, the City inspector will:

   A. Discuss with the owner, contractor or project manager of the SWPPP the effectiveness of current controls and if modifications are needed.

   B. Identify a time frame for making modifications on site and SWPPP report and plans,

   C. Discuss with the owner, contractor or project manager any compliance or enforcement issues.

5. As a follow up after inspection, the City inspector will:

   A. Check the adequacy of SWPPP Construction Site Inspection Checklist for private development.

   B. Send documents to building inspectors for certificate of occupancy coordination.

   C. City Engineering Inspectors will conduct SWPPP inspections per the CIP project Checklist. Records will be sent to City Engineer.

   D. Follow up on corrective actions and SWPPP report and plans modifications; and

   E. Contact City code enforcement and State for compliance and enforcement if needed.

6. City Engineer will evaluate the SOP and program effectiveness and update the SWMP, as needed.

Appendix A3

Standard Operating Procedure for Post-Construction Site Runoff Control Program

This SOP describes the procedures used to support Chapter 195 of Yuma City Code "Post-Construction Stormwater Runoff." and to ensure that post-construction and developed sites that fall under this Section are:

1. Having SWPPP designed per the Plan Review Checklist; and
2. Being inspected to ensure that the measures indicated in the SWPPP are installed adequately and meeting their intended design goals.

This SOP will be revised with the SWMP as necessary. For post-construction and developed sites located within ¼ mile of the impaired segment of Colorado River, refer to AMC No. 1 in this SWMP. Below are the required procedures for inspections and enforcement of BMP control measures at post-construction and developed sites that fall under the umbrella of Section 195 of Yuma City Code:

1. Prior to inspection, the City inspector will:
   a) Contact owner/contractor superintendent or project manager
   b) Bring camera, project file and Personal Protective Equipment to the site
   c) Bring the SWPPP post-construction inspection Checklist
   d) Review previous inspection reports to determine reoccurring problems
2. At the post-construction site the City inspector will, at minimum, inspect the following:
   a) Record starting time, ambient temperature, rainfall within the last 72 hours, wind and clearness or cloudiness of sky
   b) Ensure that the site does not have evidence of releasing any discharge from its boundaries
   c) Take photographs of effective BMPs and BMPs that need evaluation or replacement. The photo must indicate date and time of inspection and comment on the BMP.
3. Before leaving the site, the City inspector will:
   a) Discuss with the owner the effectiveness of current controls and if modifications are needed in the SWPPP
   b) Identify a time frame for making modifications on site and SWPPP report and plans
   c) Discuss with the owner any compliance or enforcement issues needed
   d) Ensure that all BMPs are installed correctly and performing their intended goals
4. After conducting the inspection, the City inspector will:
   a) Fill the SWPPP checklist and fax or email to the owner within 3 working days
   b) Follow up on corrective actions and SWPPP report and plans modifications

c) Contact City code enforcement for compliance and enforcement if needed, and
d) Evaluate the SOP and program effectiveness and update the SWMP

Appendix A4

Standard Operating Procedure for Reducing the Discharge of 303 (d) Listed Pollutants

The intent of this SOP is to describe the procedures that can be used to reduce the contribution of 303 (d) listed-pollutants from the City Municipal Separate Storm Sewer System (MS4) to Colorado River (River). This SOP offers the below steps to achieve this goal:

1. Require owners with construction sites that disturb one or more acres and located within ¼ mile of the River to develop and submit SWPPP and Monitoring Plan to the City. Owners must submit the same to ADEQ and obtain approval prior to start of construction.
2. Require owners to inspect construction sites that disturb one or more acres within ¼ mile of the River per the AZG2021-002.
3. Perform selenium and sediment monitoring and testing.
4. Require owners with post-construction discharge potential to install BMPs that will reduce selenium.
5. Add areas within ¼ mile of the River to the stormwater map.
6. Use visual inspections of upstream points as a second step and document all results for future references.
7. Create a new Monitoring Program, containing its own SOP that utilizes visual monitoring to the maximum extent practicable. Testing will be required for all 303 (d) listed pollutants in the River after ADEQ establishes the TMDLs.
8. Conduct inspections during dry weather periods using the Dry Weather Outfall Inspection Form.
9. Add new BMPs to reduce the introduction of the 303 (d) –listed pollutants to the Erosion Control Drainage Design Manual for Maricopa County, Arizona, as amended and to City Standards, and
10. Evaluate the program effectiveness and update the SWMP.

APPENDIX B

ANNUAL SWMP EVALUATION CHECKLIST

APPENDIX C

UNPERMITTED INDUSTRIAL & CONSTRUCTION DISCHARGES TO THE MS4

APPENDIX D

ANALYTICAL MONITORING PLAN

APPENDIX E

ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

APPENDIX F

ENFORCEMENT RESPONSE PLAN