#### Recertification Notice of Intent (NOI)

### Regulated Small Municipal Separate Storm Sewer Systems (MS4's) General Permit ARR040000

You must complete, certify, and sign this Recertification Notice of Intent (NOI) form and return it along with the updated Stormwater Management Program (SWMP) to the Department in order to continue permit coverage under the General Permit ARR040000. You must submit this form no later than July 1. 2019. Please keep a copy of this form for your records once completed and signed.

Permit Tracking Number	AFIN
	88-01536
	Permit Tracking Number ARR040062

If any changes or additions need to be made to the information shown below, please update the new information in the corrections section below and/or attach documentation.

	Current Information in ADEQ's database	Corrections/Additions, If Needed
Small MS4 Physical Address	400 N. Broadway	
County	Benton	
Urbanized/Core Areas	Siloam Springs	
Receiving Stream	unnamed trib.	
Ultimate Receiving Stream	Sager Creek	
Contact Person & Title	Phillip Patterson, City Administrator	
Telephone Number		
Cognizant Official & Title	Justin Bland, City Engineer	
Responsible Official & Title	Phillip Patterson, City Administrator	

Are the mailing and inv	voice addresses the same?	
Yes or No*	*If "No," please provide invoice address:	
Additional Comments:		
-		

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

I certify that I have read and will comply with all the requirements of the Regulated Small Municipal Separate Storm Sewer Systems (MS4's) General Permit ARR040000.

> Responsible Official Name: Phillip Patterson Responsible Official Title: Responsible Official Signature: Date:

City Administrator

Return the NOI form to the address below or send it electronically to: water.permit.application/a adeq.state.ar.us or via ePortal at the following web address: https://eportal.adeq.state.ar.us/

> NPDES Permits Section, Office of Water Quality Arkansas Department of Environmental Quality **5301 Northshore Drive** North Little Rock, AR 72118-5317

# STORM WATER MANAGEMENT PROGRAM



# **City of Siloam Springs, Arkansas**

400 N. Broadway St. P.O. Box 80 Siloam Springs, AR 72761

# Small Municipal Separate Storm Sewer Systems (MS4) Phase II MS4 Permit No. ARR040000

DECEMBER 2016 REVISED AUGUST 2018

Prepared By:

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## **Acronyms**

ADEQ Arkansas Department of Environmental Quality

BMP Best Management Practice

CWA Clean Water Act

EPA Environmental Protection Agency

MEP Maximum Extent Practicable

MCM Minimum Control Measure

MS4 Municipal Separate Storm Sewer System

NPDES National Pollutant Discharge Elimination System

SWMP Storm Water Management Program

SWPPP Storm Water Pollution Prevention Plan

#### 1. BACKGROUND AND CONTEXT

The Siloam Springs' Storm Water Management Program (SWMP) has been developed to provide policy and management guidance for activities affecting stormwater throughout the City of Siloam Springs. It is intended to help fulfill certain State and Federal water quality requirements and to meet local water resources management objectives. With the implementation of the policies and management practices embodied in the SWMP, the City of Siloam Springs hopes to preserve urban stormwater quality which would otherwise negatively impact local rivers and streams, and to develop and preserve the urban drainage infrastructure in a manner that meets the community's needs for years to come.

While the State and Federal regulatory programs place significant emphasis on improving water quality and the health of Arkansas's watersheds, Siloam Springs, as part of the Illinois River Watershed, further emphasizes the need for local management of urban stormwater and waterways. It becomes even more important that management of these resources occur in a manner that minimizes destructive long-term impacts to drainage infrastructure and the natural features that help protect water quality and control flooding.

#### 2. DESCRIPTION OF THE PERMIT AREA

The City of Siloam Springs (The City) currently serves a population of 15,039 people (2010) within the city limits. The geographic boundaries of the MS4 plan are the City limits and the service area for stormwater planning encompasses approximately 11.25 square miles. The City has complete authority and responsibility for planning, building, operating, maintaining and regulating the stormwater drainage system within the city limits. Therefore, the MS4 NPDES permit for which this MS4 plan is submitted covers only the area within the city limits. The area includes Sager Creek and its tributaries as well as an assortment of un-named tributaries to the Illinios River which is south of the service area. The City's stormwater management practices have evolved to include efficient and cost-effective approaches that reduce or eliminate stormwater pollution and protect the riparian (stream bank) areas of open waterways. These approaches provide natural pollutant removal and stormwater management capacity. However, the City has never before had a SWMP intended to provide comprehensive stormwater management guidance for the City organization. In 2015, the City Council endorsed the proposed Stormwater Management and Drainage Manual by Ordinance No. 15-03. The goals in this manual have served as a guide for the City's efforts to develop this SWMP and other related water resource management efforts.

#### 3. PURPOSE, SCOPE AND AREAS OF FOCUS

The purposes of the SWMP are threefold. First, the SWMP characterizes the City's entire stormwater drainage system, including both the open and piped systems, their connections to the streams, and the overall condition of the system. This characterization is necessary to address relevant State and Federal regulatory requirements and it provides baseline information on which to develop focused stormwater management strategies. Second, the SWMP establishes goals, policies and implementation actions that will achieve the City's long-term objectives in a way that is understandable to the public, usable by City staff, and meets regulatory needs. Finally, the SWMP establishes a means for measuring, reporting and adaptively managing the City's water resources, by presenting benchmarks that will ensure meaningful progress, as well as ensuring compliance with applicable laws and permit requirements.

The SWMP addresses stormwater quality management policies and management practices that are, and/or will be implemented in the City. The scope of the SWMP is determined primarily by the Federal MS4 permit requirements, but is intended to address local water resources issues as well. These areas of focus in the SWMP include:

• Pollution incidents and unlawful (illicit) discharges to the City's stormwater drainage system. These discharges can be systematic (recurring) or episodic (occasional or one-time) discharges,

and include pollutant runoff from parking lots, discharges from industrial outfalls, accidental spills, poor construction site management, and a variety of ways people dump pollutants into street gutters or catch basin.

- On-site management of stormwater to reduce the quantity of stormwater and pollution
  entering the drainage system. Similar to illicit discharges, events that cause flooding, system
  surcharges, or ongoing pollutant loading can occur downstream from the city limits, and
  originate from a variety of causes. These include inadequacies in the type and design of
  infrastructure, inadequate maintenance, insufficient erosion and/or sediment control practices,
  and increases in impervious area without provision for on-site infiltration of stormwater into the
  ground. The City regulates these issues through implementation of the Siloam Springs
  Municipal Code and the Stormwater Management and Drainage Manual within the city limits.
- Reduction and prevention of pollution at City facilities and resulting from City activities and business practices. The City provides services with a potential for creating water pollution, erosion, and sedimentation. These include field activities such as ditch cleaning and excavation/maintenance activities, as well as activities at City facilities, such as vehicle washing and maintenance, painting, and material handling. The Federal NPDES SWMP requires the City to implement pollution prevention practices that reduce or eliminate stormwater pollution from City activities
- Public education geared toward broad community stewardship of water resources. The
  Federal NPDES SWMP places significant emphasis on public education as part of the long term
  solution to stormwater pollution. As such, education is a required element of the SWMP. The
  long-term success of the City's efforts will hinge on increased awareness and stewardship
  throughout the community.
  - The SWMP will result in formal, organized educational and outreach efforts that are targeted broadly throughout the metropolitan area.
- Public awareness and involvement in the City's Stormwater Management Program.
   Broad awareness and participation in the development and implementation of the SWMP by residents and local area businesses is a key component to ensure effectiveness of the SWMP.
   The SWMP includes a public involvement component in its development that meets the Federal NPDES program.
- ADEQ required Municipal Separate Storm Sewer System (MS4) Plan elements. The NPDES Stormwater Program requires that the City submit a MS4 plan in order to acquire a MS4 permit to legally discharge stormwater to the waters of the U. S.

The Federal rules and, therefore, ADEQ's permit requirements, direct that the City's MS4 plan address six minimum areas, which are termed "Minimum Control Measures." These areas are broadly titled in the rules as follows:

- 1. Public Education and Outreach on Stormwater Impacts;
- 2. Public Involvement/Participation;
- 3. Illicit Discharges Detection and Elimination;
- 4. Construction Site Stormwater Runoff Control;
- 5. Post-Construction Stormwater Management in New Development and Redevelopment; and
- 6. Pollution Prevention/Good Housekeeping for Municipal Operators.

Under each of these areas described above, the City's MS4 plan must contain the following information:

 The structural and nonstructural Best Management Practices (BMPs) that the permittee or another entity will implement for each of the stormwater Minimum Control Measures;

- The measurable goals (Benchmarks) for each of the BMPs including, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action; and
- The person or persons responsible for implementing or coordinating the BMPs for the permittee's MS4 plan.

In addition to the requirements listed above, the permittee must provide a rationale for how and why each of the BMPs is selected and measurable goals for the permittee's SWMP.

Stormwater Best Management Practices (BMPs) is a *catch-all* term for approaches to managing stormwater that reduce negative impacts of runoff on the receiving streams. While the term has become widely used by the regulatory agencies and throughout the stormwater management industry, it does not imply that each BMP is necessarily the "Best" at achieving a particular stormwater management objective. BMPs are alternatives to practices that reduce the water quality and flow management functions and benefits of the open drainage system such as piping, filling or hardening open drainage ways. BMPs include, but are not limited to:

- physical structures or created natural features such as wetlands or ponds that improve water quality and/or attenuate flow;
- maintenance or construction practices that prevent erosion, control sedimentation, and reduce pollution entering runoff;
- educational strategies that inform the public, developers, business/industry, etc. on stormwater pollution prevention;
- regulations and enforcement programs that protect water quality;
- protection of open drainage ways for stormwater treatment and conveyance, and maintaining adjacent (riparian) buffers to provide natural stormwater filtration, cooling and long term channel stability and other stormwater management functions; and the avoidance of piping, filling, or deteriorating the condition of open drainage ways.

#### 4. OVERVIEW OF SILOAM SPRINGS'S STORMWATER DRAINAGE SYSTEMS

The City is responsible for implementing surface water management activities within its boundaries, including the planning, design, construction, operation, and maintenance of the stormwater drainage system. The City performs all operation and maintenance on the public drainage system that is designed and constructed to City standards and located within easements or rights-of-way, or real property that has been conveyed or dedicated to the City. The City also maintains open channels throughout the city, and public outfalls to natural streams within the City's jurisdiction. The geographic area covered by this program includes approximately 11.25 square miles inside the Siloam Springs city limits.

#### 5. STORMWATER DRAINAGE BASIN CHARACTERIZATION

The City's stormwater drainage system has two major drainage routes, Sager Creek and the Illinois River. The City is further broken down into several separate tributaries to these streams. A drainage basin can be described as a geographic area within which stormwater drains from many small systems converge on a larger drainage way, ultimately culminating in outfalls to the major drainage way. The character and condition of the drainage way varies significantly throughout the basins, depending on surrounding land uses and contributing drainages.

#### 6. GOALS, POLICIES & IMPLEMENTATION ACTIONS

This section provides overall guidance to the City in performing stormwater management activities in a manner consistent with State and Federal laws, while meeting local goals and the long-term outcomes

the City hopes to achieve. The following goals are derived from long-term key outcomes that have been reviewed. The policies provide specific direction, consistent with the local goals, and State and Federal requirements. Implementation actions include BMPs discussed in detail in the MS4 plan and other actions needed to achieve local objectives. The work plan for completion of Implementation Actions is in the SWMP Implementation Action Summary.

#### **GOAL 1: PROTECT CITIZENS AND PROPERTY FROM FLOODING**

#### **Policies**

- 1.1 Maintain surface drainage in the City to reduce the threat of flooding, through proper maintenance of the stormwater drainage system infrastructure, with practices that are protective of water quality.
- 1.2 Through the development review process, ensure that new development incorporates adequate stormwater management infrastructure to avoid downstream capacity and water quality problems.
- 1.3 Preserve open stormwater drainage where feasible, to best accommodate peak storm flows, maintain flood storage capacity, and promote water quality.
- 1.4 Adhere to standards, policies, and practices which comply with Federal Emergency Management Agency (FEMA) Flood Management Program requirements to ensure that the City maintains flood insurance coverage under this program.

#### **Implementation Actions**

- 1.a Continue evaluation of City maintenance practices and implement appropriate BMPs to assure that the City adequately maintains the stormwater drainage system capacity in an environmentally responsible manner.
- 1.b Evaluate and refine the City's drainage program, including educational outreach, inspection, and enforcement components to reduce the negative stormwater impacts from land alteration, erosion, sedimentation, and excessive runoff.
- 1.c Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to ensure that the public is aware of the importance of preventing pollution from entering the streams and water bodies of the State.
- 1.d Implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Control, to minimize or eliminate erosion and sedimentation in the stormwater drainage system.
- 1.e Implement BMPs consistent with NPDES Minimum Control Measure #5, Post Construction Stormwater Management for New Development and Redevelopment, to ensure that new development is in compliance with flow-regulating management practices, such as detention ponds, on-site stormwater storage, etc.
- 1.f Implement BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, to ensure adequate maintenance of the stormwater system.

# GOAL 2: IMPROVE SURFACE AND SUB-SURFACE WATERS FOR AQUATIC LIFE AND OTHER BENEFICIAL USES

#### **Policies**

2.1 The City will monitor and implement practices and regulatory programs with the objective of improving surface and groundwater quality to, at a minimum, meet State water quality standards, adequately protect threatened and endangered wildlife, and meet the State beneficial use guidelines.

2.2 The City will maintain its open channels and waterways in a manner that is protective of their natural stormwater management and habitat functions for the benefit of the citizens of the City, local wildlife, including threatened or endangered species, and future generations.

#### **Implementation Actions**

- 2.a Promote pollution protection educational efforts, including signage, development project review, and public outreach.
- 2.b Enhance erosion and illicit discharge detection and compliance efforts, including permitting and Code enforcement.
- 2.c Implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to enhance citizens' and businesses' knowledge regarding water quality regulations as well as the benefits to the community from properly functioning waterways.
- 2.d Implement BMPs consistent with NPDES Minimum Control Measure #3, Illicit Discharges Detection and Elimination, to eliminate or minimize toxic discharges from business and industry.
- 2.e Implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Runoff Control, to minimize sedimentation and channel degradation from construction sites.
- 2.f Implement BMPs consistent with NPDES Minimum Control Measure #5, Post-Construction Stormwater Management for New Development and Redevelopment, to ensure long-term functioning of newly-developed sites.
- 2.g Implement BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, to ensure that the stormwater drainage system is maintained in properly functioning condition.

#### **GOAL 3: PRESERVE AND MAINTAIN SURFACE WATERS, WETLANDS, AND RIPARIAN AREAS**

#### **Policies**

- 3.1 Through the development review process, the City will ensure that development is protective of significant open waterways, wetlands, and riparian areas.
- 3.2 The City will implement permitting programs, educational outreach, compliance inspections and enforcement activities as needed to reduce erosion, sedimentation, illicit discharges, and other pollution impacts to the City's waterways.

#### **Implementation Actions**

- 3.a The City will review and refine its drainage program as necessary, which addresses erosion, sedimentation, and the impacts of land alteration, including permitting, inspections, technical educational and outreach, and enforcement.
- 3.b The City will review development proposals for impacts on open drainage ways, wetlands, and riparian areas, and protect the functions and benefits of these areas as provided for in the Code of Ordinances.
- 3.c The City will work cooperatively with citizens, businesses, and agencies to protect and improve surface waterways, seek opportunities for stewardship partnerships, further enhance educational opportunities, and continue participation in intergovernmental work groups.
- 3.d The City will implement and continue to refine/improve BMPs for City activities with potential to impact water quality and/or the functions of waterways, wetlands, and riparian areas.
- 3.e The City will implement BMPs consistent with NPDES Minimum Control Measure #4, Construction Site Stormwater Runoff Control, to reduce or eliminate sedimentation from construction sites as a contributor to poor water quality and quantity management.

- 3.f The City will implement BMPs consistent with NPDES Minimum Control Measure #5, Post-Construction Stormwater Management for New Development and Redevelopment, so new development at a minimum maintains the functioning of the stormwater drainage system, and doesn't contribute to future degradation.
- 3.g The City will implement BMPs consistent with NPDES Minimum Control Measure #6, Pollution Prevention in Municipal Operations, which is critical to maintaining properly functioning wetland and riparian areas and open channels.

# GOAL 4: TO FURTHER CITIZENS, BUSINESSES, AND INDUSTRIES UNDERSTANDING OF THE NEED TO PROTECT WATER QUALITY

#### **Policies**

- 4.1 The City will develop targeted education and outreach and technical assistance programs regarding practices and obligations for keeping debris and pollutants out of the stormwater drainage system and train stakeholder groups in appropriate erosion control and sediment prevention practices, as well as stormwater management BMPs.
- 4.2 The City will seek to form partnerships with neighborhoods or groups interested in providing stewardship of local waterways.
- 4.3 The City will develop, implement, and enforce appropriate building, design, and Municipal Codes to address water quality compliance issues, including pollution, habitat, and aesthetic issues, to encourage the development of urban waterways that are positive amenities in the community.

#### **Implementation Actions**

- 4.a The City will continue to support outreach and education efforts regarding water quality, riparian and wetland areas, including business, contractor, and developer outreach programs to educate these parties about their impacts on stormwater quality.
- 4.b The City will continue to maintain enforcement and compliance activities, including inspections, technical assistance, and Code enforcement.
- 4.c The City will implement BMPs consistent with NPDES Minimum Control Measure #1, Public Education and Outreach on Stormwater Impacts, to engage the public in the efforts to create positive urban amenities.
- 4.d The City will implement BMPs consistent with NPDES Minimum Control Measure #3, Illicit Discharges Detection and Elimination, to ensure that waterways are safe, meet State water quality standards, and can function as positive amenities.

#### **GOAL 5: URBAN DRAINAGE WAYS BECOME COMMUNITY AMENITIES**

#### **Policies**

- 5.1 The City will conduct education and outreach activities to appropriate target groups to increase understanding of the importance of maintaining safe and clean drainage ways, and to seek volunteers to be caretakers for water features near them.
- 5.2 The City will, through its Code of Ordinances, protect existing significant open waterways and encourage site planning and landscaping that enhances the attractiveness and natural functions of the water features.
- 5.3 The City will maintain urban drainage ways in a manner that provides for safe and attractive conditions within the limits of its fiscal constraints.

#### **Implementation Actions**

City of Siloam Springs Storm Water Management Program Revised August 2018

- 5.a Enhance the City's erosion control program, including educating developers and the community regarding the positive aspects of open waterways to promote acceptance, and integrating effective compliance and enforcement components.
- 5.b Provide adequate funding within the City's restraints for public maintenance of the stormwater drainage system, and ensure ongoing maintenance of private stormwater features through development agreements.
- 5.c Increase educational outreach to schools to increase awareness of children regarding the need to keep litter and pollutants out of urban drainage ways.
- 5.d Implement all six of the NPDES Minimum Control Measure BMPs. Implementing all of the provisions of the SWMP will ultimately result in improved water quality and quantity management, improved habitat and resource protection, and, ultimately, enhance urban waterways as desirable community amenities.

#### 7. SILOAM SPRINGS'S NPDES MS4 PROGRAM

#### **City Stormwater Management Program Responsible Parties:**

The City is responsible for implementing surface water management activities within its boundaries, including the planning, design, construction, operation and maintenance of the stormwater drainage system. In response to the NPDES Phase II stormwater requirements, the City has developed a MS4 plan addressing each of the six required Minimum Control Measures, as specified in the Federal-NPDES Phase II rules. The City's stormwater management program is the responsibility of the Building and Street Department. However, the implementation of the City's MS4 plan will extend throughout the City organization by implementing a Stormwater Pollution Prevention Team with representatives from Police, Fire, Community Development, Public Works and Electric Departments. Each Department's task would be recognizing the stormwater issues of their facility, the field work they do, and documenting data for both positive and negative events that are stormwater related that previously went unnoted. Negative findings will be enforced by various Departments of City Enforcement and the City Code of Ordinances.

#### **City of Siloam Springs Organizational Chart** CITIZENS OF SILOAM SPRINGS DISTRICT COURT JUDGE MAYOR AND BOARD OF DIRECTORS BOARDS AND COMMISSIONS CITY ADMINISTRATOR Planning and Zoning Commission General Administration Board of Adjustment - Economic Development Parks Advisory Board CITY ATTORNEY - Legal Reviews CITY CLERK/LEGAL ASSISTANT Official Records Certifications Seal/Attest Official Records Assists City Attorney **HUMAN RESOURCES** Employee Relations - Recruitment Benefits Administration - Job Analysis PUBLIC WORKS DEPARTMENT POLICE DEPARTMENT FIRE DEPARTMENT COMMUNITY DEVELOPMENT ELECTRIC DEPARTMERNT FINANCE DEPARTMENT - Water - Patrol - Fire Prevention Planning Electric Utility Financial Reporting and Budget - Wastewater - Criminal Investigations - Fire Suppression - Engineering Electric Inspections - Investments (Bonds) - Solid Waste - Dispatch - Fire Inspections Building Permits and Inspections - Traffic Signal Control - Accounts Payable/Receivables - School Resource Officers - Vehicle/Equipment Maintenance **EMS and Ambulance Billing** - Public Communications - Utility Billing - Streets and Infrastructure - Records and Evidence - Emergency Management - Library - Information Technology - Meter Reading **Emergency Management** - Court Parks and Recreation - Code Enforcement/Animal Services - Airport - Boards and Commissions

#### 8. NPDES Phase II BMP Requirement

Specific BMPs are proposed for each Minimum Control Measure, which are intended to support the reduction of discharges of pollutants in stormwater runoff to the maximum extent practicable (MEP) as required by the Federal NPDES Phase II rules. In this section, a summary sheet is provided for each

City of Siloam Springs Storm Water Management Program Revised August 2018

Minimum Control Measure, which includes a list of the selected BMPs, the rationale for their development and selection, and a summary of the measurable goals and implementation schedule. The summary sheet is followed by a fact sheet for each of the selected BMPs. Together, the summary sheets and the fact sheets provide the following information in accordance with the Federal rules:

- 1. A list of the responsible parties for the BMP implementation;
- 2. A brief description of the BMP;
- 3. A description of existing conditions;
- 4. The proposed MS4 plan activities;
- 5. Measurable goals; and
- 6. An implementation schedule.

The BMP development/implementation schedule shows when certain activities will be completed on a fiscal year basis. The NPDES Phase II rules provide for a five-year implementation schedule starting from January of 2017, which is when the City submitted its original MS4 permit application materials. Therefore, the BMP implementation schedule lays out a five-year schedule starting with fiscal year 2017.

# MINIMUM CONTROL MEASURE #1 - PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

#### **REGULATORY REQUIREMENTS**

Regulation 40 CFR 122.34(b)(1): "The permittee must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff."

#### **PUBLIC EDUCATION (PE) SELECTED BMPs**

- PE-1: Develop and distribute electronic and printed educational materials Once topics have been identified, fact sheets, podcasts, e-learning modules, website content, newsletters, press releases, and PSAs will be developed, adapted, and/or gathered for distribution at public meetings, in support of presentations, and with educational displays. Stormwater management and pollution prevention messages will be provided to participating MS4s for inclusion in municipal utility bill mailings to their residents
- **PE-2:** <u>Create displays and staff educational booths</u> Displays highlighting the annual topics of emphasis will be created and set up/staffed at libraries, banks, schools, local festivals, county fairs, etc.
- **PE-3:** Conduct stormwater programs for adult audiences Educational presentations will be given to illustrate stormwater dynamics, identify potential pollutants and pathways, describe techniques to reduce stormwater pollution and encourage voluntary BMP implementation according to the annual topic/audience emphases outlined in the SWMP.
- PE-4: Conduct hands-on youth stormwater/water quality education programs Educational programs for school youth will focus on the water cycle, watersheds, stormwater dynamics, water quality and pollution prevention using the EnviroScape surface runoff model, groundwater simulator, hands-on exercises from Project WET, Project WILD, and Project Learning Tree and creek-side classrooms. Programs conducted will support the Arkansas State Frameworks required curriculum.

#### **RATIONALE**

In order to cover a wide range of audiences including government staff, the general public, and youth, multiple outreach genres and methods must be used (booths and materials at local festivals, newspaper articles, school programs, etc.).. Siloam Springs strategy for developing and distributing the public education materials is to start with information such as the most typical sources of pollutants in stormwater runoff and the impacts associated with those pollutants, and making this information available as educational handouts, flyers, and mailings. Future activities will include outreach presentations, advertisements, and workshops for the public, businesses, industry, and various other stakeholders, to educate them on impacts that the City's stormwater management program may have, and what they can do to improve stormwater quality. Outreach presentations, advertisements, and workshops can target development businesses to utilize new technology methods for stormwater runoff control and encourage Low Impact Development (LID) within development planning. Numerous topics can be covered by these outreach methods and will include recommendations for topics of interest via steering committees. Topic areas are coordinated to target populations that are defined by the different committees. These multiple partners, venues, and materials allow for at least 50% of the population of the MS4 areas to be reached.

It is important to note that due to the timing of Siloam Springs being designated as a MS4, the City is out of sync with the other regional MS4s. As such, the regional topics for 2020 and 2021 have not been identified. The City is proposing to amend the SWMP once these topics are finalized to maintain consistency with other MS4s in the region.

#### **RESPONSIBLE PARTIES**

The City of Siloam Springs is responsible for the development and implementation of the public education efforts.

#### **SUMMARY OF MEASURABLE GOALS**

Staff from the City of Siloam Springs may use public events, periodic neighborhood surveys, and consultation with community and citizen group leaders to solicit feedback on specific education/outreach efforts.

## MCM #1 DEVELOPMENT/IMPLEMENTATION SCHEDULE SUMMARY

	PERMIT YEAR						
ВМР#	YR 2019	YR 2020	YR 2021	YR 2022	YR 2023		
PE-1	Form internal committee within City of Siloam Springs to plan outreach/education methods, measurable goals, and evaluate program impacts.  Continue meeting with the stormwater committee on a monthly basis to receive feedback on educational efforts and regional training needs.						
PE-2	•		h the general public hi ollution prevention top		n specific and media		
PE-3	Topic Emphasis: Pet Waste Disposal	Topic Emphasis: Yard and Garden Management	Topic Emphasis: Automotive Maintenance	Topic Emphasis: Litter/trash management	Topic Emphasis: Sediment & Erosion Control, LI and Green Infrastructure		
	Target Audience: MS4 residents	Target Audience: MS4 residents and commercial landscapers	Target Audience: Vehicle Owners	Target Audience: General public, homeowners	Target Audience: Land Development Community		
PE-3	Rationale: Based on the city's recent interactions it appears there is a knowledge gap concerning the volume and impact of pet waste pollutants on urban stormwater quality	Rationale: Improper yard waste disposal can clog storm drains and excess fertilizer and pesticide applications can contaminate stormwater	Rationale: Leaking automotive fluids and washing vehicles on paved surfaces allow oil, grease and chemicals to be carried into storm drain system.	Rationale: Improper handling and disposal of litter can allow it to enter the storm drain system and impact stormwater quality	Rationale: Hold public meetings targeted at the land development community to emphasize proactive measures to improve stormwater quality		
PE-4	· · ·	activities with youth	through school enrich	ment, library, ar	nd camp programs		

#### B. MINIMUM CONTROL MEASURE #2 - PUBLIC INVOLVEMENT/PARTICIPATION

#### **REGULATORY REQUIREMENTS**

Regulation 40 CFR 122.34(b)(2): The permittee shall, at a minimum, comply with State and local public notice requirements when implementing a public involvement/ participation program.

#### **PUBLIC INVOLVMENT (PI) SELECTED BMPs**

- PI-1: Engage Residents in Stormwater Policy Development Information will be included through multiple outlets (website, newsletters, press releases, etc.) to encourage public input/involvement as MS4 stormwater management policy evolves.
- PI-2: <u>Train and Utilize Volunteer Educators</u> "Train-the-trainer" processes will be used to engage public volunteers and educators in teaching stormwater and pollution prevention (e.g. Benton and Washington County Master Gardeners, Master Naturalists, Lake Smart Leaders, etc.)
- **PI-3:** <u>Conduct Public Participation/Involvement Events</u> Citizen and youth groups will participate in public involvement events (litter pick up, establishing demonstration rain gardens, planting riparian vegetation, stenciling storm drain inlets, etc.).

#### **RATIONALE**

The City selected the above four BMPs to address the Public Involvement/Participation Minimum Control Measure #2 and complement its public education efforts. The City will implement a public involvement/participation program addressing PI-1, PI-2 & PI-3. Components of this program will include organizing citizen participation in periodic creek cleanup efforts, storm drain stenciling, or assisting with educational or interpretive events.

It is important to note that due to the timing of Siloam Springs being designated as a MS4, the City is out of sync with the other regional MS4s. As such, the regional topics for 2020 and 2021 have not been identified. The City is proposing to amend the SWMP once these topics are finalized to maintain consistency with other MS4s in the region.

#### **RESPONSIBLE PARTIES**

The Community Development Department is responsible for the development and implementation of the public involvement and participation efforts.

#### **SUMMARY OF MEASURABLE GOALS**

The City will provide opportunities for public input on the stormwater management program on an annual basis in various forms, including surveys and/or public events. Additionally, the administration will be periodically updated on the stormwater plan and efforts to meet State water quality standards. Feedback from the administration on annual progress will guide modifications to the stormwater plan as appropriate. The City will track these activities on an annual basis. In addition, the the city will utilize Master Gardeners and community volunteers for creek cleanups, storm drain stenciling, and assisting with PE-2 and PE-3 programs.

## MCM #2 DEVELOPMENT/IMPLEMENTATION SCHEDULE SUMMARY

	PERMIT YEAR							
ВМР#	YR 2019	YR 2020	YR 2021	YR 2022	YR 2023			
PI-1	Identify and implement public involvement activities in implementing stormwater policies, implementation actions and BMPs.							
PI-2		Incorporate stormwater pollution prevention into annual Master Gardener training and use trained volunteers for further public outreach and education programs for PE1, PE-2 and PE-3.						
	Program Emphasis: Coordinate citizen volunteers for storm drain stenciling  Target Audience:	Program Emphasis: Engage organizations (such as Master Gardeners, POAs and lawn care/landscaping professionals) to promote stormwater pollution prevention educations Target Audience:	Program Emphasis: Engage HHW Collection Centers and automotive shops to promote their vehicle fluid collection programs.  Target Audience:	Program Emphasis: Coordinate clean up events (potential locations: creek, lake, park, trail or roadway)  Target Audience:	Program Emphasis: Coordinate volunteers to plant native tree seedlings to enhance urban riparian buffers  Target Audience:			
PI-3	General public	Homeowners, lawn care/landscaping professionals	Vehicle owners, automotive maintenance professionals	MS4 residents	Urban creek side landowners			
	Rationale: To emphasize to the public that what drains into the storm drain ends up in the creek, these stencils will help make the connection	Rationale: Improper management of grass clippings and leaves can clog storm drains and excess fertilizer and pesticide applications can contaminate stormwater	Rationale: Improper handling/disposal of automotive fluids, allow oil, gasoline and other vehicle fluids to be carried in stormwater to local waterways	Rationale: Improper handling and disposal of litter can allow it to enter the storm drain system and impact stormwater quality	Rationale: Support green infrastructure educational emphasis promoting urban greenways for stormwater management			

# C. MINIMUM CONTROL MEASURE #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

#### **REGULATORY REQUIREMENTS**

Regulation 40 CFR 122.34(b)(3): The permittee must:

- 1. Develop, implement and enforce a program to detect and eliminate illicit discharges [as defined at 40 CFR 122.26(b)(2)] into the permittee's small MS4.
- 2. Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;
- 3. To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the permittee's storm sewer system and implement appropriate enforcement procedures and action. Possible sanctions include non-monetary penalties (such as stop work orders), fines, bonding requirements, and/or permit denials for non-compliance;
- 4. Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the permittee's system;
- 5. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste;
- 6. Address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if the permittee identifies them as significant contributors of pollutants to the permittee's small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition).
- 7. The permittee must also develop a list of other similar occasional incidental non-storm water discharges (e.g. non-commercial or charity car washes) that will not be addressed as illicit discharges. These non-storm water discharges must not be reasonably expected (based on information available to the permittees) to be significant sources of pollutants to the MS4, either because of the nature of the discharges or conditions the permittee have established for allowing these discharges to the permittee's MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to sensitive water bodies, BMPs on the wash water). The permittee must document in the permittee's storm water management program plan any local controls or conditions placed on the discharges. The permittee must include a provision prohibiting any individual non-storm water discharge that is determined to be contributing substantial amounts of pollutants to the permittee's MS4.
- 8. The permittee must develop a process to respond to and document complaints relating to illicit discharges.

#### **ILLICIT DISCHARGE (IDDE) SELECTED BMPs**

IDDE-1: Illicit Discharges Reporting and Tracking System

IDDE-2: Illicit Discharges Response and Enforcement

IDDE-3: Citywide Illicit Discharge Detection and Elimination

**IDDE-4:** Non-Stormwater Discharge Assessment

IDDE-5: Storm Sewer Inventory and Mapping

#### **RATIONALE**

Siloam Springs has selected the above five BMPs to address MCM #3. BMPs IDDE-1 and IDDE-2 describe the City's processes that respond to and document complaints regarding water quality, including illicit discharges, in fulfillment of Requirements 1, 3 and 8 above. BMP IDDE-1 will provide methods for reporting and tracking of presumed illicit spills, sightings and discharges. Most of the City department's personnel, while doing their daily jobs, will report potential illicit problem areas to the Community Development Department. In addition, the public will have the opportunity to report potential illicit problem areas to City Hall. The reported problem area will be investigated soon or immediately depending on the situation. The public phone calls received and the reports submitted by City personnel will be tracked with Illicit Complaint files. BMP IDDE-2 will provide methods for the response to reported potential illicit discharges and any necessary enforcement. Minor infractions will be brought to the owner's attention, followed up on, and a complete investigation report will be included in the Illicit Complaint files with pictures and the investigation results. Larger incidents within water bodies (such as fish kills with unknown circumstances) will be reported to the State Fish and Wildlife and/or the ADEQ for their expertise and water quality measurement capabilities. These two BMPs include a phone number for complaints and protocols for the most efficient and effective follow-up actions in response to calls. BMP IDDE-2 will be enforced, as necessary, with the use of the City Code of Ordinances.

BMP IDDE-3 consists of a comprehensive program to detect and eliminate illicit discharges throughout the City and addresses Requirement 4. This will include performing dry inspections of approximately 20% of the storm sewer outfalls per year over the next five years. This BMP will be implemented in conjunction with BMP IDDE-5 which will provide an inventory of all outfalls within City limits. Any outfalls which are discovered to have potential illicit discharges will be investigated as described in BMP IDDE-2.

Requirement 5 to inform the public regarding the hazards of illicit discharges is implemented through several of the public education BMPs such as Clean Water In to Storm Curb Drain and Door Hangers.

Requirements 6 and 7, addressing non-stormwater discharges, will require that the City assess these discharges, and determine if they adversely impact the stormwater system. If they are found to cause an adverse impact, appropriate management practices or regulations will be used or developed and implemented with BMP IDDE-4.

Requirement 8 is covered by public knowledge of phone numbers of City Hall and Police Dispatch. Complaints phoned in regarding an incident are forwarded to the appropriate City personnel that can address the particular type of situation. Several of the public education BMPs as well as IDDE-1 will also help educate the public about illicit discharges and provide the phone numbers to report them to.

BMP IDDE-5 will meet Requirement 2 above by completing the mapping and inventory of the City's storm sewer system including all outfalls. This map will be updated with any new storm sewer systems and/or outfalls that are created through development.

#### **RESPONSIBLE PARTIES**

**Community Development Department** - Coordinate Management and Implementation of the IDDE Control Measures, respond and investigate citizen complaints and tips, assess and enforce as necessary.

**Public Works Department-** Recognize illicit discharges and trash at areas within the City and take appropriate action.

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**Police** – Respond to accidental illicit discharges (car accidents or other spills on or near public streets and public places). Report discharge to appropriate department for enforcement/cleanup.

**Fire**- Respond to accidental illicit discharges (car accidents or other spills on or near public streets and public places). Report discharge to appropriate department for enforcement/cleanup.

#### **SUMMARY OF MEASURABLE GOALS**

The measurable goals of the illicit discharges program will include:

- 1. Monitor the number and document the type of calls received and the actions taken in response each year.
- 2. Create storm sewer maps for areas within city limits. Document an annual review of maps to ensure they are up-to-date.
- 3. Monitor the number of illicit discharges that are encountered and document enforcement procedures that are conducted.
- 4. Track the number of commercial/industrial uses assessed for possible illicit discharges and document resolution of illicit discharges identified.
- 5. Complete an assessment of non-stormwater discharges as required by Minimum Control Measure #3, Requirement 6 and 7, along with implementing local controls where they are identified as being needed.

## MCM #3 DEVELOPMENT/IMPLEMENTATION SCHEDULE SUMMARY

		PE	RMIT YEAR			
BMP#	YR 2019	YR 2020	YR 2021	YR 2022	YR 2023	
IDDE-1	Operate, publish and promote phone number and email, and document calls received each year within Illicit Discharge file.	Implement program improvements as warranted.	Monitor and revise as necessary			
IDDE-2	Implement protocols for responding to complaints annually, and document within Illicit Discharge file.	Monitor and revise as necessary				
IDDE-3	Conduct dry inspections of existing outfalls, covering 20% of the total number. Identify and inspect new outfalls as they are constructed or found. Add new inlets & outfalls to storm sewer maps	20% each ye Identify and in Add new	ry inspections of existing outfalls, covering an additional h year until all are inspected by the end of the permit. In inspect new outfalls as they are constructed or found new outfalls to storm sewer maps. Add last year's not or revisions as additions to storm sewer maps for each year's update.			
IDDE-4	Assess impact of non- stormwater discharges. If impact is significant create & implement program to address	Continue ongoing program assessment, implementation and revisions.			ation and	
IDDE-5	Inventory existing storm sewer maps. Update per inspections required for IDDE-3	Verify outfalls a for IDDE-3.	erify outfalls and update storm sewer map per inspections required or IDDE-3.			

# D. <u>MINIMUM CONTROL MEASURE #4 - CONSTRUCTION SITE STORM WATER</u> RUNOFF CONTROL

#### **REGULATORY REQUIREMENTS**

Regulation 40 CFR 122.34(b)(4):

The permittee shall develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. For stormwater discharges associated with small construction activity in accordance with 40 CFR 122.26(b)(15)(i), the permittee will develop, implement, and enforce a program to reduce pollutant discharges from such sites. The permittee's program must include the development and implementation of, at a minimum:

- 1. An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;
- 2. Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;
- 3. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- 4. Procedures for site plan review which incorporate consideration of potential water quality impacts;
- 5. Procedures for receipt and consideration of information submitted by the public, and
- 6. Procedures for site inspection and enforcement of control measures.

#### **CONSTRUCTION SITE WASTE (CSW) SELECTED BMPs**

**CSW-1:** Erosion and Sediment Control Regulations

**CSW-2:** City Staff Erosion Control Training

**CSW-3:** Land Drainage Program **CSW-4:** Inspections and Enforcement

#### **RATIONALE**

The City selected the above BMPs to address each component of the construction site runoff minimum control measures. The regulatory authority for BMP CSW-1 is currently provided for in the Stormwater Management and Drainage Manual which was approved by Ordinance No. 15-03. This ordinance helps to satisfy Requirements 1, 2 and 3 by providing regulatory authority for implementation and enforcement of the erosion and sediment control measures for construction or redevelopment of sites disturbing greater than one acre.

Specific requirements for construction site operators are addressed during the development approval process as well as the issuance of Building Permits. The Stormwater Management and Drainage Manual requires the development of erosion and sediment control plans and will be updated to include future regulatory requirements. Chapters 54 and 87 of the Municipal Code detail the procedures for development approval including Technical Plan Review. Taken together, these adopted Codes and programs fulfill Requirements 1 through 4 described above.

BMP CSW-2 involves the training of City staff to recognize and correct erosion problems on construction sites and to enforce the provisions of the City's adopted ordinances. This BMP is a critical component of the stormwater management program. This is being addressed through the development of specific, dedicated staff for permitting, inspections, enforcement and the implementation of the City Stormwater Pollution Prevention Team. This program is ongoing, and is intended to address Requirement 6.

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Currently, staff from the Community Development Department have received certification as "Stormwater Site Inspectors" and are fulfilling these roles within the organization.

During the development approval process, BMP CSW-3 will be implemented by the systematic review of plans with the use of checklists and/or other methods to ensure that the Drainage and Development Ordinance and all ADEQ requirements have been met. These checklists will ensure that minimum control measures such a construction entrances, concrete washouts, silt fence and others are included in the plans. The long term stability of storm water improvements will also analyzed during plan review.

After construction has started, BMP CSW-4 will be implemented with the initiation of regular site inspections by certified City personnel. These inspections will be documented, as well as any violations that are observed. If necessary, the City Code of Ordinances will be used for any enforcement actions.

Requirement 5 is covered by public knowledge of phone numbers of City Hall and Police Dispatch. Complaints phoned in regarding an incident are forwarded to the appropriate City personnel that can address the particular type of situation. Several of the public education BMPs will help educate the public about illicit discharges and provide the phone numbers to report them to.

#### **RESPONSIBLE PARTIES**

The Community Development Department maintains the City Code of Ordinances related to construction, coordinate the Site Plan Review process and coordinate the construction site inspections. Enforcement of these sections of the City's Code is conducted in coordination with the Office of the City Attorney, if necessary.

#### **SUMMARY OF MEASURABLE GOALS**

Staff will review the Municipal Code provisions related to erosion control and construction site runoff during the permit period and revise as necessary. The measurement of success of the program will be based on tracking of compliance and avoidance of impacts to water quality from land alteration and construction.

## MCM #4 DEVELOPMENT/IMPLEMENTATION SCHEDULE SUMMARY

	PERMIT YEAR					
BMP#	YR 2019	YR 2020	YR 2021	YR 2022	YR 2023	
RC-1	Review existing Drainage Regulation and Development Code sections for erosion and construction site runoff control effectiveness	Review, modify and enforce provisions as necessary.				
RC-2	Conduct staff trai ongoing basis; up	•	Evaluate the effectiveness of the training and update/improve as warranted.			
RC-3	Implement the land drainage and alteration program on an ongoing basis.	Conduct land drainage and alteration program training as needed.	Track land drainage and alteration compliance and impacts to water quality on an annual basis.	Evaluate Municipal Code and amend as needed to achieve compliance with CWA and ESA.	Program review and assessment.	
RC-4	Conduct inspections on an ongoing basis.	Implement existing Code authority on an ongoing basis.	Review and amend the Code as appropriate.			

# E. MINIMUM CONTROL MEASURE #5 - POST CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

#### **REGULATORY REQUIREMENTS**

Regulation 40 CFR 122.34(b)(5): The permittee must:

- A. Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts;
- B. Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for the community;
- C. Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law; and
- D. Ensure adequate long-term operation and maintenance of BMPs.

#### **DEVELOPMENT STANDARD (DS) SELECTED BMPs**

DS-1: Implementation of City Code of Ordinances and Development of BMP Manual

DS-2: Post Construction Stormwater System Maintenance Inspections and Compliance

#### **RATIONALE**

The City selected the above BMPs to meet the post-construction Minimum Control Measure requirements. The City's Stormwater Management and Drainage Manual requires that new developments incorporate stormwater management BMPs to reduce the impacts associated with stormwater runoff generated at the site. BMP DS-1 provides for maintenance of the appropriate section of municipal code such that pollutants from stormwater runoff from new development are reduced to the maximum extent practicable, in partial compliance with the requirements of this Minimum Control Measure. In addition, the City will develop a BMP Manual which details available BMPs and indicates the best place for their use.

BMP DS-2 provides for the development of a long-term inspection and enforcement program, which is still needed to meet all the requirements noted above. Staff from the Community Services Department have received certification as "Stormwater Site Inspectors." They are currently performing the stormwater inspections and will continue to perform Post—Construction System Maintenance Inspections to ensure compliance.

#### **RESPONSIBLE PARTIES**

Community Development Department

#### **SUMMARY OF MEASURABLE GOALS**

The regulatory framework for control of post-construction stormwater runoff is contained in the City's Code of Ordinances. This framework will be refined and expanded as needed to improve the City's capability to achieve reductions in stormwater pollution from new developments through periodic evaluations and updates to the Codes. Measurable goals will include to:

- 1. Monitor Technical Plat Review and Land Division approvals for adequacy of stormwater quality management;
- 2. Monitor Stormwater Pollution Plans for adequacy of stormwater quality management;
- 3. Monitor compliance achieved in private maintenance of Stormwater management systems required in the development approval process; and

4. Monitor as needed any new stormwater drainage infrastructure that incorporates stormwater quality improvement facilities where practicable.

### MCM #5 DEVELOPMENT/IMPLEMENTATION SCHEDULE SUMMARY

			PERMIT YEAR		
BMP#	YR 2019	YR 2020	YR 2021	YR 2022	YR 2023
DS-1	Review Codes and propose amendments as appropriate. Seek City Council approval & adoption of amendments. Develop BMP Manual and amend as needed.	Continue enforcing existing Codes and monitor/analyze effectiveness at achieving BMPs that comply with pollutant reduction MEP requirement and update as needed.			n pollutant
DS-2	Maintain inspection and compliance activities and monitor/analyze program effectiveness and success/failure of BMPs observed over time	monitor/ana		oliance activities an ctiveness and succ	

# F. MINIMUM CONTROL MEASURE #6 - POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

#### **REGULATORY REQUIREMENTS**

Regulation 40 CFR 122.34(b)(6): The permittee must:

- A. Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations; and
- B. Using training materials that are available from EPA, ADEQ, other organizations, or developed inhouse, the program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

#### **OPERATION AND MAINTENANCE (OM) BMPs**

OM-1: Operation and maintenance program that includes a training component

**OM-2:** <u>Train MS4 employees</u> - MS4 employees will be equipped with a knowledge and understanding of how to reduce the potential impact of their municipal operations activities on stormwater quality.

#### **RATIONALE**

The city will provide training at least once a year to MS4 employees. The training will use materials provided by ExCal Visuals and others that include information on construction sites, park & open space maintenance, and fleet & building maintenance. This training will be used to implement operation and maintenance programs for City facilities and specific operations. These policies will be reviewed annually to ensure that no adjustments need to be made. Jurisdictional-specific ordinances, policies, and mandates will also be addressed during these trainings and specific system maintenance as departmentally appropriate. Training will stress how the employees are the "eye and ears" of the city and that they should learn to recognize signs of illicit discharge and how to properly report these instances. Recommendations from the employees are also addressed during the regional stormwater compliance committee's monthly meetings and these recommendations help to shape the educational outreach messages.

In addition, City personnel will participate in the occasional MS4 orientated webinars offered by the EPA.

#### **RESPONSIBLE PARTIES**

The Community Development department is responsible for preparing and providing training to City staff. Each City Department (Fire, Police, Building, etc.) is responsible for applying the training in the field and reporting illicit discharges.

#### **SUMMARY OF MEASURABLE GOALS**

Operation and maintenance policies which are implemented will be evaluated and reported annually. In addition, the number of employee training programs given each year will be reported along with the number of employees participating.

### MCM #6 DEVELOPMENT/IMPLEMENTATION SCHEDULE SUMMARY

	PERMIT YEAR					
BMP#	YR 2019	YR 2020	YR 2021	YR 2022	YR 2023	
	Obtain training DVD's	Review and update materials	Review and update materials	Review and update materials	Review and update materials	
OM-1	Develop and implement good housekeeping policies for City activities and facilities	Review and revise policies as appropriate	Review and revise policies as appropriate	Review and revise policies as appropriate	Review and revise policies as appropriate	
OM-2	Conduct annual training for employees.	Conduct training as necessary for new hires.	Conduct annual training for employees.	Conduct training as necessary for new hires.	Conduct annual training for employees.	

