

**STORMWATER  
MANAGEMENT PLAN  
MEXICO, MO**

**Recommended Revision for 2018 - 2021**

Revised By:

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**PART I  
CITY OF MEXICO  
BACKGROUND**

**City of Mexico Background**

**Information on the Permittee:**

Name of the Permittee: City of Mexico, Missouri  
Type of Entity: City – Municipality  
Total Area (acres): 12.5 sq. miles  
Mailing Address: 300 N. Coal, Mexico, MO 65265  
Primary Contact: Kensey Russell, P.E., P.L.S. – City Engineer  
Phone Number: 573-581-2100  
Secondary Contact: Drew Williford, P.E. – Civil Engineer  
Phone Number: 573-581-2100  
Population (2010): 11,543

**Information on the Municipal Separate Storm Sewer System:**

MS4 System Location: Mexico, Missouri  
Name of Organization: City of Mexico, Missouri  
County Permittee Resides: Audrain County  
The major receiving waters within the permitted area include: Davis Creek, South Fork Salt River, Long Branch, Town Branch, Lakeview (Park) Lake, Teal Lake, Kiwanis Lake, Railroad Lake (AKA C&A Lake)  
None of the receiving waters are on the latest CWA’s list of impaired waters.

**Information on Adjacent Waterways:**

The Permittee is within 100 feet of: Davis Creek, South Fork Salt River, Long Branch, Town Branch  
The Permittee discharges to waters classified as major reservoirs: Lakeview (Park) Lake, Teal Lake, Kiwanis Lake and Railroad Lake (AKA C&A Lake).  
The Permittee has some area defined as wetlands as identified by the National Wetland Inventory. See attached map.  
Stormwater from Mexico does not discharge to a sinkhole.

## **PART II MINIMUM CONTROL MEASURES**

Note: The following section adheres to the general structure and order of the City's 2016 MS4 Permit, with the corresponding section of the permit beginning at 4.2.1.

# **1. Public Education and Outreach**

## **1.1. Regulatory requirement - 40 CFR 122.34.b.1**

### **1.2. Target Audiences**

**1.2.1. Description.** During the development of the proposed education program, Mexico identified the sources of stormwater pollutants that needed to be reduced to improve overall water quality. The target audiences were selected because changing their behavior would have a significant stormwater quality impact on the target pollutants. The target audiences for the education program are: Citizens (Homeowners), Developers and Home Builders, Business owners, Children, Elected Officials, and City Staff.

### **1.2.2. Related Permit Sections.** 4.2.1.1.1

### **1.3. Best Management Practices**

#### **1.3.1. STORMWATER WEB PAGE**

**1.3.1.1. Description.** The City of Mexico has selected the use of a web page for implementation as part of this Stormwater Management Program. The City maintains a section with stormwater education information on the City's web page. The section includes general stormwater information, conveys actions citizens can take to improve stormwater quality, solicits input on the program plan, and has direct links to the stormwater ordinances and guidance documents. The stormwater section will be reviewed during each reporting cycle to determine if any updates are needed.

**1.3.1.2. Measurable Goal.** The number of comments received related to the City's Stormwater Web Page will be submitted with each reporting cycle.

**1.3.1.3. Evaluation.** All comments related to the City's Stormwater Web Page will be reviewed by the City to determine if improvements to the Stormwater Web Page are necessary.

#### **1.3.1.4. Related Permit Sections.** 4.2.1.1.2, 4.2.1.1.3, 4.2.1.1.4

#### **1.3.2. BROCHURES**

**1.3.2.1. Description.** The City of Mexico has selected brochures for implementation as part of this Stormwater Management Program. The City developed information flyers related to protecting water quality (Rain Gardens and Healthy Lawns). They also have a general information brochure on stormwater management. These educational materials are available at City Hall and on the City web site. They will be replenished as needed.

**1.3.2.2. Measureable Goal.** The approximate number of flyers and brochures printed and distributed will be submitted each reporting cycle.

**1.3.2.3. Evaluation.** The City will conduct a review of the information provided in the stormwater brochures during each reporting cycle to be sure the information is relevant to current stormwater topics. If new stormwater issues within the City arise, these brochures may be customized to address such issues.

**1.3.2.4. Related Permit Sections.** 4.2.1.1.2, 4.2.1.1.3, 4.2.1.1.4

### **1.3.3. CITY NEWSLETTER ARTICLE**

**1.3.3.1. Description.** The City of Mexico has selected distributing information through its newsletter for implementation as part of this Stormwater Management Plan. The City Newsletter is distributed to each household within the Mexico City Limits and is published twice each year. Staff will put stormwater education information in the newsletter as the opportunity arises.

**1.3.3.2. Measurable Goal.** The number of stormwater articles published will be submitted each reporting cycle.

**1.3.3.3. Evaluation.** The City will conduct a review of the stormwater articles posted in the City's newsletter during the reporting cycle. This review will primarily examine whether the postings addressed relevant topics within the community. If postings are determined to be outside the scope of relevant stormwater topics within the City, an effort will be made to better tailor future newsletter articles towards relevant City topics.

**1.3.3.4. Related Permit Sections.** 4.2.1.1.2, 4.2.1.1.3, 4.2.1.1.4

### **1.3.4. ANNUAL STORMWATER PRESENTATION**

**1.3.4.1. Description.** The City of Mexico has selected an annual stormwater presentation at local schools with the hope of performing two presentations in the first year and determining a final goal at the end of the 2018 reporting cycle. These presentations will cover stormwater topics which range from a basic understanding of the water cycle to stormwater pollutants, and even a minor introduction to stormwater engineering.

**1.3.4.2. Measureable Goal.** The number of stormwater presentations, as well as the general number of students in attendance, will be submitted each reporting cycle.

**1.3.4.3. Evaluation.** The City will conduct a review of the stormwater presentations made at local schools each reporting cycle. This review will focus on the information presented during the presentation and on how to improve student interest in the general topic. If changes occur to the MS4 permit, City ordinances, or other related stormwater topics, the City's presentations may need to be updated to convey more

relevant stormwater information. If several presentations are deemed ineffective and modifications cannot be successfully implemented, this BMP will be removed and replaced with a more effective BMP.

**1.3.4.4. Related Permit Sections.** 4.2.1.1.2, 4.2.1.1.3, 4.2.1.1.4

### **1.3.5. SOCIAL MEDIA**

**1.3.5.1. Description.** The City of Mexico has selected the use of social media for implementation as part of this Stormwater Management Plan. This will allow the City to distribute to the widest audience possible. The City currently maintains a Facebook page. As social media continues to evolve, the City will leverage the various technologies to distribute education information to its citizens. Staff will post stormwater education information to some form of social media at least twice a year.

**1.3.5.2. Measureable Goal.** The number of times information is posted, to which social media site it is posted, and the general content of the educational message will be reported each reporting cycle.

**1.3.5.3. Evaluation.** The City will conduct a review of the social media posts made related to stormwater education each reporting cycle. The review will compare the post's subject matter and current stormwater topics within the City to determine if the posts were relevant. If irrelevant posts are found, an effort will be made to reevaluate current stormwater topics in the City and align future posts with these topics.

**1.3.5.4. Related Permit Sections.** 4.2.1.1.2, 4.2.1.1.3, 4.2.1.1.4

### **1.4. Target Pollutants**

**1.4.1. Description.** The following is a list of the leading pollutants that are targeted in the City's public education and outreach programs; suspended solids, oil and grease, pesticides, herbicides, nutrients, and litter/trash.

**1.4.1.1. Related Permit Sections.** 4.2.1.1.5

## ***2. Public Involvement in Stormwater Management Program Development***

### **2.1. Regulatory Requirement - 40 CFR 122.34.b.2**

### **2.2. Public Notice/Target Audiences**

**2.2.1. Description.** The City of Mexico will comply with state and local public notice requirements when implementing the public involvement/participation program. The public will be included in reviewing and implementing the Stormwater Management Plan as much as possible. The target audiences for the public involvement program are the same as those listed in **Section 1.2** of this document.

**2.2.1.1. Related Permit Sections.** 4.2.1.1.1



## **2.3. Best Management Practices**

### **2.3.1. EXISTING PUBLIC MEETINGS**

**2.3.1.1. Description.** The City of Mexico has selected inviting public input through existing meetings for implementation as part of the Stormwater Management Plan. There is an open public comment period at each City Council meeting where citizens are allowed input on any City issue. Additionally, development and redevelopment issues as they relate to stormwater are discussed at the Planning and Zoning hearings. The City Council typically has meetings twice a month and the Planning and Zoning Commission holds meetings as needed on a monthly basis.

**2.3.1.2. Measureable Goal.** The number of meetings where stormwater input is received will be submitted with each reporting cycle.

**2.3.1.3. Evaluation.** All input acquired from public meetings will be evaluated to determine if improvements to the City's Stormwater Ordinances/Policy are needed.

**2.3.1.4. Related Permit Sections.** 4.2.2.1.2

### **2.3.2. PUBLIC INPUT ON THE CITY'S STORMWATER MANAGEMENT PLAN**

**2.3.2.1. Description.** The City of Mexico has selected requesting public input on this Stormwater Management Plan for implementation purposes. This BMP allows for direct public involvement and participation in the development and implementation of the Stormwater Management Plan. As part of this process, the City's proposed Stormwater Management Plan will be posted on the City's website a minimum of 10 days, to overlap the period of public notice as required in Section 4.2.2.1.1 in the City's MS4 Permit. The City's Stormwater Management Plan will be presented at a City Council meeting where public comment will be welcomed.

**2.3.2.2. Measureable Goal.** A summary of input received, if any, will be included in each reporting cycle.

**2.3.2.3. Evaluation.** All input received during the creation of the Stormwater Management Plan, or during the reporting cycle, will be evaluated to determine if improvements to the Stormwater Management Plan are needed.

**2.3.2.4. Related Permit Sections.** 4.2.2.1.1, 4.2.2.1.2

### **2.3.3. PUBWORKS SERVICE REQUEST TRACKING SYSTEM**

**2.3.3.1. Description.** The City of Mexico has selected utilization of the PubWorks Service Request Tracking System as part of this Stormwater Management Plan. Staff currently receive calls related to a variety of public works issues, including stormwater problems. These Service

Requests are tracked and closed out after resolution of the issue is completed.

**2.3.3.2. Measurable Goal.** The number of stormwater issues reported and tracked through this system will be included for each reporting cycle.

**2.3.3.3. Evaluation.** The City will evaluate opened Service Requests related to stormwater during each reporting cycle to determine if any potential stormwater issues need to be addressed. Factors such as workforce availability, project prioritization, weather, ect. all have a significant effect on when Service Requests are closed.

**2.3.3.4. Related Permit Sections.** 4.2.2.1.3, 4.2.2.1.6

### ***3. Illicit Discharge Detection and Elimination***

**3.1. Regulatory Requirement – 40 CFR 122.34.b.3**

**3.2. Best Management Practices**

**3.2.1. STORM SEWER SYSTEM MAP**

**3.2.1.1. Description.** The City of Mexico developed a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the U.S. that received discharges from those outfalls. It is a GIS based map that integrates additional GIS data such as aerial photography, contour data, etc. that is available. The original data collection was performed by George Butler and Associates, additional updates and data collection have been completed by the City, and the conversion from paper maps to the GIS was completed by Horner and Shifrin. The map is updated as the system expands or as discrepancies with field information are discovered.

**3.2.1.2. Measurable Goal.** A City-wide storm sewer map will be submitted each reporting cycle to show the current City storm sewer system. Year to year comparison may be conducted to determine improvements to the City's Storm Sewer GIS inventory.

**3.2.1.3. Evaluation.** The City deems this BMP as essential to many City functions. It is in the City's, and DNR's, interest for the City to maintain and improve the storm sewer system GIS inventory. This BMP will not be removed or replaced.

**3.2.1.4. Related Permit Sections.** 4.2.3.1.1

**3.2.2. ILLICIT DISCHARGE DETECTION AND ELIMINATION ORDINANCE**

**3.2.2.1. Description.** The City of Mexico passed an illicit discharge detection and elimination ordinance on December 14, 2009. This ordinance may be found in Chapter 16, Article III, Division 5 and 7 of the City Code. An online version of this code may be found at: [https://library.municode.com/mo/mexico/codes/code\\_of\\_ordinances](https://library.municode.com/mo/mexico/codes/code_of_ordinances)

**3.2.2.2. Measurable Goal.** The number of comments received related to the City's Stormwater Ordinances will be submitted with each reporting cycle.

**3.2.2.3. Evaluation.** All comments received related to the City's Stormwater Ordinances will be reviewed each reporting cycle to determine if improvements to the Stormwater Ordinances are required.

**3.2.2.4. Related Permit Sections.** 4.2.3.1.2

### **3.2.3. PROCEDURE FOR LOCATING PRIORITY AREAS FOR SCREENING**

**3.2.3.1. Description.** Outfalls within the City Limits have been reviewed with the intent of prioritizing by likelihood of contamination. There are many outfalls in the City of Mexico which only run through a small portion of the City Limits. These locations have been deemed to be a low priority as they have little chance of containing contaminants when compared to outfalls which carry water from larger watersheds of the developed portions in the City. Seven sites have been selected based on this criteria, and will be tested annually.

**3.2.3.2. Measurable Goal.** A map of all monitored sites will be submitted each reporting cycle.

**3.2.3.3. Evaluation.** The City will review these sites near the end of each reporting cycle to determine if new developments, changes to storm sewer flow, other reported issues, etc. necessitate a change in monitoring sites.

**3.2.3.4. Related Permit Sections.** 4.2.3.1.3

### **3.2.4. DRY WEATHER FIELD SCREENING**

**3.2.4.1. Description.** The City of Mexico will conduct dry weather field screening at seven (7) outfalls annually.

**3.2.4.2. Measurable Goal.** The number of outfall inspections completed in each reporting cycle will be submitted.

**3.2.4.3. Evaluation.** The City regards the dry weather field screening process as a required BMP of the City's Stormwater Management Plan. As land use within the City changes, the dry weather field screening locations may be adjusted to be more likely to detect illicit discharges.

**3.2.4.4. Related Permit Sections.** 4.2.3.1.4

### **3.2.5. INVESTIGATE ILLEGAL CROSS-CONNECTION OF SANITARY AND STORM SEWER SYSTEMS**

**3.2.5.1. Description.** The City of Mexico will continue to investigate cross-connection of the sanitary sewer system through CCTV inspection. This work will be coordinated with the City's wastewater inflow and infiltration (I&I) reduction program.

**3.2.5.2. Measurable Goal.** The lineal feet of sanitary and/or storm sewer lines inspected in each reporting cycle will be submitted.

**3.2.5.3. Evaluation.** The City regards this BMP as an essential function to the City's workflow. Eliminating cross-connections, while continuing to reduce I&I, is deemed to be a significant aid to the community.

**3.2.5.4. Related Permit Sections.** 4.2.3.1.5, 4.2.3.1.6, 4.2.3.1.7

### **3.2.6. PROCEDURES FOR THE SOURCE OF AN ILLICIT DISCHARGE**

**3.2.6.1. Description.** The City of Mexico will continue to utilize its storm sewer system map to trace the source of any illicit discharges that are discovered.

**3.2.6.2. Measurable Goal.** The number of illicit discharges will be submitted each reporting cycle.

**3.2.6.3. Evaluation.** The City will review all instances of any illicit discharges which occur during the reporting cycle and determine if any improvements to the Illicit Discharge Detection and Elimination ordinance are needed.

**3.2.6.4. Related Permit Sections.** 4.2.3.1.6

### **3.2.7. PROCEDURES FOR ELIMINATING THE ILLICIT DISCHARGE**

**3.2.7.1. Description.** The City of Mexico will utilize the enforcement mechanisms within its adopted ordinance to remove the source of any illicit discharges discovered where the responsible party can be identified. Public Works or Public Safety staff (depending on the nature of the source) will remove the source of any illicit discharges discovered where the responsible party cannot be identified.

**3.2.7.2. Measurable Goal.** The number of illicit discharges will be submitted each reporting cycle.

**3.2.7.3. Evaluation.** The City will review all instances of any illicit discharges which occur during the reporting cycle and determine if any improvements to the Illicit Discharge Detection and Elimination ordinance are needed.

**3.2.7.4. Related Permit Sections.** 4.2.3.1.7

### **3.2.8. PLAN TO ENSURE ENFORCEMENT**

**3.2.8.1. Description.** The City will utilize its Engineering Division to coordinate all Illicit Discharge related duties. The Street Department will be utilized when additional equipment is needed for cleanup or when a street closure is necessary. While the City will begin the enforcement process by issuing a Notice of Violation, the Public Safety Department will also be utilized if the entity responsible for the source of contamination is unwilling to comply with City ordinances. Power to carry out such enforcement actions has been granted to the City

through Ordinances found in Chapter 16, Article III, Division 5 and 7 of the City Code. An online version of this code may be found at:

[https://library.municode.com/mo/mexico/codes/code\\_of\\_ordinances](https://library.municode.com/mo/mexico/codes/code_of_ordinances)

**3.2.8.2. Measurable Goal.** The number of enforcement actions taken will be submitted each reporting cycle.

**3.2.8.3. Evaluation.** The City will review all instances of any illicit discharges which occur during the reporting cycle and determine if any improvements to the Illicit Discharge Detection and Elimination ordinance are needed.

**3.2.8.4. Related Permit Sections.** 4.2.3.1.8

### **3.2.9. PUBLIC/EMPLOYEE EDUCATION**

**3.2.9.1. Description.** The City of Mexico has developed a public education effort to inform public employees, business, and the general public of hazards associated with illegal discharges and improper disposal of waste. This has included distribution of informational door hangers, annual presentations, brochures, stormwater web page, and other means found in **Section 1.3** of this document.

**3.2.9.2. Measurable Goal.** The City deems this BMP as having no 'measurable goal' as these items all relate to other BMPs which do have measurable goals as reported in **Section 1.3** of this document.

**3.2.9.3. Evaluation.** The City has incorporated this BMP as a part of the Public Education/Outreach requirements found in **Section 1.3**. Therefore, the primary evaluations will be conducted on the BMPs found in **Section 1.3**.

**3.2.9.4. Related Permit Sections.** 4.2.3.1.9

### **3.2.10. CONTINUE HOUSEHOLD HAZARDOUS WASTE (HHW) COLLECTION PROGRAM**

**3.2.10.1. Description.** The City of Mexico will continue to encourage its citizens to participate in the HHW collection program in order to prevent these materials from becoming illicit discharges. The public education program will further advertise these options for proper disposal of HHW.

**3.2.10.2. Measurable Goal.** The City will submit a record of all materials collected through its HHW program each reporting cycle.

**3.2.10.3. Evaluation.** The City deems this BMP as essential to its basic operating procedures.

**3.2.10.4. Related Permit Sections.** 4.2.3.1.9, 4.2.3.1.10

### **3.2.11. ADDRESSING NON-STORMWATER FLOWS**

**3.2.11.1. Description.** The City of Mexico does not currently see the need to address the following non-stormwater flows into its MS4: landscape irrigation, rising ground waters, uncontaminated ground water

infiltration, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, springs, water from crawl space pump, footing drains, lawn water, flows from riparian habitats and wetlands, flows from street wash water, and flows from emergency fire-fighting activities. These flows are not considered significant contributors of pollutants to the MS4.

**3.2.11.2. Measurable Goal.** The number of comments received related to the City's Stormwater Ordinances will be submitted with each reporting cycle.

**3.2.11.3. Evaluation.** The City will conduct an evaluation of any reported issues related to non-stormwater discharges which occurred during the reporting cycle. If the cases of such issues increase to a similar number as stormwater related discharges, then the City will review options to mitigate non-stormwater discharges.

**3.2.11.4. Related Permit Sections.** 4.2.3.1.10

### **3.2.12. ADDRESSING INCIDENTAL NON-STORMWATER FLOWS**

**3.2.12.1. Description.** The City of Mexico does not currently see the need to address incidental non-stormwater flows into its MS4 (such as non-commercial or charity car washes). These flows are not considered significant contributors of pollutants to the MS4.

**3.2.12.2. Measurable Goal.** The number of comments received related to the City's Stormwater Ordinances will be submitted with each reporting cycle.

**3.2.12.3. Evaluation.** The City will conduct an evaluation of any reported issues related to incidental non-stormwater discharges which occurred during the reporting cycle. If the cases of such issues increase to a similar number as stormwater related discharges, then the City will review options to mitigate non-stormwater discharges.

**3.2.12.4. Related Permit Sections.** 4.2.3.1.10

### **3.2.13. INDUSTRIAL/COMMERCIAL FACILITIES**

**3.2.13.1. Description.** The City of Mexico is not currently required to inventory and inspect industrial or commercial facilities. The illicit discharge ordinance gives the authority to do such inspections should the need arise.

**3.2.13.2. Measurable Goal.** The number of comments received related to the City's Stormwater Ordinances will be submitted with each reporting cycle.

**3.2.13.3. Evaluation.** The City will conduct an evaluation of any reported issues related to commercial/industrial discharges which occurred during the reporting cycle. If the cases of such issues increase to a

similar number as stormwater related discharges, then the City will review options to mitigate these discharges.

**3.2.13.4. Related Permit Sections.** 4.2.3.1.10

## **4. Construction Site Stormwater Runoff Control**

**4.1. Regulatory Requirement** – 40 CFR 122.34.b.4

**4.2. Best Management Practices**

**4.2.1. CONSTRUCTION SITE RUNOFF CONTROL ORDINANCE**

**4.2.1.1. Description.** The City of Mexico adopted a construction site runoff control ordinance and associated design guidance on December 14, 2009. The ordinance can be found in Chapter 16, Article III, Division 3 of the Mexico City Code. An online version of this code may be found at: [https://library.municode.com/mo/mexico/codes/code\\_of\\_ordinances](https://library.municode.com/mo/mexico/codes/code_of_ordinances)

**4.2.1.2. Measurable Goal.** The number of comments received related to the City's Stormwater Ordinances will be submitted with each reporting cycle.

**4.2.1.3. Evaluation.** All relevant internal and external interactions related to the City's Stormwater Ordinances will be reviewed by the City to determine if improvements to the Stormwater Ordinances are required.

**4.2.1.4. Related Permit Sections.** 4.2.4.1.1, 4.2.4.1.1.1

**4.2.2. CONSTRUCTION SITE WASTE CONTROL**

**4.2.2.1. Description.** The City of Mexico adopted a construction site runoff control ordinance and associated design guidance on December 14, 2009. The specific requirements related to construction site waste control can be found in Chapter 16, Article III, Division 3 of the Mexico City Code. An online version of this code may be found at: [https://library.municode.com/mo/mexico/codes/code\\_of\\_ordinances](https://library.municode.com/mo/mexico/codes/code_of_ordinances)

**4.2.2.2. Measurable Goal.** The number of comments received related to the City's Stormwater Ordinances will be submitted with each reporting cycle.

**4.2.2.3. Evaluation.** All relevant internal and external interactions related to the City's Stormwater Ordinances will be reviewed by the City to determine if improvements to the Stormwater Ordinances are required.

**4.2.2.4. Related Permit Sections.** 4.2.4.1.2

**4.2.3. PRE-CONSTRUCTION PLAN REVIEW**

**4.2.3.1. Description.** The City of Mexico has selected plan review for implementation as part of this Stormwater Management Plan. Plan review policies and procedures adding emphasis on protection of water quality were developed as part of the stormwater design manual. All development and re-development projects disturbing greater than one acre (or otherwise requiring City review) will be evaluated for the

potential impact to water quality and comments provided to minimize the potential for discharge of pollutants from the site.

**4.2.3.2. Measurable Goal.** The number of plans reviewed for water quality impacts will be submitted at the end of each reporting cycle.

**4.2.3.3. Evaluation.** The City considers this BMP as essential for water quality and quantity purposes. This BMP will not be removed.

**4.2.3.4. Related Permit Sections.** 4.2.4.1.3

#### **4.2.4. RECEIVE PUBLIC INPUT ON CONSTRUCTION PROJECTS**

**4.2.4.1. Description.** This BMP coordinates with MCM #2 and can be integrated into existing activities through receipt of information from the public at the existing Planning and Zoning hearings and City Council Meetings. Additional input can be received less formally through the City web site and at the designated phone number or mailing address. Information about construction site runoff control will be integrated into the public education program as feasible. This may increase the input received from the public on construction projects.

**4.2.4.2. Measurable Goal.** A summary of all input from the general public related to construction projects will be included with each reporting cycle.

**4.2.4.3. Evaluation.** The City will review this BMP at the end of each reporting cycle to determine if any improvements could be made which would assist in gathering input from the general public related to construction projects.

**4.2.4.4. Related Permit Sections.** 4.2.4.1.4

#### **4.2.5. CONSTRUCTION SITE INSPECTIONS**

**4.2.5.1. Description.** The City of Mexico has selected construction site inspections for implementation as part of this Stormwater Management Plan. All development and re-development projects disturbing one acre or more will be inspected at least monthly when active. The inspection records are kept in the City Engineer's Office at City Hall.

**4.2.5.2. Measurable Goal.** The number of construction site inspections completed will be reported annually.

**4.2.5.3. Evaluation.** The City will compare the number of inspections required with the number conducted to determine if changes to the inspection process need to be made. If the number of inspections is less than the required number, procedures will be developed to better assist with reaching the required number.

**4.2.5.4. Related Permit Sections.** 4.2.4.1.5, 4.2.4.1.5.1

#### **4.2.6. ENSURING COMPLIANCE (ENFORCEMENT)**



**4.2.6.1. Description.** The City of Mexico’s stormwater ordinance has a detailed outline of the process that will be followed for enforcement, including escalation, if necessary. It includes the use of verbal and written notifications, stop work orders, permit revocations, and deeming the violation a nuisance if abatement is necessary.

**4.2.6.2. Measurable Goal.** The number of construction site runoff control enforcement actions taken will be submitted with each reporting cycle.

**4.2.6.3. Evaluation.** The City will review this ordinance during each reporting cycle to determine if updates need to be made to improve this portion of the stormwater ordinance.

**4.2.6.4. Related Permit Sections.** 4.2.4.1.6

#### **4.2.7. LAND DISTURBANCE GIS INVENTORY**

**4.2.7.1. Description.** The City of Mexico has created a Land Disturbance GIS Inventory to aid in the track of Land Disturbance sites and provide a centralized location for tracking all contact information for Land Disturbance projects. Once a Land Disturbance Permit is closed, the site is moved to the Maintenance Agreement GIS Inventory.

**4.2.7.2. Measurable Goal.** The number of Land Disturbance Permits issued will be submitted with each reporting cycle.

**4.2.7.3. Evaluation.** The City will review this BMP each reporting cycle to determine if improvements can be made to the tracking process.

**4.2.7.4. Related Permit Sections.** 4.2.4.1.5, 4.2.4.1.5.1

## **5. Post-Construction Stormwater Management for New Development/Redevelopment**

**5.1. Regulatory Requirement – 40 CFR 122.34.b.5**

**5.2. Best Management Practices**

### **5.2.1. ORDINANCE TO ADDRESS POST-CONSTRUCTION STORMWATER MANAGEMENT**

**5.2.1.1. Description.** The City of Mexico adopted a comprehensive post-construction stormwater management ordinance on May 30, 2011. This code can be found in Chapter 16, Article III, Division 4 of the City Code. An online version of this code may be found at: [https://library.municode.com/mo/mexico/codes/code\\_of\\_ordinances](https://library.municode.com/mo/mexico/codes/code_of_ordinances) This ordinance included provisions for stormwater quantity and quality management through runoff reduction, control of the channel protection volume, and management of flood flows. It also has requirements for treatment of the water quality storm.

**5.2.1.2. Measurable Goal.** The number of comments received related to the City's Stormwater Ordinances will be submitted with each reporting cycle.

**5.2.1.3. Evaluation.** All relevant internal and external interactions related to the City's Stormwater Ordinances will be reviewed by the City to determine if improvements to the Stormwater Ordinances are required.

**5.2.1.4. Related Permit Sections.** 4.2.5.1.1

## **5.2.2. PLAN FOR LONG TERM OPERATION AND MAINTENANCE OF POST-CONSTRUCTION BMPs**

**5.2.2.1. Description.** The City of Mexico adopted a comprehensive post-construction stormwater management ordinance on May 30, 2011. This ordinance included provisions to authorize the inspection of post-construction stormwater BMPs. It also included enforcement mechanisms if violations are found. This code may be found in Chapter 16, Article III, Division 4 of the City Code. An online version of this code may be found at:

[https://library.municode.com/mo/mexico/codes/code\\_of\\_ordinances](https://library.municode.com/mo/mexico/codes/code_of_ordinances).

**5.2.2.2. Measurable Goal.** The number of Maintenance Agreements signed will be submitted with each reporting cycle.

**5.2.2.3. Evaluation.** The City will review the Maintenance Agreement document during each reporting cycle to determine if changes need to be made to improve the document/process.

**5.2.2.4. Related Permit Sections.** 4.2.5.1.2

## **5.2.3. STRATEGIES TO MINIMIZE WATER QUALITY IMPACTS**

**5.2.3.1. Description.** The City of Mexico has adopted a comprehensive pre/post-construction stormwater management ordinance which utilizes both structural and non-structural BMPs to mitigate stormwater pollution. This may be found in Chapter 16, Article III, Division 2 (Performance Criteria) of the City Code. An online version of this code may be found at:

[https://library.municode.com/mo/mexico/codes/code\\_of\\_ordinances](https://library.municode.com/mo/mexico/codes/code_of_ordinances).

Criteria found in this section includes engineered/natural systems, riparian buffers, environmentally sensitive areas, stormwater quantity control, and stormwater quality control. The post-development conditions are required to meet, or exceed, the pre-development quantity and quality conditions.

**5.2.3.2. Measurable Goal.** The City will review both internal and external interactions related to the City's Stormwater Ordinances to determine if improvements are needed. All interactions evaluated will be submitted with each reporting cycle.

**5.2.3.3. Evaluation.** The City will review its Stormwater Ordinance once per reporting cycle to determine if any updates are necessary.

**5.2.3.4. Related Permit Sections.** 4.2.5.1.3

#### **5.2.4. POST-CONSTRUCTION INSPECTION PLAN**

**5.2.4.1. Description.** The City of Mexico has adopted a Stormwater Ordinance which incorporates post-construction inspection of sites which have been issued a Stormwater Discharge Permit. The City conducts an inspection once every reporting cycle to determine if post-construction BMPs are being adequately maintained. In addition, the City requires the owner of each site, per the Stormwater Maintenance Agreement, to conduct an inspection based on the recommended guidelines of the Engineer who designed the BMP. These documents are on-record with the City Engineer's Office, but are also to be kept on-record at each site for reference.

**5.2.4.2. Measurable Goal.** The number of post-construction inspections conducted will be submitted each reporting cycle along with a count of the expected number of post-construction inspections.

**5.2.4.3. Evaluation.** A review of the conducted inspections and expected number of inspections will be conducted each reporting cycle. If the number of inspections do not meet City requirements, a review will be conducted to determine if improvements need to be made to the inspection process.

**5.2.4.4. Related Permit Sections.** 4.2.5.1.4, 4.2.5.1.5

#### **5.2.5. POST-CONSTRUCTION BMP GIS INVENTORY**

**5.2.5.1. Description.** The City of Mexico has developed a Post-Construction (e.g. Maintenance Agreement) BMP Inventory for all currently monitored Stormwater Maintenance Sites. This inventory provides a spatial representation of stormwater facilities at each site and assists both site inspection and in cases where stormwater issues are found at the site.

**5.2.5.2. Measurable Goal.** A city-wide map will be submitted with each reporting cycle to show the Post-Construction BMP GIS Inventory status.

**5.2.5.3. Evaluation.** The City will review this BMP near the end of each reporting cycle to determine if sites are missing. If missing sites are found, they will be added to the GIS Inventory.

**5.2.5.4. Related Permit Sections.** 4.2.5.1.4, 4.2.5.1.5

## **6. Pollution Prevention/Good Housekeeping for Municipal Operations**

## 6.1. Regulatory Requirement - 40CFR 122.34.b.6

### 6.2. Best Management Practices

#### 6.2.1. EMPLOYEE TRAINING PROGRAM

**6.2.1.1. Description.** The City of Mexico will provide training to employees related to Good Housekeeping in Municipal Operations at least annually. This training will be either contracted out to a consultant specializing in the Stormwater field or carried out by the MS4 Coordinator (or designee) for the City. All topics will be tailored to the type of work involved with municipal operations and utilize relevant material found on the EPA NPS Outreach Toolbox web page, or similar education/outreach source.

**6.2.1.2. Measurable Goal.** A summary of the number of employees trained, and topics discussed, will be submitted with each reporting cycle.

**6.2.1.3. Evaluation.** The City will conduct a review of the employee training offered during the reporting cycle to determine if improvements are needed. During this review, an emphasis will be given to incorporate additional training to mitigate any new stormwater issues which may have developed during the reporting cycle.

**6.2.1.4. Related Permit Sections.** 4.2.6.1.1

#### 6.2.2. LIST OF MUNICIPAL OPERATIONS

**6.2.2.1. Description.** The City of Mexico is implementing Good Housekeeping practices in all municipal operations that can reasonably be expected to impact water quality. The City's municipal operations, as they relate to the MS4 Permit, include the management and maintenance of: ***parks and open space, other municipally-owned recreational facilities, roads and streets, municipal fleet, fleet and equipment yards, municipal buildings, municipal parking lots, storm sewer system, salt/sand storage areas, residential solid waste collection (by contract), and wastewater collection.*** In addition, any construction or land disturbance undertaken by City Crews, or by contractors of the City, would be considered 'municipal operations'.

**6.2.2.2. Measurable Goal.** The City of Mexico will report on relevant municipal operations in the section of this document corresponding with their related BMP.

**6.2.2.3. Evaluation.** The City will conduct a review of municipal operations each reporting cycle to determine if improvements to its Good Housekeeping procedures are needed.

**6.2.2.4. Related Permit Sections.** 4.2.6.1.2

### **6.2.3. MS4 MAINTENANCE (INCLUDING PROPER MANAGEMENT OF WASTE REMOVED FROM MS4)**

**6.2.3.1. Description.** The City of Mexico will operate and maintain its municipal separate storm sewer system (MS4) in order to reduce pollutants discharged from the MS4 to the maximum extent practicable. Public Works staff will inspect storm sewers and inlets/catch basins as they conduct their other routine duties. They will clean out pipes and structures of debris and any other pollutants discovered during these inspections. Litter removed from the MS4 will be disposed of in dumpsters. Other floatables and grit will be disposed of according to solid waste management standards.

**6.2.3.2. Measurable Goal.** The number of man-hours spent working on these activities will be submitted in each reporting cycle.

**6.2.3.3. Evaluation.** The City will review the man-hours spent working on MS4 maintenance activities to determine if current man-hour levels are adequate to maintain the City's MS4.

**6.2.3.4. Related Permit Sections.** 4.2.6.1.3, 4.2.6.1.5

### **6.2.4. STREET SWEEPING**

**6.2.4.1. Description.** The City of Mexico will operate and maintain its street system and municipally owned parking lots in a manner to reduce pollutants discharged to the MS4 to the maximum extent practicable. Public Work's staff will perform regular street sweeping on City streets and City owned parking lots. Litter will be picked up as staff and volunteer resources are available.

**6.2.4.2. Measurable Goal.** The number of man-hours spent sweeping will be submitted each reporting cycle.

**6.2.4.3. Evaluation.** The City will review the street sweeper man-hours each reporting cycle to determine if current sweeping levels are adequate to maintain City streets and parking lots.

**6.2.4.4. Related Permit Sections.** 4.2.6.1.4

### **6.2.5. SPREADER CALIBRATION**

**6.2.5.1. Description.** The City of Mexico will conduct winter operations in a manner to reduce pollutants discharged to the MS4 to the maximum extent practicable. The City Street Division calibrates its spreaders to attain an efficient blend of effectiveness and contaminate control.

**6.2.5.2. Measurable Goal.** The calibration of the salt spreader will be submitted each reporting cycle.

**6.2.5.3. Evaluation.** The City will review the calibration of its spreaders each year to be sure they are appropriately dispensing material.

**6.2.5.4. Related Permit Sections.** 4.2.6.1.4

## **6.2.6. CINDER RECYCLING**

**6.2.6.1. Description.** The City of Mexico will conduct winter operations in a manner to reduce pollutants discharged to the MS4 to the maximum extent practicable. The City Street Division has recently started to recycle cinders by sweeping streets after a large winter operation. This is not done for smaller winter storms, but is a means for the City to limit pollutants which enter the MS4. The sweepings are emptied at the Singleton Maintenance Building and reused in future winter operations.

**6.2.6.2. Measurable Goal.** The number of street sweeper loads of recycled cinders will be submitted with each reporting cycle.

**6.2.6.3. Evaluation.** The City will review its cinder recycling process near the end of each reporting cycle to determine if improvements are needed.

**6.2.6.4. Related Permit Sections.** 4.2.6.1.4

## **6.2.7. CONCRETE WASHOUT MITIGATION**

**6.2.7.1. Description.** The City of Mexico conducts its street patching and curb reconstruction projects in a manner to prevent and/or reduce pollutants discharged from the site to the MS4 to the maximum extent practicable. The Street Division takes special care to provide a designated concrete washout area for street construction projects. For smaller projects, the Street Division fills its loader bucket with rock to act as a filter and provide a location for concrete washout.

**6.2.7.2. Measurable Goal.** The number of street patches and curb reconstructions will be submitted with each reporting cycle.

**6.2.7.3. Evaluation.** The City deems this BMP essential to basic operations. The BMP will not be removed. Should this process experience issues related to poor containment, the City will initiate appropriate mitigation procedures.

**6.2.7.4. Related Permit Sections.** 4.2.6.1.4.

## **6.2.8. STREET SWEEPER WASHOUT MAINTENANCE**

**6.2.8.1. Description.** The City of Mexico has constructed a designated area for its street sweeper washout operations. Litter and debris discharged from the site to the MS4 is mitigated to the maximum extent practicable.

**6.2.8.2. Measurable Goal.** The number of instances when City forces conduct maintenance operations on street sweeper cleanout facilities will be submitted with each reporting cycle.

**6.2.8.3. Evaluation.** The City deems this BMP essential to basic operations. The BMP will not be removed. City forces will review these

facilities during Good Housekeeping inspections to determine if maintenance is required.

**6.2.8.4. Related Permit Sections.** 4.2.6.1.4

**6.2.9. POLLUTION CONTROL FOR MAINTENANCE/STORAGE YARDS**

**6.2.9.1. Description.** The City of Mexico will operate and maintain its municipal maintenance and storage yard in a manner to prevent and/or reduce pollutants discharged from the site to the MS4 to the maximum extent practicable. The Singleton Maintenance Building is located at 221 S Morris St. This facility is home to the Street and Park Divisions. Other departments use this facility for fleet maintenance as well. Good Housekeeping inspections will include the general premises, fleet/mechanic areas, salt/sand/deicing storage areas, solid waste areas, fueling areas, and hazardous waste areas. The site will follow general Good Housekeeping practices related to outdoor storage. Good Housekeeping Inspections will be conducted quarterly at this location.

**6.2.9.2. Measurable Goal.** The number of Good Housekeeping Inspections will be submitted each reporting cycle.

**6.2.9.3. Evaluation.** The City will compare the number of completed Good Housekeeping Inspections and the number of required Good Housekeeping Inspections to determine if there are issues with the general inspection program. If these numbers do not match, or an issue arises at a municipal location, a review will be conducted to determine if improvements to the Good Housekeeping Inspection program are needed.

**6.2.9.4. Related Permit Sections.** 4.2.6.1.4

**6.2.10. POLLUTION CONTROL FOR WASTE TRANSFER STATIONS**

**6.2.10.1. Description.** The City of Mexico contracts solid waste collection and disposal. The waste transfer station is not within the MS4 jurisdictional boundary.

**6.2.10.2. Measurable Goal.** This BMP is deemed to have no measurable goal.

**6.2.10.3. Evaluation.** The City will review solid waste incidents which relate to the City's MS4 to determine if improvements to the City's contract with the waste disposal entity are needed.

**6.2.10.4. Related Permit Sections.** 4.2.6.1.3, 4.2.6.1.4

**6.2.11. STORAGE OF PAINTS, SOLVENTS, and PETROLEUM PRODUCTS**

**6.2.11.1. Description.** The City of Mexico manages paints, solvents, petroleum products, and petroleum waste products in a manner to prevent and/or reduce pollutants discharged to the MS4 to the

maximum extent practicable. Locations where paints, solvents, petroleum products, and petroleum waste products are present have appropriate spill protection countermeasures nearby and are stored with pollution prevention in mind. Sites will follow general Good Housekeeping practices related to storage of these substances. Good Housekeeping Inspections will be conducted quarterly at this location.

**6.2.11.2. Measurable Goal.** The number of spills from these substances will be submitted with each reporting cycle.

**6.2.11.3. Evaluation.** The City will review each spill occurring in the reporting cycle to determine if improvements to storage, or additional BMPs are needed.

**6.2.11.4. Related Permit Sections.** 4.2.6.2