UNIFIED GOVERNMENT • Wyandotte County • Kansas City, Kansas •

PUBLIC WORKS

ONE MCDOWELL PLAZA 701 NORTH 7TH STREET, KANSAS CITY, KANSAS 66101 (913) 573-5400

February 28, 2020

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
(*Courtesy Copy via Electronic Mail)*

Tom Stiles, Director
Kansas Department of Health and Environment
Bureau of Water
1000 SW Jackson, Suite 420
Topeka, KS 66612-1367
(*cc via email: Thomas.Stiles@ks.gov*)

Re: Kansas Water Pollution Control NPDES Permit No. M-MO25-SO01
Transmittal Letter for 2019 MS4 Program Annual Report

Please find enclosed the 2019 Annual Report for the Unified Government's Municipal Separate Storm Sewer System (MS4) Program. This report covers the period from January 1, 2019, through December 31, 2019. Pursuant to the MS4 Permit, this report has a required submittal date of February 28, 2020.

Thank you for your participation and cooperation in this important program. If you have any questions, please contact me at (913) 573-5400.

Sincerely,

Jeff Fisher

Director of Public Works

Enclosure

cc: Lisa Ochsenhirt
AquaLaw
(via email: lisa@AquaLaw.com)

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KANSAS STORMWATER 2019 ANNUAL REPORT FORM FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)

Please place an "X" in the left box if any information has changed from previous years

☐	Permittee [Agency Name] Mailing Address 1:	Unified Government of Wyandotte County/ Kansas City, Kansas
☐	Mailing Address 2:	701 N. 7th St.
☐	Municipality:	Kansas City
☐	State:	Kansas
☐	Zip Code:	66101
☒	MS4 Program Contact Person:	Jonathan Wiles
☒	Contact E-Mail Address:	jwiles@wycokck.org
☐	Contact Phone Number:	913-573-5700
☐	Construction E-Mail Address:	jxiong@wycokck.org
☐	Contact Phone Number:	913-602-6701
☐	Kansas Permit Number: — Ex. M-MC21-SU01	M-MO25-SO01

Reporting period covers activities from January 1, 2019 through December 31, 2019.

This annual report must be submitted to the Kansas Department of Health and Environment (KDHE) by February 28th, 2019. The annual report is to be submitted as PDF files to KDHE preferably on a standard compact disk (CD) or digital versatile disk (DVD). If the permittee does not have the ability to provide the files in a CD or DVD, a flash drive can be submitted. Some permittees provide additional hard copy submissions of the annual report or supplemental documents along with the electronic files. There is no requirement to provide hard copies of any documents other than a simple transmittal letter.

B. EXECUTIVE SUMMARY

Introduction: Stormwater Management Plan. The UG reviewed the SMP in 2020 for appropriateness and effectiveness. Changes were made to the UG's Stormwater Management Plan (SMP) in 2019, finalized and submitted to KDHE and the EPA with the Annual Report February 2019. The following changes were made to the SMP effective for 2020.

PUBLIC EDUCATION AND OUTREACH

BMP 1.H was removed. There has been little interest from the public. This BMP, and accompanying measurable goal, is also redundant and does not add enough value to the program for the effort needed. The UG is increasing its efforts and resources in other Public Education areas to balance out the removal of the Stormwater Speakers Bureau program including improvements to the UG Stormwater website.

IDDE

Measurable goal 3.F.4 was removed. When this Measurable Goal was written, the intent was for the UG to review previously collected CCTV for cross connections and suspected Illicit discharges into the regulated MS4. The CCTV of sewer lines has caught up to the point where reviewing old tapes are irrelevant. However, the UG is still reviewing CCTV on a going-forward basis using new tapes. As CCTV is collected, UG staff are trained to identify and make note of possible illicit discharges and cross connections and report those to their Supervisor for appropriate follow-up.

TMDL

The parameters sampled for the Wyandotte County Lake tributaries have been revised to conform to the Permit sample parameters.

Wet Weather Monitoring

Sampling location identified as R-7 has proven difficult to get to during wet weather and the watershed that drains to the site is small. Sample results over the years also indicate the site is not a high risk for the pollutants monitored under the Permit. The UG reviewed alternative sites to be sampled in the area and has settled on sampling at R-2, which was sampled prior to 2016. The sample site R-2 is more representative of the area, has a larger watershed draining to it and is easier for staff to obtain samples. R-7 was retired at the end of 2019.

Aspects of the Program Especially Effective at Reducing Pollutants in Stormwater Discharge.

The UG's Erosion Control Program has been an effective tool in reducing the amount of pollutants that enter our stormwater system. With a dedicated inspector, we are able to meet with contractors throughout the project to ensure that proper erosion control techniques are

being utilized. The UG continues to strengthen its education and training in pollution prevention on construction sites with the use of brochures, field guides, and training. In some cases, troubleshooting occurs in the field and discussions are held between the contractor and UG in order to modify the erosion and sediment control measures to best fit the site.

Aspects of the Program Providing Unsatisfactory Results. The weather in 2019 presented the UG with challenges in obtaining samples and Secchi disk readings at Wyandotte County Lake. Kansas City saw one of the wettest years on record with over 200 days of precipitation. The period between rain events was often less than the 48 hours allowed for sampling, and the weather was often not clear with sunlight, as required to take Secchi disk readings. In addition, the UG had mechanical problems with the boat they use to obtain samples on the lake. As a result of these challenges, the UG was only able to obtain three of the four required samples. For similar reasons, the UG able to only obtain two of the three required Secchi Disk Readings per SMP 8.B. The UG is prepared to address these challenges in 2020, if they recur and are manageable (i.e., are not extreme weather events)

The Public Education Speaker Bureau was implemented in 2018. The program has been actively promoted for the last two years, but unfortunately has received no interest from the public. The UG has decided to discontinue the Speaker Bureau. As noted above, the UG has shifted efforts and resources to other Public Education efforts including improvements to the UG Stormwater website.

Inspections of the UG owned stormwater treatment facilities were overlooked in 2019 due to challenges with communication among employees and changes in personnel at the Engineering Department. In order to address this situation, the UG has now assigned staff that will annually inspect the facilities and work with Water Pollution Control and Parks and Recreation to maintain the facilities.

The Fleet Maintenance Facility is currently under an NPDES Permit. In November of 2019, the manager of the Fleet Maintenance Center left the position without providing extensive notice. The Street Maintenance Department appointed a new manager soon after. When the Stormwater Coordinator was notified that a new manager had started at the Fleet Maintenance Center, the Stormwater Coordinator met with the manager to discuss the NPDES Permit and SWPPP implementation. The Stormwater Coordinator and the manager searched files at the facility for information on implementation, training, and past NPDES inspections, but no records were found. It is unclear how the previous manager stored these documents (i.e., whether he kept them in a different location on-site than expected, etc.) The UG did confirm that the NPDES permit had been renewed in past years. The new manager met with the Stormwater Coordinator and an engineering consultant to review the SWPPP, walk the facility, and

determine the next steps to ensure compliance with the permit and SWPPP. Follow up meetings were held with facility supervisors and staff to inform them of the permit, requirements and good housekeeping practices that will be followed. Currently, the facility is in compliance and the SWPPP will be reviewed and updated in 2020.

The Most Successful Part of the Program. The most successful part of the UG's MS4 program is the Construction Site Stormwater Runoff Control Program. The UG has improved in educating contractors and maintaining compliance. The improvement in compliance with erosion and sediment control directly affects water quality. Of course, there is always room for improvement. The UG is continuing to review ordinance changes, procedures, and policies to refine the program.

The UG has made numerous strides in improving its stormwater management programs. The UG is particularly proud of the progress we have made in our Erosion Control Program. Overall, the UG has been successful in implementing the MS4 program as required by the permit, effective January 1, 2016.

The Most Challenging Aspect of the Program. The Post-construction program continues to be a challenge. In 2019, the UG began importing the owner information into GIS and Lucity for better tracking of private BMPs. In 2020, the UG will continue efforts to improve the program through education outreach, training, procedural enhancements, and review of and possible revisions to the ordinances. These efforts are intended to educate owners and developers and streamline the reporting process for owners and the UG.

The IDDE program is continuing to improve. In 2019, the UG held several interdepartmental meetings with Water Pollution Control, WPC Lab, Health Department, Engineering, and Benesch to identify opportunities for improving communication and reporting of suspected illicit discharges, responses, and ordinance changes. These efforts will continue in 2020.

The City/County area MS4 Cleanups. The UG collaborates with Operation Brightside, Friends of the Kaw, school, neighborhood, and church groups. The stormwater department provides trash bags with the UG Logo and an educational message, "Your Litter Could End up in Local Rivers, Streams, and Lakes! Please Do Not Litter!" We also coordinate with the Public Works Street Department to pick up the trash bags and dispose of them when the event is complete.

Elected Official Participation in Stormwater Pollution Reduction/Elimination. Elected officials are updated regularly about the status and accomplishments of the Stormwater Management Program. UG staff receives feedback regarding the program frequently throughout the year.

Collaboration with Other Organizations. The success of many of the UG's programs can be attributed to the strong partnerships and collaborations with other metro organizations. The UG has been an active member in the Water Quality Education Committee organized by MARC. This effort includes representatives from multiple cities and communities in the metro area, encouraging sharing of ideas and promoting a uniform message on water quality in the region. Other active partnerships include, Friends of the Kaw, Operation Brightside and other local organizations.

Audits/Inspections Conducted by KDHE or EPA. The UG was not audited during this Annual Report reporting period.

IN ADDITION, provide the following:

1. A current copy of the Stormwater Management Program (SMP) Document as a PDF file along with the Annual Report.
2. Include an executive summary to this report which briefly covers the major aspects of the MS4 stormwater management program enacted during the year. In completing the executive summary, the preparer should address the following questions:

    1. Were there any aspects of the program that appeared especially effective at reducing pollutants in your stormwater discharge?
    2. Were there any aspects of the program that provided unsatisfactory results?
    3. What was the most successful part of the program?
    4. What was the most challenging aspect of the program?
    5. Describe any City/County area MS4 clean-ups and the participation.
    6. Describe the elected officials' participation in the stormwater pollution elimination.
    7. Describe the collaboration with other organizations to eliminate stormwater pollution.
    8. If an audit/inspection of your MS4 program was conducted by EPA or KDHE during the year, list the items the audit/inspection report identified as required changes and provide a narrative explanation of how the changes were implemented or explain the plan to implement the changes and identify a target date for final implementation.

    The executive summary does not need to be extensive and detailed. It is anticipated the executive summaries will range from one half of a page to two pages in length depending on the scope of the program.

3. Any new stormwater ordinances/resolutions or revised ordinances/resolutions which have not already been submitted to KDHE for review and retention.

This template annual report document (basic report) for the 2018 reporting period has changed from the annual report format used in previous years. This document focuses on the core aspects of permit requirements including the Stormwater Management Program, the Six Minimum Control Measures (Public Education and Outreach, Public Involvement and Participation, Illicit Discharge Detection and Elimination, Construction Site Stormwater Runoff Control, Post-Construction Stormwater Management in New Development and Redevelopment Projects, and Pollution Prevention/Good Housekeeping for Municipal Operations), Total Maximum Daily Load (TMDL) Best Management Practices and TMDL wet weather monitoring. Additionally, for Phase I permittees a program to monitor their listed industrial facilities is required. Although any failure to comply with a requirement of the MS4 National Pollutant Discharge Elimination System (NPDES) permit may expose the permittee to enforcement action by either the permitting authority (Kansas Department of Health and Environment) or by the Environmental Protection Agency, the failure to implement the core aspects of the permit likely increases the risk of not only enforcement but also of incurring a monetary penalty.

The permittee is well advised to accurately report the conditions and status of their stormwater program and give due consideration to improving or enhancing their program where it is weak, or deficient in any of the core aspects (stormwater management program, six minimum control measures and TMDL best management practices – if applicable – also for Phase I permittees monitoring industrial facilities).

TOPICS REQUIRED TO BE ADDRESSED IN THIS REPORT AS IDENTIFIED IN PART V OF THE PERMIT

Within the next one or two pages, or perhaps more if so desired, provide comments addressing the following items:

1. Provide the status of compliance with permit conditions, an assessment of the appropriateness of the implemented Best Management Practices, progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP), and the measurable goals with an indication of the progress toward meeting the goals for each of the six minimum control measures.

2. Provide results of information collected and analyzed, (for example test results, surveys, or public comments/input) during the annual reporting period. This may include monitoring data used to assess the success of best management practices with respect to reduction in pollutant discharge. Include an interpretation of the information which addresses success or failure of the portion of the program for which the information applies.

3. Provide results of information collected and analyzed, if any, during the annual reporting period, including monitoring data used to assess the success of the program at reducing the TMDL regulated pollutants.

4. Provide a summary of the stormwater activities that were scheduled to be undertaken during the previous calendar year and the status of these activities.

5. Provide a summary of the stormwater activities which are scheduled to be undertaken during the next calendar year (including an implementation schedule).

6. Provide a map showing changes in the permittee's Permit Area if the permit area has changed within the year.

7. Provide a description of significant changes in any of the BMPs.

8. Provide a list of any ordinances or resolutions which were updated in the last year and are associated with the SMP. Please note, page on of this report requires submission of any new stormwater related ordinances or resolutions or any such updated ordinances or resolution be submitted with this annual report.

9. Provide a list of other parties (such as other municipalities or consultants), which are responsible for implementing any of the program areas of the Stormwater Management Program.

10. For Phase I permittees only, provide a summary of the inspection results, including the wet weather surface water quality monitoring test results, and information obtained under PART III Monitoring Industrial Stormwater Discharges section of this permit.

SIX MINIMUM CONTROL MEASURES FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) WITH NPDES PERMITS

The following outlines the NPDES permit requirements for implementation of the Six Minimum Control Measures as required under Kansas MS4 permits issued by the KDHE. The NPDES permit provided to the MS4 authority should be reviewed for additional requirements associated with implementation of the Six Minimum Control Measures such as deadlines for the implementation of the requirements or supplemental requirements associated with the individual measures. The general requirements are as follows:

A. Six Minimum Controls — The permittee shall develop and implement Best Management Practices (BMP's) with measurable goals for each of the six minimum control measures. The six minimum control measures and the associated requirements are listed and explained as follows:

1. **Public Education and Outreach**

   The permittee shall implement a public education program which includes distribution of educational materials to the community or conducting equivalent outreach activities which address the impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

2. **Public Involvement and Participation**

   The permittee shall implement a public involvement and participation program to solicit public comment and recommendations regarding the BMP's and measurable goals utilized by the permittee to comply with the permit. The permittee shall comply with state and local public notice requirements when implementing a public involvement and participation program.

3. **Illicit Discharge Detection and Elimination**

   The permittee shall:

   a. develop, implement and enforce a program to detect and eliminate illicit discharges into the MS4;
   b. Develop a storm sewer system map of the permittee's MS4, showing the location of all outfalls, either pipes or open channel drainage, showing the names and location of all streams or lakes that receive discharges from those outfalls. A copy of the map shall be submitted to KDHE. This map may be submitted as a PDF file(s) on a CD or DVD.
   c. Enact ordinances or resolutions to prohibit non-stormwater discharges into the storm sewer system and implement appropriate enforcement procedures and actions if the permittee has such authority. A copy of the ordinances or resolutions shall be submitted to KDHE.
   d. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; and

e. Develop and implement a plan to detect and address prohibited non-stormwater discharges, including but not limited to illegal dumping, to the storm sewer system. Unless identified by either the permittee or KDHE as a significant source of pollutants to waters of the state, the following examples of non-stormwater discharges are not prohibited from entering the MS4:

1. Water line flushing
2. Diverted stream flow
3. Rising groundwaters
4. Uncontaminated groundwater infiltration as defined under 40 CFR 35.2005(20) to separate storm sewers
5. Uncontaminated pumped groundwater
6. Contaminated groundwater if authorized by KDHE and approved by the municipality
7. Discharges from potable water sources
8. Foundation drains
9. Air conditioning condensate
10. Irrigation waters
11. Springs
12. Water from crawl space pumps
13. Footing drains
14. Lawn watering
15. Individual residential car washing
16. Occasional not-for-profit car wash activities
17. Flows from riparian habits and wetlands
18. Dechlorinated swimming pool discharges excluding filter backwash
19. Street wash waters (excluding street sweepings which have been removed from the street)
20. Discharges of flows from firefighting activities
21. Heat pump discharge waters (residential only)
22. Treated wastewater meeting requirements of a NPDES permit
23. Sump pump drains
24. Other discharges determined not to be a significant source of pollutants to waters of the state, a public health hazard, or a nuisance

4. Construction Site Stormwater Runoff Control

The permittee shall develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater 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. The program must include the development and implementation, at a minimum, of the following:

a. Permittees which have the authority to enact ordinances or resolutions shall enact such ordinances or resolutions to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State and Local law;

b. Requirements for construction site owners or operators to implement appropriate erosion and sediment control best management practices;

c. Requirements for construction site owners or operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that are likely to cause adverse impacts to water quality;

d. Procedures for site plan review which incorporate consideration of potential water quality impacts;

e. Procedures for receipt and consideration of information submitted by the public;

f. Procedures for site inspection and enforcement of control measures.

5. Post-Construction Stormwater Management in New Development and Redevelopment Projects

The permittee shall develop, implement, and enforce a program to address post-construction 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 and implementation, at a minimum of the following:

a. BMP's to prevent or minimize adverse water quality impacts;

b. Strategies which include a combination of structural and/or non-structural BMP's appropriate for the municipality;

c. For permittees which have the authority, ordinances or resolutions to address post-construction runoff from new development and redevelopment projects to the extent allowable under State and local law;

d. Ensure adequate long-term operation and maintenance of BMP's

6. Pollution Prevention/Good Housekeeping for Municipal Operations

The permittee shall develop and implement an operation and maintenance program that includes employee training to prevent and reduce stormwater pollution from municipal operations activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

B. Stormwater Management Program

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
☒	☐	☐	Has the Stormwater Management Program (SMP) been developed and implemented?
☒	☐	☐	Has the SMP been modified or updated during this reporting period?
☒	☐	☐	If the answer to question 2 above was "yes," has the modified SMP been submitted to KDHE for review?*

If the answer to item 3 is a "NO," a copy of the updated SMP must be submitted with this annual report. If it is anticipated a measurable goal cannot be met in the next year the SMP should be modified and submitted to KDHE for review. The modifications may include different BMP's and/or revised goals to avoid being in a position of non-compliance. However; reasonable BMP's with reasonable goals must be implemented or KDHE may require the permittee to modify the SMP to include additional or better BMP's and/or more reasonable goals.

*The revised SMP is being submitted with this report.

B. Stormwater Management Program (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
10.A	Hire a Stormwater Coordinator.	10.A.1 - Create a new position of Stormwater Coordinator.	Completed in 2012
		10.A.2 - Fill the Stormwater Coordinator position.	The UG filled the position of Stormwater Coordinator in 2019.
10.B	Create Stormwater Executive Committee to Provide Administrative Oversight, Coordination and Direction.	10.B.1 - Form Stormwater Executive Committee and conduct meeting.	Completed in 2013
		10.B.2 - Stormwater Executive Committee to consider formation of other committees as needed.	Committees were deemed unnecessary at this time.
		10.B.3 - Prepare Executive Committee meeting minutes.	An Executive Committee Meeting was held on November 21. Minutes are available upon request.
10.C	Conduct an Annual Financial Analysis of the Stormwater Program.	10.C.1 - Conduct an annual analysis of the program's funding and expenses.	Completed in 2019.
		10.C.2 - Include a copy of the financial analysis in the Annual Report.	A summary of the financial analysis and proposed budget can be found in Appendix 10.C.

C. Total Maximum Daily Load (TMDL) Best Management Practices

C. Total Maximum Daily Load (TMDL) Best Management Practices (BMP's)

Some permittees are required to implement BMPs to reduce the discharge of listed TMDL regulated pollutants (potentially any or all of the following pollutants – bacteria, nutrients, and sediment)

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
☒	☐	☐	Were any BMP's intended to attenuate the discharge of TMDL regulated pollutants implemented? See your permit to determine if TMDL regulated pollutants are listed for the receiving stream affected by your stormwater system (TMDL Table).
☒	☐	☐	List all of the BMP's intended to attenuate the discharge of TMDL regulated pollutants as identified in the SMP and provide the requested information in the following table.

List all the TMDL BMPs as identified in the SMP and provide the requested information in the following table.

C. Total Maximum Daily Load (TMDL) Best Management Practices

BMP ID Number	Brief BMP Description	Regulated TMDL Parameter	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
8.A	Develop and Implement BMPs to Reduce TMDL Regulated Pollutants (Bacteria), to the Maximum Extent Practicable, from Entering the Kansas River.	Bacteria	8.A.1 - Implement BMPs by distributing pet waste brochures, regulating septic systems, and focus IDDE Major Outfall inspection program within Kansas River basin.	Completed.
			8.A.2 - Include all reports and activities in the Annual Report.	Completed. See Appendix 8.A.
8.B	Undertake Activities to Reduce Stormwater Impacts on Wyandotte County Lake.	Nutrients	8.B.1 - Develop baseline report of existing conditions surrounding the lake.	Completed in 2013.
			8.B.2 - Gather and analyze tributary samples taken four times per year.	All required samples were obtained and analyzed for each location. See Appendix 9.C for summary.
			8.B.3 - Place high priority on sites surrounding the lake when enforcing E&SC and post-construction elements.	Ongoing effort.
			8.B.4 - Conduct a follow-up bathymetric survey of lake. (2017)	Completed in 2017.
			8.B.5 – Take Secchi Disk Readings at up to three locations, three times/yr.	The UG obtained Secchi disk readings on two of the three days. See Executive Summary. See Appendix 8.B for results.

C. Total Maximum Daily Load (TMDL) Best Management Practices

BMP ID Number	Brief BMP Description	Regulated TMDL Parameter	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
8.B (Continued)	Undertake Activities to Reduce Stormwater Impacts on Wyandotte County Lake.	Nutrients	8.B.6 – Develop plan to determine significant sources of phosphorus entering lake.	Completed. A technical memorandum was prepared which summarized results of the assessment in 2017.
			8.B.7 – Implement plan developed in 8.B.6.	Completed in 2018. Plan is to continue monitoring WYCO Lake.
			8.B.8 – Compose a technical memorandum pertaining to 8.B.6 and 8.B.7 and recommendations.	The 2017 technical memorandum found that phosphorus is not a high priority, and recommended that the UG continue to monitor the lake. Subsequent Secchi disk readings and sample results in 2018 and 2019 confirm the same, making it unnecessary to write a technical memorandum, which would be identical to the 2017 memorandum. The UG continued to monitor Wyandotte County Lake but was only successful in obtaining three of the four required samples. See Executive Summary for details.
8.C	Develop and Implement BMPs focused on the Little Turkey Creek (LTC) and Brenner Heights Creek (BHC) Watersheds as proxies for the Kansas River.	Nutrients, Sediment and Bacteria	8.C.1 – Distribute pet waste brochures to be displayed at parks and/or other UG owned facilities located within the LTC and BHC watersheds.	Completed. Brochures are available at the West Wyandotte Library (LTC watershed) and Parks and Recreation (BHC watershed). See Appendix 1.A.

C. Total Maximum Daily Load (TMDL) Best Management Practices

BMP ID Number	Brief BMP Description	Regulated TMDL Parameter	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
8.C (continued)	Develop and Implement BMPs focused on the Little Turkey Creek (LTC) and Brenner Heights Creek (BHC) Watersheds as proxies for the Kansas River.	Nutrients, Sediment and Bacteria	8.C.2 - Distribute leaf litter related brochures to be displayed at parks and/or other UG owned facilities located within the LTC and BHC watersheds.	Completed. Brochures are available at the West Wyandotte Library (LTC watershed) and Parks and Recreation (BHC watershed). See Appendix 1.A.
			8.C.3 – Perform dry weather major outfall inspections focused on LTC and BHC watersheds.	Completed in 2017.
			8.C.4 – Install and maintain Pet Waste stations in parks within LTC and BHC watersheds if deemed necessary.	Pet Waste stations were installed in Thompson Park (1), Wellborn Park (2), and Stony Point Park.

C. Total Maximum Daily Load (TMDL) Best Management Practices

BMP ID Number	Brief BMP Description	Regulated TMDL Parameter	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
8.D	Assess BMPs Focused on LTC and BHC Watersheds Targets as proxies for Kansas River.	Nutrients, Sediment and Bacteria	8.D.1 – Summary of assessment of potential pollutants within LTC and BHC watersheds	Completed in 2017.
			8.D.2 – Provide summary of preliminary assessment of LTC and BHC watersheds based on 2016 and 2017 wet weather sample results. Recommend BMPs if deemed necessary.	Completed in 2018.
			8.D.3 – Implement any BMPs identified in 8.D.2.	The recommendation was to continue monitoring. A new SMP will be created in 2020 which will address the watersheds if sampling results warrant specific BMPs.

C. Total Maximum Daily Load (TMDL) – Wet Weather Monitoring Best Management Practices

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
9.A	Implement SOPs to Address Monitoring of TMDL Regulated Pollutants.	9.A.1 - Implement existing wet weather monitoring SOPs.	Completed in 2013.
		9.A.2 - Review and update, if needed, any SOPs.	Completed in 2014.
		9.A.3 - Provide copy of updated Monitoring Plan and data analysis procedures in the Annual Report.	Completed. Revisions were made to the sampling plan. See Appendix 9.A
		9.A.4 – Review in 2016 SOPs for monitoring and data analysis and modify if necessary.	Completed in 2016.
9.B	Develop Tracking System for Wet Weather Monitoring Activities	9.B.1 - Develop spreadsheet to track the water quality results.	Completed in 2013.

C. Total Maximum Daily Load (TMDL) – Wet Weather Monitoring Best Management Practices

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
9.C	Conduct Water Quality Analyses of SW Discharges to Assess Effectiveness of Implemented BMPs and Stormwater Pollution Prevention Actions.	9.C.1 – Annually prepare memorandum on analyses results.	Completed. Summary of results is located in Appendix 9.C.
		9.C.2 - Provide copy of data analysis in the Annual Report.	Completed. See Appendix 9.C.
		9.C.3 – Continue analyzing samples gathered at (2016) active locations.	Completed in 2016.
		9.C.4 – Begin analyzing in 2017, samples at locations determined in 9.D.1.	Completed. See Appendix 9.C for summary of the analysis results.
9.D	Perform sampling activities at Wet Weather Monitoring Sites.	9.D.1 – Conduct an assessment in (2016) of current monitoring locations and determine future locations.	Completed in 2016.
		9.D.2 – Gather samples at the six (2016) locations.	Completed in 2016.
		9.D.3 – Begin analyzing in 2017 samples at 8 locations determined in 9.D.1.	Completed. Summary of results is located in Appendix 9.C.

D. Stormwater Management Program Requirements (Six Minimum Controls)

1. Public Education and Outreach (Table)

List all of the public education and outreach BMPs as identified in the SMP and provide the requested information in the following table. (List presentations & media)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
1.A	Gather and Distribute Printed Stormwater Educational Materials.	1.A.1 - Purchase copies of selected SW flyers.	Completed. Over 500 flyers of various messages were distributed to multiple locations. See Appendix 1.A.
		1.A.2 – Place flyers in various public locations.	Completed. See Appendix 1.A.
		1.A.3 – The UG shall continue to prepare envelope inserts designed educate the general public on several of the key elements of the SMP. Insert shall be bilingual.	Completed. A bilingual Board of Public Utilities bill insert was created and covered the topic of Septic Tanks. See Appendix 1.A.
		1.A.4 – Distribute envelope inserts in water bills.	Completed. See Appendix 1.A for Summary.
		1.A.5 – Replenish flyers at targeted locations.	Completed. See Appendix 1.A for locations.

1. Public Education and Outreach (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
1.B	Deliver Televised Programs/Announcements on Stormwater Management/Surface Water Quality/How to Reduce Pollutants to the Storm Sewer System on UG's Cable Channel.	1.B.1 – Research preparing or obtaining 3rd party license for a Public Service Announcement (PSA).	Completed in 2014.
		1.B.2 – Prepare or obtain 3rd Party Public Service Announcement.	Completed in 2014.
		1.B.3 – Air PSA at least four times per year.	The UG's PSA Contest winner video aired on UGTV. The UGTV is no longer tracking viewership numbers. It has also been uploaded to YouTube. See Appendix 1.B
		1.B.4 – Annually review PSA and modify as needed.	Completed. PSAs were reviewed, and UG is satisfied with the content and message of the PSAs.
1.C	Enhance Existing Website to Provide Information of Stormwater Issues.	1.C.1 – Include copy of approved SMP.	Completed. See Appendix 1.C.
		1.C.2 – Copy of Annual Report placed on website within 30 days of submitting the Annual Report to KDHE.	Completed. See Appendix 1.C.
		1.C.3 – PSA placed on UG's website.	Completed in 2014.

1. Public Education and Outreach (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
1.D	Contribute Financially to Local Agencies within Wyandotte County Who Promote SW Management Improvements.	1.D.1 – Annual contribution to Wyandotte County Conservation District (WCCD).	Completed. Contributed $45,000 to WCCD in 2019. A summary of the WCCD 2019 activities is unavailable due to employee issues at WCCD.
1.E	Contribute Financially to Regional Agencies Who Promote SW Education and Management Improvements.	1.E.1 – Annual membership and contribution to Mid-America Regional Council (MARC).	Completed. Paid $20,000 in dues for the MARC Committee. Active in MARC Water Quality Education Committee and Co-Chair of Education Sub-Committee. See Appendix 1.E.
1.F	Utilize Local Newsletters for Education of SW Related Issues.	1.F.1 – Submit one article per year in Livable Neighborhoods newsletter.	Completed. The UG submitted eight (8) stormwater quality related articles that were published in both the Livable Neighborhoods monthly newsletter and weekly e-newsletter to over 5,000 recipients. See Appendix 1.F for subject of and summary of articles published and a sample article.

1. Public Education and Outreach (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
1.F (continued)	Utilize Local Newsletters for Education of SW Related Issues. Cont.	1.F.2 – Submit at least three (3) articles for publication in the UG's Weekly E-news.	Completed. Ten (10) articles were included in the UG's Weekly E-News newsletter that has approximately 3,000 subscribers. See Appendix 1.F summary of articles published and a sample article.
1.G	Annual Review of Media Used for Public Outreach.	1.G.1 – Annually review media outlets used for public outreach efforts.	Completed. Will continue to use UG E-news, Facebook, Twitter, UG-TV, Liveable Neighborhoods, Nextdoor and website. See Appendix 1.G.
1.H	Create and maintain a Stormwater Speaker Bureau.	1.H.1 - In 2018 the UG will begin operation of the Stormwater Speaker Bureau with the intent of speaking at 8 events per year.	The program was promoted but, no requests for speaker engagements in 2019. Bureau is being discontinued due to lack of public interest and redundancy. See
		1.H.2 - Solicit topics for Stormwater Speaker Bureau.	Presented the information at the Liveable Neighborhoods meeting and promoted on the UG website.

1. Public Education and Outreach (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
1.I	Conduct Outreach to Natural Stream Owners.	1.I.1 – Identify in 2018 and evaluate the extent of natural streams within the MS4 area.	Completed in 2018.
		1.I.2 –Conduct in 2019 at least one outreach activity to select land owners to provide information about activities that land owners can take to enhance and protect natural streams and enlist the Parks and Recreation department.	The technical memorandum prepared in 2018 defined natural streams as streams with no human influence (ie. No drainage from developments) Based on that definition, less than 2% of the steam miles fit that definition. Given the small number of qualifying streams, the UG decided to broaden its program in order to have more positive impacts on the water quality of local streams and creeks. The UG reached out to those in the Brenner Heights Creek and Little Turkey Creek watersheds to educate them on stream degradation and what they could do to prevent it. An educational postcard was mailed to 855 residents within the watersheds with streams running through their property. See Appendix 1.I

2. Public Involvement and Participation (Table)

List all of the public involvement and participation BMPs as identified in the SMP and provide the requested information in the following table. (List all associations & partnerships)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
2.A	Create a Stormwater Quality Education Grant Program.	2.A.1 - Prepare criteria for a SW Quality education grant program.	Completed in 2014.
		2.A.2 – Promote the grant program to local teachers/schools/districts/non-profits via various media outlets.	Completed. The grant program was advertised through the website, social media (Facebook, Twitter), Liveable Neighborhoods, School Districts and email.
		2.A.3 – Provide copy of criteria and applications for selected projects in Annual Report.	Completed. See Appendix 2.A.
2.B	Promote and Implement Community Cleanup Programs.	2.B.1 – Partner with Operation Brightside to facilitate annual cleanups.	Completed. Continued partnership with Operation Brightside and Livable Neighborhoods for neighborhood cleanups. A summary of cleanup activities can be found in Appendix 2.B.

2. Public Involvement and Participation (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
2.C	Provide Assistance and Materials to Community Groups for participation in a Storm Drain Inlets Stenciling Program.	2.C.1 – Advertise the availability of a Storm Drain Stewardship Brochure.	Completed. Copy of the brochure was made available on the UG's website and distributed to all the sites where other brochures were placed. A UG inlet stenciling flier was also distributed at neighborhood group meetings and on the UG webpage.
		2.C.2 – Provide materials and areas for stenciling to participating groups.	Completed. Inlet markers, door hangers, and other application supplies were made available for volunteer groups to use.
		2.C.3 – All storm drainage inlet castings manufactured w/ "Exits to River, Do Not Dump Waste".	Completed. All storm inlet castings are specified to have the required statement.
		2.C.4 – Document the number and name of groups, the number of inlets stenciled, and number of brochures distributed.	Completed. No requests for stenciling kits were made in 2019.

3. Illicit Discharge Detection and Elimination

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
☒	☐	☐	Has a program/plan been developed and is it presently implemented to detect and address illicit/prohibited discharges into the MS4?
☐	☐	☒	Has a map of the MS4 been developed, showing the location of all outfalls, either pipes or open channel drainage, showing names and location of all streams or lakes receiving discharges from the outfalls? *
☒	☐	☐	The permit may require the permittee enact ordinances, or resolutions. Have ordinances, or resolutions, or regulations to prohibit non-stormwater discharges into the storm sewer system been enacted? Effective date: 06/02/05
☐	☒	☐	Have the ordinances, resolutions, or regulations been modified? Effective date:

List all the Illicit Discharge Detection and Elimination BMPs as identified in the SMP and provide the requested information in the following table

* The UG prepared a map that identifies Major Outfalls and receiving water bodies as described in the MS4 Permit and the UG SMP. The UG is in compliance with both.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.A	Evaluate, and if Necessary, Update Ordinances that pertain to Illicit Discharges.	3.A.1 – Prepare Memorandum regarding current ability of ordinances to perform IDDE inspections and take enforcement action.	Completed in 2013.
		3.A.2 – Legal Authority contained in Chapter 30 of UG's current Municipal Code of Ordinances included in Annual Report.	Completed in 2013.
3.B	Implement, & Revise if Needed, Standard Operating Procedures for Illicit Discharge Detection, Sampling, Tracking and Enforcement.	3.B.1 – Implement applicable existing Standard Operating Procedures (SOPs).	Completed in 2013.
		3.B.2 – Review and update if appropriate, all IDDE Program SOPs.	Completed in 2014.
		3.B.3 – Provide any updated SOPs in Annual Report.	Completed. No revisions in 2019.
		3.B.4 – Perform a review in 2018 of outfall inspection, dry weather sampling, inspection and tracking, and enforcement SOPs. Prepare a memo with results of review.	Completed. SOPs were reviewed and no revisions were made.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.C	Design, Implement and Maintain IDDE Program Tracking and Reporting System.	3.C.1 – Review maps and prepare list of major outfalls.	Completed in 2013.
		3.C.2 – Continue tracking of outfall inspections and dry weather sampling.	Completed. See Appendix 3.E.
		3.C.3 – Continue illicit discharge detection, tracking and enforcement activities.	Completed. Four (4) suspected illicit discharges were investigated. Two were not found to be illicit (closed). One was an illicit connection to the storm sewer (enforcement proceeding). One was a septic system issue (resolved). See Appendix 3.C.
		3.C.4 – Amend current stormwater maps to distinguish major outfalls from other nodes/outfalls.	Completed in 2014.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.D	Provide Training for IDDE Inspection Staff	3.D.1 – Conduct training session for key UG employees on identification of illicit discharges.	Training was held for staff of Water Pollution Control, Sewer Maintenance, Engineering, and Engineering Inspectors Dec.19th and 20th. See Appendix 3.D.
		3.D.2 – Provide in-house or commercial training for persons assigned to inspect, sample and track illicit discharges.	Training was held for staff of Water Pollution Control, Sewer Maintenance, Engineering, and Engineering Inspectors Dec. 19th and 20th .See Appendix 3.D
		3.D.3 – Provide copy of training materials and attendance sheet in Annual Report.	See Appendix 3.D.
3.E	Perform Dry Weather Screening of Stormwater Outfalls.	3.E.1 – Conduct at least 125 non-exclusive dry weather inspections per year of major outfalls.	Completed. 128 major outfalls were inspected. No suspected illicit discharges were identified. See Appendix 3.E.
		3.E.2 – Evaluate the effectiveness of the outfall inspection program every 5th year (2017).	Completed in 2017.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.E (continued)	Perform Dry Weather Screening of Stormwater Outfalls.	3.E.3 – Provide list of all inspected outfalls, illicit discharges detected, types of illicit discharges discovered and how, any discharges that were eliminated, and enforcement action.	See Appendix 3.E.
3.F	Implement Program to Televise and Inspect Illicit Discharges/Cross Connections in UG's Storm and Sanitary Sewer Systems.	3.F.1 – Televise and review storm sewers CCTV information for illicit discharges and follow IDDE SOPs for any found illicit discharges.	Completed. See Appendix 3.F.
		3.F.2 – Televise 20,000 feet of sanitary sewers and review CCTV information for cross connections and follow IDDE SOPs for any found illicit discharges.	Completed. Televised 432,960 ft. of combined, storm and sanitary sewer in 2019. See Appendix 3.F.
		3.F.3 – Review 20,000 feet per year of previously collected storm and sanitary sewer CCTV inspection videos to discover any illicit discharges/cross connections.	The UG reviews previously collected CCTV videos as part of its pipe rehabilitation and repair projects, but not as a separate exercise. The CCTV of the sewer system is at a point where staff have caught up to the old tapes and review of these is redundant and irrelevant. See Executive Summary.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.F (continued)	Implement Program to Televise and Inspect Illicit Discharges/Cross Connections in UG's Storm and Sanitary Sewer Systems.	3.F.4 – Provide a summary report including the number of linear feet of storm and sanitary sewer lines televised and number of illicit discharges or cross-connections that were detected and eliminated in Annual Report.	Completed. See Appendix 3.F.
3.G	Maintain a Current Storm Sewer Mapping System.	3.G.1 – Convert all existing AutoCAD MS4 maps to a new GIS.	Completed in 2015
		3.G.2 – Annually update GIS maps from record drawings.	Completed. See Appendix 3.G.
3.H	Continue the UG's Existing Household Hazardous Waste Collection Program.	3.H.1 – Coordinate seven (7) HHW collection days every year.	Completed. Seven (7) events were held. Additionally, two (2) events were held for residents to drop off electronic waste. See Appendix 3.H.
		3.H.2 – Estimate amount of material collected at each event and list in the Annual Report.	Completed. 58.9 tons of household hazardous waste and 26.4 tons of electronics were collected. See Appendix 3.H.
		3.H.3 – Continue program to collect and dispose of abandoned tires.	Completed. 1,011 tires were collected by Street Maintenance Dept. See Appendix 3.H.

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
3.I	Engage commercial facilities that have potential to contribute pollutants to the MS4.	3.I.1 – Assess in 2018 the types of commercial facilities that may contribute pollutants to the MS4, assess level of effort and potential rewards in outreach to commercial facilities, and prepare a technical memorandum detailing the efforts necessary, results, and recommendations	Completed in 2018.
		3.I.2 – Select in 2018 and 2019 a group of commercial facilities to engage.	The UG selected Home Improvement, Landscaping and Septic Hauler businesses. Fliers were sent out to these businesses. See Appendix 3.I

4. Construction Site Stormwater Runoff Control

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
☒	☐	☐	The permit requires the permittee, if they have such authority, to enact ordinances or resolutions. Have ordinances or resolutions to address construction site runoff from new development/redevelopment projects been enacted? Effective date:12/14/06
☒	☐	☐	Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?
☒	☐	☐	Has a procedure or program been developed requiring construction site owners and/or operators to implement appropriate erosion and sediment control best management practices?
☒	☐	☐	Has a procedure or program been developed requiring construction site owners and/or operators to control waste such as discarded building materials, concrete truck washout, chemicals, paint, litter, and sanitary waste atconstruction sites likely to cause adverse impacts to water quality?
☒	☐	☐	Has a procedure been developed and implemented requiring site plan review which includes consideration of potential water quality impacts?
☒	☐	☐	Has a procedure been developed for the receipt andconsideration of information submitted by the public?
☒	☐	☐	Has a procedure been developed and implemented forconstruction site inspection and enforcement of the control measures?

List all the construction site stormwater runoff control BMP's as identified in the SMP and provide the requested information in the following table.

4. Construction Site Stormwater Runoff Control (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
4.A	Implement, & Revise if Needed, SOPs for SW Plan Review/Approval, Construction Site Inspections and Enforcement Activities.	4.A.1 – Implement applicable SOPs.	The UG began implementing in 2013.
		4.A.2 – Review and update, if appropriate, all Construction Site Program SOPs.	Completed in 2014.
		4.A.3 – Provide any updated SOPs in Annual Report.	SOPs were reviewed. No revisions were made to the SOPs.
		4.A.4 – Review in 2019 the SOPs for stormwater plan review, site inspections, and enforcement, prepare a technical memorandum detailing the results of the review, and modify SOPs if necessary.	The UG is continuing to review the program for improvement. Ordinances are also being reviewed. No changes were made to the SOPs. A technical memo was not prepared; it was deemed unnecessary due to no changes in the SOPs. The UG will document changes to the program and SOPs in the following years to track progress.
4.B	Continue to Utilize Tracking System for SW Plan Review/Approval, Construction Site Inspections and Enforcement Activities.	4.B.1 – Continue to use existing tracking system for all program activities.	Ongoing. See Appendix 4.B.
		4.B.2 - Report on activities under this program.	Completed. The UG conducted a total of 456 inspections in 2019. 95 plans were reviewed for stormwater quality and erosion and sediment control BMPs. See Appendix 4.B.

4. Construction Site Stormwater Runoff Control (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
4.C	Provide Training to UG's Erosion & Sediment Control (E&SC) Inspection Staff.	4.C.1 - Conduct training session for key UG employees on E&SC standards every 2 years.	Training on E&SC and Post-Construction BMPs was held in for UG staff, developers, designers and private facilities with BMPs. See Appendix 4.D.
		4.C.2 - Provide copy of table of contents of training materials and attendance sheet in Annual Report.	See Appendix 4.D.
4.D	Provide Training to Local Contractors and Owners.	4.D.1 – Sponsor a training session for local construction site owners, contractors, site operators, and installers.	Training on E&SC and Post-Construction BMPs was held in 2019 for UG staff, developers, designers and private facilities with BMPs. See Appendix 4.D.
		4.D.2 Provide a copy of training materials and sign-in sheet in annual report.	See Appendix 4.D.
4.E	Conduct Routine Construction Site Inspections.	4.E.1 – Conduct inspection on a priority basis.	Completed.
		4.E.2 – Whenever practicable, conduct erosion control inspections within five working days of receiving complaints.	The UG continues to complete these types of inspections within five days.
		4.E.3 – Include a summary of inspection records in Annual Report.	Completed. See Appendix 4.E.

5. Post-Construction Site Stormwater Management in New Development and Redevelopment (Table)

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
☒	☐	☐	The permit requires the permittee, if they have such authority, to enact ordinances or resolutions. Have ordinances or resolutions to address construction site runoff from new development and redevelopment projects been enacted? Effective date:5/6/10
☒	☐	☐	Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?
☒	☐	☐	Has a post-construction stormwater runoff program been implemented?
☒	☐	☐	Have post-construction sites been inspected? *
☒	☐	☐	Are BMP's specified to minimize adverse water quality impacts?
☒	☐	☐	Have strategies been developed to include a combination of structural and/or non-structural BMP appropriate for the municipality?
☒	☐	☐	Have measures been implemented to ensure adequate long-term operation and maintenance of structural BMP's? *

List all the post-construction site stormwater management in new development and redevelopment BMPs as identified in the SMP and provide the requested information in the following table.

* The UG has a Post-Construction Site Stormwater Management Program that is consistent with the UG's SMP. Per the SMP, the UG is required to enforce annual operation and maintenance requirements for privately owned BMPs. The program is set up such that the owner is responsible for the inspection and maintenance of privately-owned post-construction facilities. The owner is required by ordinance to maintain and submit a report on maintenance and repairs to the facilities. The UG as part of it's Construction Site Erosion and Sediment Control Inspections, inspects BMPs for compliance with plans and BMP standards.

5. Post-Construction Site Stormwater Management in New Development and Redevelopment (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
5.A	Maintain and Make Available Local Standards for Post-Construction Stormwater BMPs.	5.A.1 – Maintain and enforce local standards for post-construction SW management BMPs and post local standards and BMPs outlined in the standards on website.	Standards are enforced and posted on the UG website under Urban Planning and Zoning/Engineering. BMPs are posted as well.
5.B	Implement, & Revise if Needed, SOPs for SW Plan Review/Approval, Post-Construction Site Inspections and Enforcement Activities.	5.B.1 – Update applicable SOPs.	Completed in 2014.
		5.B.2 - Review and update, if appropriate, all Post-construction Site Program SOPs.	Completed in 2014.
		5.B.3 - Provide any updated SOPs in Annual Report.	SOPs were reviewed. No revisions were made.
		5.B.4 – Review SOPs and prepare summary memorandum.	The UG is reviewing the overall program, ordinances and policies to Post Construction Stormwater. Based on the proposed changes and new permit, the UG will continue to plan and implement changes in 2020. No revisions were made to the SOPs. A technical memo was not prepared due to no changes in the SOPs. The UG will document changes to the program and SOPs in the following years to track progress.

5. Post-Construction Site Stormwater Management in New Development and Redevelopment (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
5.C	Conduct BMP Site Inspections and Maintain a Tracking System for Post-Construction Sites.	5.C.1 - Maintain an inventory of existing publicly and privately owned BMPs.	Completed. See Appendix 5.C
		5.C.2 - Update tracking system for inspection and compliance.	Completed in 2013.
		5.C.3 - Conduct annual inspections of publicly owned BMPs.	The public BMPs were not inspected. See Executive Summary for additional details.
		5.C.4 - Enforce annual operation & maintenance requirements for privately owned BMPs.	UG ordinances require private sector owners to inspect and provide a report on inspection and maintenance activities bi-annually. Sixteen (16) letters were sent to owners requesting reports. The UG received five reports from owners. The UG continues to pursue owner inspections and improve the program. See Executive Summary for more details. See Appendix 5.C for summary.
		5.C.5 - Maintain tracking system to store BMPs inspection and enforcement activities.	Continuing to maintain and improve tracking. Lucity and GIS database are utilized for tracking and enforcement. See Appendix 5.C for summary.

5. Post-Construction Site Stormwater Management in New Development and Redevelopment (Table)

		5.C.6 - Provide BMP Inventory list, inspection and enforcement summary in Annual Report.	Completed. See Appendix 5.C for summary.
BMP ID Number	**Brief BMP Description**	**Measurable Goal(s)**	**Progress Achieving Goal(s) (Measured Result)**
5.D	Provide Training to UG's Post-Construction BMPs Inspection Staff.	5.D.1 - Conduct training session for key UG employees on new BMP standards.	Training on E&SC and Post-Construction BMPs was held for UG staff, developers, designers and private facilities with BMPs. See Appendix 4.D.
		5.D.2 - Provide copy of training materials and attendance sheet in Annual Report.	Training and attendance sheet included in Appendix 4.D.
5.E	Develop Training Program For Local Property Owners, Designers and Developers on BMPs regarding maintenance and inspections.	5.E.1 - Sponsor a training session for architects/engineers/developers/contractors and owners of SW structural BMP sites every 2 years.	A training session on Operations & Maintenance of BMPs was held on December 12. Invitations were sent to UG internal staff as well as our registry of landscapers, engineers, developers, contractors and owners. See Appendix 4.D.
		5.E.2 - Provide copy of training materials and attendance sheet in Annual Report.	See Appendix 4.D

6. Municipal Pollution Prevention/Housekeeping. (Table)

Please place an “X” in the left boxes to complete the table below.

YES	NO	N/A	
☒	☐	☐	The permit requires the permittee to enact a program to address pollution prevention/good housekeeping for Municipal Operations. Has such a program been enacted?

List all the municipal pollution prevention/housekeeping BMP’s as identified in the SMP and provide the requested information in the following table.

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.A	Implement, & Revise if Needed, SOPs for Application of Pesticides, Herbicides and Fertilizers on UG Property.	6.A.1 – Continue to implement applicable SOPs.	Completed for 2019.
		6.A.2 - Review and update, if appropriate, all PHF SOPs.	Completed in 2014.
		6.A.3 - Review and modify lawn care maintenance specifications and contracts.	Completed in 2014.
		6.A.4 - Provide any updated SOPs, most recent PHF specifications, amounts applied, and list of certified contractors in Annual Report.	SOPs were reviewed, no revisions were made. Summaries can be found in Appendix 6.A.
6.B	Continue to Operate the UG's Existing Vehicle Washing Facility.	6.B.1 - Continue use of existing washing facility in accordance with SOP.	The UG used the vehicle washing facility located at the Fleet Maintenance Facility until November. The facility was used 15,537 times. The facility will be improved in 2020. SOPs were reviewed and no revisions made.

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.C	Implement, & Revise if Needed, UG's Tracking System for Street Sweeping. Implement SOP for Street Sweeping Activities.	6.C.1 – Implement existing SOP. Track route classification and amount of material collected on a monthly basis.	Summaries of the materials collected can be found in Appendix 6.C.
		6.C.2 - Review SOP and tracking system, prepare memorandum on results of in-depth review.	Completed in 2014.
		6.C.3 - Use existing transfer station for street sweeping materials.	The UG no longer uses 50th Street and State Ave as a transfer station for street sweepings. The current transfer station for street sweepings is located at 47th St and Orville Avenue.
		6.C.4 - Provide list of monthly dates, route classifications, total amount of material collected per month, and copy of the latest procedures in Annual Report.	Completed. See Appendix 6.C.
		6.C.5 - Provide any updated SOP in Annual Report.	The SOPs were reviewed, and minor revisions were made. The revised SOP can be found in Appendix 6.C.

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.D	Provide Training to UG Employees on Good Housekeeping Activities and Information on Reducing Pollutants to the MS4.	6.D.1 - Prepare and distribute SW Pollution Prevention materials to employees via emails/website.	Completed. Pollution Prevention materials were distributed to UG employees through, social media, trainings and website.
		6.D.2 - Provide copy of all educational materials in Annual Report.	Completed. Materials can be found in Appendix 1.A, 1.C and 3.D
6.E	Continue Existing Curb Inlet Inspection and Cleaning Program.	6.E.1 - Perform approximately 5,000 curb inlet inspections per year.	Completed. 22,583 inlets/catch basins were inspected. Summary can be found in Appendix 3.F
		6.E.2 - Continue to clean approximately 3,000 curb inlets per year.	Completed. 10,021 curb inlets/catch basins were cleaned. Summary can be found in Appendix 3.F.

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.E (continued)		6.E.3 - Re-evaluate the effectiveness of current inspection and cleaning program.	Completed in 2015.
		6.E.4 - Provide summary report in Annual Report.	Completed. See Appendix 6.E.
6.F	Review & Revise if Needed, Tracking System for Curb Inlet Inspection/Cleaning Activities. Implement SOP for inlet inspections and cleaning.	6.F.1 - Implement existing SOPs.	SOPs were implemented.
		6.F.2 - Review, and update, existing tracking system, and incorporate into maintenance work order system.	Completed in 2014.
		6.F.3 - Review SOPs and prepare memorandum on results.	Completed in 2015.
		6.F.4 - Include updated SOPs in the Annual Report for the year they were updated.	The SOP was reviewed, and no revisions made.
		6.F.5 – Review inlet inspection and cleaning procedures and prepare a memo detailing the results. If necessary, modify SOP.	Completed in 2018.

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.G	Create UG-owned/operated or UG-operated Buildings and Facilities Inventory. Review permit coverage and SWPPPs for regulated sites.	6.G.1 - Update existing UG-owned/operated or UG-operated buildings/facilities inventory.	Completed in 2015.
		6.G.2 - Verify those sites requiring State General Permit have one/review SWPPPs.	Completed in 2014.
		6.G.3 - Take appropriate action if a UG site is not covered by current State permit.	Completed in 2015.
		6.G.4 - Provide copy of inventory, departments contacted, and action any follow up action at sites in Annual Report.	Completed. See Executive Summary for details regarding Fleet Maintenance Center. The SWPPP will be updated in 2020. See Appendix 6.G.

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
6.H	Monitor Good Housekeeping at Non-regulated UG Sites.	6.H.1 - Develop schedule to visit all non-regulated sites within 5 years.	Completed in 2014.
		6.H.2 - Continue visiting non-regulated sites and provide educational materials on good housekeeping practices.	Completed. Inspectors discussed management practices with the facility managers that can reduce pollution potential of these sites. Educational materials were handed out. See Appendix 6.H.
		6.H.3 - Provide copy of schedule and educational materials in Annual Report.	Completed. See Appendix 6.H.

7. Industrial Stormwater Runoff Management Program (Table)

7. ***PHASE I OPERATORS ONLY*** - Monitoring Industrial and High-Risk Run-off

.

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
☐	☐	☒	Has the permittee developed and maintained a list of the municipal industrial facilities contributing to the pollutant loading to the MS4? *
☒	☐	☐	Have at least two municipal industrial facilities on the list had inspection and sampling conducted?
☐	☐	☒	If the answer to items 1 and 2 is "No," provide a statement.

* Consistent with the MS4 Permit and SMP, the UG has an industrial activity stormwater runoff management program to address industrial facilities consistent with 40 C.F.R. § 122.26(d)(2)(iv)(C) that the UG determines are contributing a substantial pollutant loading to the MS4. The UG has developed and maintained a list of the facilities within this group and is inspecting these sites as required by the Permit and SMP. The UG has answered the questions to the best of its ability given some inconsistencies between the questions and the specific requirements of the UG's program. The UG is in compliance with its Permit, ordinances, and SMP.

7. Industrial Stormwater Runoff Management Program (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
7.A	Develop SOPs for SW Plan Review/Approval, Industrial Site Inspections, Review of SW Control Measures, and Enforcement Activities.	7.A.1 - Create SOP for SW Plan Review/Approval by March 31, 2013.	Completed in 2013.
		7.A.2 - Create SOP for inspection of industrial sites by March 31, 2013.	Completed in 2013.
		7.A.3 - Create SOP for enforcement actions of violators by March 31, 2013.	Completed in 2013.
		7.A.4 - Include copy of SOPs in Annual Report.	Completed in 2013.
		7.A.5 – Review SOPs for plan review, inspection, and enforcement, prepare a technical memorandum of review, modify if necessary.	SOPs were reviewed in 2019. No changes were made to the SOPs. A technical memo was not prepared due to no changes in the SOPs. The UG made revisions to the SOPs in 2017. See Appendix 7.A

7. Industrial Stormwater Runoff Management Program (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
7.B	Create and Maintain Industrial Facilities Inventory.	7.B.1 - Annually update industrial facilities registry to include those industries defined in 40 CFR 122.26(d)(2)(iv)(C) that the UG determines are contributing a substantial pollutant loading to the MS4.	Completed. No facilities were added to the registry in 2019. See Appendix 7.B.
		7.B.2 - Provide list in the Annual Report.	Completed. See Appendix 7.B.
7.C	Implement an Industrial Facility Inspection Program.	7.C.1 - Continue annually inspecting two sites on industrial registry.	Completed. Two facilities were inspected. All facilities were compliant with NOI and SWPPP. See Appendix 7.C.
		7.C.2 - Train all UG personnel who will be conducting inspections.	Completed. IDDE training also satisfies this training requirement. See Appendix 3.D.
		7.C.3 - Include a summary of inspection conducted in the Annual Report.	Completed. Two facilities were inspected. All facilities were compliant with NOI and SWPPP. See Appendix 7.C.
7.D	Adopt Legal Authority for Inspection of Industrial Facilities, Review of Onsite Control Measures, and Enforcement.	7.D.1 - Review current Code of Ordinances and adopt any ordinance authorizing this program.	Completed in 2014.
		7.D.2 - Include copy of review results and ordinance activities in the Annual Report.	Completed in 2014

7. Industrial Stormwater Runoff Management Program (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
7.E	Develop a program for monitoring industrial discharges to the MS4.	7.E.1 – Develop and maintain a list of industrial facilities consistent with 40 C.F.R. 122.26(d)(2)(iv)(C) that the permittee determines are contributing substantial pollutant loading to MS4.	Completed. See Appendix 7.B.
		7.E.2 – Annually sample stormwater at two high priority facilities.	UG sampled two facilities in 2019. Samples were obtained, and results were within acceptable limits. See Appendix 7.E.

E. Recordkeeping and Reporting

Some permittees are required to monitor surface waters if the permit includes TMDL monitoring requirements for Specific Impaired Streams or Lakes to Target within Part II of the permit. Provide a current map of monitoring locations.

Map and table of sample sites can be found in Appendix 9.C

F. Effectiveness of Source Controls and BMPs

The permit requires a final report on effectiveness of source controls and structural BMPs to achieve the measurable goals. The final report for this MS4 NPDES permit term addressing effectiveness of the Stormwater Management Program to achieve reduction in pollutant discharge from the MS4.

On the following pages address:

1. Effectiveness of pollutant source controls, e.g. public education, identification and elimination of illicit discharges, and the construction site stormwater runoff control program.
2. Address all other BMPs implemented (generally the structural BMPs) under the stormwater management program and address their effectiveness.
3. Summarize water quality test results, if such testing has been conducted, and address any trends or outliers, i.e., unusually high or low pollutant concentrations. As the data is somewhat limited (perhaps only data over the past five years), definitive conclusions may not be possible, however, if trends are observed, some adjustment in the Stormwater Management Program (SMP) may be justified.
4. Address any SMP modifications which will be considered and possibly implemented in the next few years (up to five years).

F. RECORDKEEPING AND REPORTING - Part V of Permit – 2019

EFFECTIVENESS OF SOURCE CONTROLS AND BMPS

INTRODUCTION

The tables on the following pages address the reporting requirements to measure the effectiveness of the BMPs based on the evaluation criteria included in the SMP. The tables also summarize results for those applicable BMPs that include a data collection component. The following sections have been structured to follow the SMP for conformity with the Section (#) tables and appendices.

The tables are color coded. The measurable goals completed in previous year are in gray text and the BMPs and measurable goals which are new or revised in blue text.

APPROPRIATENESS OF BMPs (Permit Part V.A)

The BMPs are generally considered to be appropriate for the local population and pollution sources and no specific concerns have been identified.

RESULTS OF INFORMATION COLLECTED AND ANALYZED (Permit Part V.B)

Based on the water quality results available it appears that the measures and BMPs are reducing the TMDL pollutants slightly despite increases in development within the County..

SUMMARY OF WATER QUALITY RESULTS

Generally, the results are consistent with previous years. There were a few outliers but most trends were downward or holding steady. There were no consistent increases of a magnitude that would be cause for concern. The interpretations of the analysis of the stream sample locations can be summed up as follows.

Brenner Heights Creek

Trends for the pollutants were down for the year or held steady.

Little Turkey Creek

Nitrogen numbers were slightly higher overall. All parameters were within standard deviation.

Mill Creek-01

The results indicate that the Regulated Pollutants sampled seem to be trending down with the exception of Nitrogen. There were a few spikes but nothing consistent that cause concern.

Morris Creek-01

The results indicate that the Regulated Pollutants sampled seem to be trending down.

R-7

The results indicate that the Regulated Pollutants sampled seem to be trending down with the exception of Nitrate + Nitrite and Total Nitrogen which are trending up.

Wyandotte County Lake

The results were within standard deviations of overall samples. See Appendix 8.

STANDARD OPERATING PROCEDURES (SOPs)

The UG continually reviews SOPs for effectiveness on a regular basis. Several SOPs were revised in 2018. The UG is working on improving various programs and is taking a detailed look at programs and the 2020 Permit and preparing a new SMP. Based on these parameters the UG elected to hold on major revisions until the new SMP is prepared.

SUMMARY OF PLANNED CHANGES

The UG reviewed and revised the SMP in 2019. A new MS4 permit was issued in early 2020. The UG will prepare a new SMP for implementation in 2021. The revisions to the current SMP are as follows:

See Executive Summary

1. Public Education and Outreach

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
1.A	Gather and Distribute Printed Stormwater Educational Materials.	Review #, type, and content of educational materials distributed and effectiveness of distribution methods. Consider developing or purchasing additional materials for UG's program.	The UG reviewed the materials and locations utilized in 2019 and deemed new materials and locations were not warranted at that time.
1.B	Deliver Televised Programs/Announcements on Stormwater Management/Water Quality on UG's Cable Channel.	Review viewership numbers and survey results.	The UGTV aired the PSA Contest winner video in 2019. The UGTV is no longer tracking the number of times a video is aired. The PSA was also uploaded to YouTube. See Appendix 1.B.
1.C	Enhance Existing Website to Provide Information on Stormwater Issues.	Review number of website hits and downloads.	The stormwater management page received 9,099 page views and 3,416 unique page views in 2019. The UG is satisfied that the website offers the public critical information in an effective manner. See Appendix 1.C.
1.D	Contribute Financially to Local Agencies within Wyandotte County Who Promote SW Management Improvements.	Review effectiveness of WCCD projects and activities to reduce pollutants to local storm sewers which reach area streams.	The projects and activities continue to be effective in reaching a broad audience. The projects and activities improve education and this education results in a reduction in the level of pollutants entering local storm sewers and streams.
1.E	Contribute Financially to Regional Agencies Who Promote SW Education and Management Improvements.	Review effectiveness of MARC projects and activities to reduce pollutants to local storm sewers which reach area streams.	The projects and activities are effective in reaching a broad audience and are effective in reducing pollutants from entering local storm sewers and streams. See Appendix 1.E for report.
1.F	Utilize Local Newsletters for Education of SW Related Issues.	Review survey/questionnaire results for knowledge and changes in public behavior.	The results from surveys indicate that the persons surveyed are interested in stormwater quality and are actively gaining knowledge and changing behavior accordingly.
1.G	Annual Review of Media Used for Public Outreach.	Review survey/questionnaire results.	The survey results indicate that those who take the time to fill out the survey are knowledgeable in stormwater and have changed their behavior.

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
1.H	Create and Maintain a Stormwater Speaker Bureau.	Review surveys from events, evaluate level of interest, review number of attendees.	Despite active promotion, the Speaker's Bureau did not receive any speaker or questionnaire results. The UG discontinued the program due to lack of public interest.
1.I	Conduct Outreach to Natural Stream Owners.	Review maps and data obtained and evaluate usefulness of information. Review level of interest through questioning property owners approached as part of effort.	Residents with creeks on their property within the Brenner Heights Creek and Little Turkey Creek watersheds were selected to receive information on stream bank maintenance and erosion. See 1.I for further details on what was done. See Appendix 1.I for flier.

2. Public Participation and Involvement

2.A	Create a Stormwater Quality Education Grant Program.	Review number of Grant Applications received, funding distributed, and whether funding provides benefits and is well spent.	The program has proven to be effective. In 2019 six applications were received and all were awarded. One group did not perform and the UG is pursuing repayment of the grant. A summary can be found in Appendix 2.A.
2.B	Promote and Implement Community Cleanup Programs.	Review the number of annual events, number of groups involved, types and quantity of trash collected.	This program is effective. Continued partnership with Operation Brightside and Livable Neighborhoods for neighborhood cleanups. See Appendix 2.C.
2.C	Provide Assistance and Materials to Community Groups for participation in a Storm Drain Inlets Stenciling Program.	Review progress towards completing the stenciling of inlets within the service area.	The UG continues to promote and provide materials to groups but a lack of interest and weather in 2019 resulted in no stenciling activities. See Appendix 2.C.

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
3. Illicit Discharge Detection and Elimination			
3.A	Evaluate, and if Necessary, Update Ordinances that pertain to Illicit Discharges.	N/A	Completed in 2013.
3.B	Implement, & Revise if Needed, Standard Operating Procedures for Illicit Discharge Detection, Sampling, Tracking and Enforcement.	Review and revise SOPs as needed.	The SOPs have proven effective. The IDDE program is being reviewed for potential improvement to increase communication and coordinate enforcement.
3.C	Design, Implement and Maintain IDDE Program Tracking and Reporting System.	Evaluate the system for effectiveness in capturing relevant data and providing sufficient reporting results.	Current system meets needs and is effective in capturing relevant data and providing reports. UG began implementing Lucity software for Major Outfall Inspections. The UG will prepare to implement Lucity for 2020 IDDE investigations. See Appendix 3.C.
3.D	Provide Training for IDDE Inspection Staff.	Analysis of data collected and feedback from personnel conducting ID investigations.	The training has improved the quality and confidence of Inspectors. See Appendix 3.D.
3.E	Perform Dry Weather Screening of Stormwater Outfalls.	Review effectiveness of SOPs in detecting illicit discharges in the service area.	SOPs are effective in evaluating discharges at major outfalls for suspected discharges.
3.F	Implement Program to Televise and Inspect Illicit Discharges/Cross Connections in UG's Storm and Sanitary Sewer Systems.	Review improvements in efficiency in reviewing CCTV data.	The CCTV of sewers has been implemented to the Maximum Extent Practicable. Software upgrades are continuing to improve tracking WPC operations. See Appendix 3.F.
3.G	Maintain a Current Storm Sewer Mapping System.	n/a	A map of the Storm Sewer System is located in Appendix 3.G
3.H	Continue the UG's Existing Household Hazardous Waste Collection Program.	Review the quantity of HHW collected each year.	The quantity of materials collected increased. Participation of residents was up considerably from last year. See Appendix 3.H.

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
3.I	Engage Commercial Facilities that Have Potential to Contribute Pollutants to the MS4.	Evaluate through surveys at events used to educate commercial facilities. Review maps and the potential pollution commercial facilities in the MS4.	Based on the technical memorandum prepared in 2018, the UG chose to engage commercial facilities with the highest potential for pollution through mailed educational fliers. The UG targeted Home Improvement, Landscaping and Septic Hauler businesses.

4. Construction Site Stormwater Runoff Control

4.A	Implement, & Revise if Needed, SOPs for SW Plan Review/Approval, Construction Site Inspections and Enforcement Activities.	Review and refine SOPs if changes are deemed necessary.	Current SOPs are effective at meeting UG's goals. No revisions were made.
4.B	Continue to Utilize Tracking System for SW Plan Review/Approval, Construction Site Inspections and Enforcement Activities	Evaluate the system for effectiveness in capturing relevant data, allowing query ability, and producing clear reporting results.	The system will be undergoing an upgrade in 2020. The current system is effective in capturing relevant data and allowing querying. The reports are clear and concise. See Appendix 4.B and 4.E.
4.C	Provide Training to UG's Erosion & Sediment Control (E&SC) Inspection Staff.	Review procedures and outcomes to ensure the E&S inspection staff are adequately and consistently evaluating and inspecting project sites that meet the regulations.	The inspection procedures are adequate to meet the needs of the UG. The results have improved each year. See Appendix 4.B and 4.E
4.D	Continue Training Program for Local Contractors and Owners.	Review evaluation and comments of attendees. Consider need for changes to future training.	Comments from those attending were positive. Timing of events and lead time need to be improved to increase attendance. See Appendix 4.D.

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
4.E	Conduct Routine Construction Site Inspections.	Evaluate compliance of construction site owners and response to complaints.	The UG continues to improve on responding to complaints in an efficient manner. The Contractors have been improving on their compliance as efforts to enforce ordinances has improved.

5. Post-Construction Stormwater Management Program

5.A	Maintain and Make Available Local Standards for Post-Construction Stormwater BMPs.	Review standards and BMP information annually and update standards and BMPs as necessary.	APWA/MARC BMP committee is continuing to work on an updated BMP Manual. The UG will review for adoption after it is released. Current standards and applicability of BMPs will also be reviewed for cost effectiveness and maintenance issues owners have. As part of the Unified Green Policy Implementation, the UG will be finalizing the revised policy and any exceptions to the APWA/MARC BMP Manual. The UG will continue to utilize the 2009 MARC Manual For Best Management Practices For Stormwater Quality as it's design standard.
5.B	Implement, & Revise if Needed, SOPs for SW Plan Review/Approval, Post-Construction Site Inspections and Enforcement Activities.	Review and refine SOPs if changes are deemed necessary.	The UG implemented Unified Green to update the stormwater and green infrastructure policy. A draft policy was presented in 2019 and efforts on finalizing the policy will continue in 2020. Adoption and implementation is proposed for January 2021.A requirement was also added to the Public Works Checklist/Approval of Occupancy Permits. This has greatly assisted in adding projects and all documentation to the BMP registry.
5.C	Conduct BMP Site Inspections and Maintain a Tracking System for Post-Construction Sites.	Evaluate the system for effectiveness in capturing relevant data, allowing query ability, and producing complete reporting results.	The current tracking system is limited in effectiveness as the program has grown. Efforts began in 2018 and continue into 2020 to put both private and public BMP sites into GIS and Lucity (asset management software) to better capture and track relevant information.

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
5.D	Provide Training to UG's Post-Construction BMPs Inspection Staff.	Review procedures and outcomes of inspections for consistency and results.	Further efforts are needed to improve providing information to owners, maintenance knowledge, and enforcement. Improvements to the program are expected to be implemented in 2020. Training can be found in Appendix 4.D
5.E	Develop Training Program For Local Property Owners, Designers and Developers on BMPs regarding maintenance and inspections.	Review evaluations and comments of attendees about the training. Assess whether changes are appropriate for future sessions.	A combination of E&SC and BMP training was held in 2019 which also met BMP 5.E criteria See Appendix 4.D.

6. Pollution Prevention/Good Housekeeping at Municipal Facilities

6.A	Implement, & Revise if Needed, SOPs for Application of Pesticides, Herbicides and Fertilizers on UG Property.	Review and refine SOPs if changes are deemed necessary.	SOPs are effective. Parks and Recreation use minimal quantities of PHFs and only as directed by manufacturer. See Appendix 6.A
6.B	Continue to Operate the UG's Existing Vehicle Washing Facility.	Review effectiveness of wash water removal as it relates to water quality goals.	The UG continues to utilize the washing facilities and finds the facilities effective. All wash water drains to a separation tank then to the sanitary sewer system. This means that wash water is not discharging into the MS4 or local waterways. Improvement will be made to the facilities in upcoming years.
6.C	Implement, & Revise if Needed, SOPs for Street Sweeping Activities.	Summary of miles swept, material collected, and review SOP for effectiveness.	SOPs are effective. Street sweeping is very effective in removing sediment that may otherwise enter the MS4. The number of miles swept and materials collected are consistent year to year. See Appendix 6.C.
6.D	Provide Training to UG Employees on Good Housekeeping Activities and Information on Reducing Pollutants to the MS4.	Employee feedback and comments and observed behavior changes.	The training and educational materials have been effective. The UG has seen changes in behavior and increased knowledge from those who have received emails and received attended the various training/education offered. See Appendices 1.A, 1.C and 3.D.

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
6.E	Continue Existing Curb Inlet Inspection and Cleaning Program.	Summary of prioritization, inspection techniques, cleaning reports. and SOP	This program is effective. Curb inlets are visited and cleaned in a proactive manner. Conditions and cleanings are tracked in GIS and Lucity database. See Appendix 6.E.
6.F	Implement, & Revise if Needed, Tracking System SOPs for Curb Inlet Inspection/Cleaning Activities. Implement SOP for Inlet Inspections and Cleaning.	Annually review and refine the SOP and the efficiency of inlet inspection and cleaning plan.	This program is effective. The UG reviewed the program and SOPs in 2019. No revisions were made to the SOPs.
6.G	Create UG-owned/operated or UG-operated Buildings and Facilities Inventory.	Review whether all sites required to have NPDES coverage are current on their NPDES Permit and SWPPP.	The Fleet Maintenance Facility is currently under an NPDES Permit. See Executive Summary for details regarding Fleet Maintenance Center. The SWPPP will be reviewed and updated in 2020. The existing SWPPP is being followed until a revised SWPPP has been prepared. WWTP 20 completed improvements to the facility in 2019 and the UG applied for a "No Exposure" Certification. See Appendix 6.G.
6.H	Monitor Good Housekeeping at Non-regulated UG Sites.	Review educational materials and if deemed necessary, make needed improvements in information provided.	The facilities associated with the Parks and Recreation and Fire Department were visited in 2019. Educational materials distributed were reviewed and found to be effective through behavior changes and site cleanliness since visits in 2015. See Appendix 6.H.

7. Industrial Activity Stormwater Runoff Management

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
7.A	Develop SOPs for SW Plan Review/Approval, Industrial Site Inspections, Review of SW Control Measures, and Enforcement Activities.	Review and refine SOPs if changes are deemed necessary.	SOPs were reviewed, no revisions were necessary.
7.B	Create and Maintain Industrial Facilities Inventory.	Completion of list of industrial facilities in service area as required by SMP.	The UG has been effective at maintaining an updated list of industrial facilities in the service area as required by the SMP. Current methods are effective for updating the Registry. See Appendix 7.B
7.C	Implement an Industrial Facility Inspection Program.	Summary of Compliance of facilities with the UG's ordinances.	Two facilities were inspected in 2019. All facilities were compliant with requirements. See Appendix 7.C
7.D	Adopt Legal Authority for Inspection of Industrial Facilities, Review of Onsite Control Measures, and Enforcement.	N/A (completed in 2014)	N/A
7.E	Develop a Program for Monitoring Industrial Discharges to the MS4.	Summary of the results of stormwater sample analysis and compare to comparable wet weather monitoring in the area.	UG sampled two facilities in 2019. Sample results were within acceptable parameters. See Appendix 7.B.

8. Total Maximum Daily Load (TMDL) Regulated Pollutants

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
8.A	Develop and Implement BMPs to Reduce TMDL Regulated Pollutants, to the Maximum Extent Practicable, from Entering the Kansas River.	Reductions in bacteria (E. coli) concentrations.	The UG Lab used a different methodology of performing estimation of MPN of E. Coli. The method used no longer estimates populations above 2,240 MPN and reports estimates clearly beyond 2,240 MPN as 2,240+. This results in a plateau which skews current averages. A new baseline may need to be established based on the 2,240 ceiling to determine reductions. The UG will discuss the options for reporting options in 2020. See Appendix 9.C.
8.B	Undertake Activities to Reduce Stormwater Impacts on Wyandotte County Lake.	Evaluate parameters, Secchi disk, and sediment data for effect on pollutants entering WYCO Lake. Modify program as appropriate. Evaluate plan to assess significant sources of phosphorus to Lake.	In-lake sample results did not indicate the lake is experiencing excessive nutrient loads. Further monitoring will continue. Secchi Disk readings were consistent with previous years results. Current trends can be found in Appendix 9.C.
8.C	Develop and Implement BMPs focused on the Little Turkey Creek (LTC) and Brenner Heights Creek (BHC) Watersheds as proxies for the Kansas River.	Evaluate the TMDL parameters reported in Wet Weather Monitoring for any significant change in concentrations of nutrients, sediment and bacteria.	The results of Wet Weather Monitoring indicate slight reductions or consistent concentrations. This is despite the increase of development in Wyandotte County.
8.D	Assess BMPs focused on LTC and BHC watersheds targets as proxies for Kansas River.	Evaluate the TMDL parameters reported in Wet Weather Monitoring as compared to wet weather monitoring results for nutrients, sediment and bacteria.	The watershed results can be found in Appendix 9.C.

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
9. Wet Weather Monitoring			
9.A	Implement SOPs to address monitoring of Water Quality Parameters.	Review and refine SOPs if changes are deemed necessary.	The current SOPs for wet weather monitoring are effective. Based on the UG's review, no revisions are deemed necessary at this time. See Appendix 9.A.
9.B	Develop Tracking System for Wet Weather Monitoring Activities.	Review tracking system for clarity, usefulness and reliability of information.	The tracking system is effective, clear, useful and reliable.
9.C	Conduct Water Quality Analyses of SW Discharges to Assess Effectiveness of Implemented BMPs.	Evaluate trends to assess water quality impacts and review possible changes to BMPs and stormwater management activities, if required.	The UG is currently reviewing monitoring results and trends. At this time, the UG finds its existing program to be effective at reducing pollutants to the MEP. Sample results are typical for the area and no changes to BMPs or the stormwater management program in general are justified. See Appendix 9.C.
9.D	Perform sampling activities at Wet Weather Monitoring Sites.	Review sampling strategies, sample machine performance and acquisition by UG personnel. Make modifications to the system if appropriate	Sampling strategies applied since 2017 are very successful. The UG obtained all required samples, with the exception of one set of In-Lake wet weather samples See Executive Summary for explanation. No modifications are necessary.
10. Stormwater Management Program			
10.A	Hire a Stormwater Coordinator	N/A	
10.B	Create SW Executive Committee to Provide Administrative Oversight, Coordination and Direction.	PW Director or designee to determine if committees are effective in implementing the SMP.	The Stormwater Executive Committee determined that committees were not necessary for 2019.

BMP #	Brief Description	Evaluation Methodology	Effectiveness and Summaries of Information Collected
10.C	Conduct an Annual Financial Analysis of the SW Program.	N/A	

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system 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 knowledgeand 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."

Signature of Permittee: _____ **Date Signed** 2-24-20

(Legally responsible person)

Name Printed: Jeff Fisher **Title** Director of Public Works

40 CFR 122.22 Signatories to permit applications and reports.

(a)Application. All permit applications shall be signed by either a principal executive officer or ranking elected official.

All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person.

Please note the submission requirements on page 1. Submit this report to:

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

Municipal Programs Section

1000 SW Jackson Street, Suite 420

Topeka, Kansas 66612