



**PUBLIC WORKS
ENGINEERING**

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Kansas City, KS 66101 E: info@wycokck.org

February 25, 2023

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 2021 MS4 Program Annual Report**

Please find enclosed the 2022 Annual Report for the Unified Government's Municipal Separate Storm Sewer System (MS4) Program. This report covers the period from January 1, 2022, through December 31, 2022. Pursuant to the MS4 Permit, this report has a required submittal date of February 28, 2023.

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



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**KANSAS STORMWATER 2022 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

<input type="checkbox"/>	Permittee [Agency Name] Mailing Address 1:	Unified Government of Wyandotte County/ Kansas City, Kansas
<input type="checkbox"/>	Mailing Address 2:	701 N. 7 th St.
<input type="checkbox"/>	Municipality:	Kansas City
	State:	Kansas
<input type="checkbox"/>	Zip Code:	66101
<input type="checkbox"/>	MS4 Program Contact Person:	Jonathan Wiles
<input type="checkbox"/>	Contact E-Mail Address:	jwiles@wycokck.org
<input type="checkbox"/>	Contact Phone Number:	913-573-5700
<input checked="" type="checkbox"/>	MS4 Construction Contact - Person	Shawna Starbach
<input checked="" type="checkbox"/>	Construction E-Mail Address:	starbach@wycokck.org
<input type="checkbox"/>	Contact Phone Number:	913-573-5700
<input type="checkbox"/>	Kansas Permit Number: — Ex. M-MC21-SU01	M-MO25-SO01

Reporting period covers activities from January 1, 2022 through December 31, 2022.

This annual report must be submitted to the Kansas Department of Health and Environment (KDHE) by February 28th, 2023. The annual report is to be submitted as PDF files to KDHE preferably by email (KDHE.MS4@ks.gov). There is no requirement to provide hard copies of any documents.

EXECUTIVE SUMMARY

Introduction: Stormwater Management Plan (SMP).

The Unified Government of Wyandotte County/Kansas City, Kansas (UG) created a new SMP in 2020 in compliance with the 2020 Municipal Separated Stormwater Sewer System (MS4) Permit. The UG is continuing to implement the new SMP and no revisions were made in 2022.

TMDL and Wet Weather Monitoring

In accordance with the 2020 permit, the UG monitors wet weather at three locations. These locations include Little Turkey Creek (LTC-01), Brenner Heights Creek (BHC-01) and Barber Creek (BARC-01). Generally, the results of the were consistent with results of previous years. There were nine results out of 12 that were above 12,000 CFU/100mL which skewed the trends for all three creeks upward. The uptick in results is concerning and the UG is taking steps to improve response when sample results exceed 12,000 CFU/100mL and preparing additional investigation procedures to increase the chances of identifying possible sources of bacteria in the creeks. Currently when sample results exceed 12,000, the UG Water Pollution Control (WPC) staff reviews Sanitary Sewer Reports (SSR) and Combined Sewer Reports (CSR), and work orders to determine if WPC sewer leaks are the cause. Investigations were unable to identify a source for the elevated results.

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

The UG has continued to improve information gathering and tracking for post-construction stormwater management treatment facilities. The use of Lucity is improving efficiency and accuracy of the information gathered for the MS4 program.

In 2022, the UG improved the enforcement portion of the Construction Site Stormwater Runoff Program. The improvements have led to an increase in compliance from contractors constructing houses on lots under 1-acre. The UG increased the number of inspections of sites under 1-acre in 2022. The increased presence of UG inspectors and notifications to contractors increased the compliance with erosion and sediment control and directly improved water quality. The UG also created a comprehensive guide for inspectors that cover all aspects of the inspection and enforcement which will improve consistency of the program.

Aspects of the Program Providing Future Opportunities for Improvement.

The IDDE program will be targeted in 2023 for improvements to the enforcement of ordinances revised in 2021. The UG will work towards creating a comprehensive investigation and enforcement guide similar to the one created for the Construction Site Stormwater Runoff Program.

The Most Successful Part of the Program.

Overall, the entire MS4 program provided successful results in 2022. In particular, the improvement to Construction Site Runoff controls related to enforcement and increased number of inspections of residential construction was very successful.

The Most Challenging Aspect of the Program.

One of the most challenging aspects of the program is IDDE tracing of non-point source pollutants as it relates to TMDL wet weather tracing. While most bacteria loads are assumed to be related to failing septic systems or broken sanitary sewer mains, identifying other possible sources of bacteria loads has been very challenging.

Another aspect that has been challenging is getting more participation in the STF Cost Share Program. The UG has promoted the program on its website and with the Neighborhood Resource Center (NRC) but has not yet realized its full potential on assisting residents with cooperative environmental goals.

The City/County Area MS4 Cleanups.

The UG partnered with the Kansas City, Kansas Police Department, Solid Waste Division of Public Works, Friends of the Kaw, Mid-America Regional Council (MARC), and Wyandotte County Conservation District (WCCD). The Engineering Department provided 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!" They also coordinated with the Public Works Street Department to pick up the trash bags and disposed of them when the event is complete. The UG Police Department also participates in off the clock community cleanup events throughout the year.

Elected Official Participation in Stormwater Pollution Reduction/Elimination.

Elected officials are updated annually about the status and accomplishments of the Stormwater Management Program.

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 is continuing its partnership with the Wyandotte County Conservation District which managed the Cost Share Program (provides funds to landowners to implement conservation practices), free soil testing and various

environmental education events. The UG continues to be an active member in the Water Quality Education Committee organized by MARC. This committee 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, and other local organizations.

Audits/Inspections Conducted by KDHE or EPA.

The UG was not audited during this Annual Report reporting period but were asked to follow up on several requests from KDHE and EPA offices.

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.

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

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	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has the Stormwater Management Program (SMP) been developed and implemented?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Has the SMP been modified or updated during this reporting period?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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.

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	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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)
TMDL-01	Install pet waste stations which include a glove/bag dispenser with signage and waste can, to encourage pet waste disposal at either parks, trails, rest areas or other public lands owned by the permittee.	Bacteria	At least one pet waste station shall be installed at the selected park, trail, rest area or other public land. The station(s) shall include signage which encourages proper pet waste disposal/cleanup and a waste can.	<p>The UG has 11 pet waste receptacles in 8 parks. Each station has signage encouraging proper waste disposal. No new stations were installed in 2022.</p> <p>Approximately 8,000 bags were distributed. A map and summary of the sites can be found in Appendix 7.A.</p> <p>Points Earned = 1</p>
TMDL-05	Develop a pet waste brochure or flyer document to educate the public about animal waste contamination of stormwater. The document encourages pet owners to pick up their pet's waste.	Bacteria	The brochures or flyers are to be posted in various public buildings and distributed to the public throughout the year. In the year the number of documents shall equal or exceed the most recent U.S. Census Bureau decennial housing units value for the permit area. The applicable U.S. Census housing units value shall be documented, and the number of documents distributed shall also be documented. This information and copies of the documents shall be retained on file.	<p>The pet waste flyer and distribution of flyers can be found in Appendix 1.B</p> <p>Points Earned = 1</p>

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)
TMDL-05 Cont.	Alternately, post the document on social media or the municipal website.	Bacteria	Documents posted to social media or the website shall have the page copied and printed to retain on file.	See previous page
TMDL-06	Distribute “Only Rain Down the Drain” door hangers or similar document.	Bacteria	Provide in portions of the permit area with suspected illicit discharges. In the year the number of documents distributed shall equal or exceed 10% of the most recent U.S. Census Bureau decennial housing units value for the permit area. The applicable U.S. Census housing units value shall be documented, and the number of documents distributed shall also be documented. This information and copies of the documents shall be retained on file.	<p>The flyer is available in various locations around Wyandotte County. The flyer is also available on the UG website. A summary of the audience reached can be found in Appendix 1.B.</p> <p>Points Earned = 2</p>

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)
TMDL-07	Inspect 10% of all known MS4 outfalls for dry weather discharges either annually or twice per year to identify potential illicit discharges.	Bacteria	Complete inspection of 10% of all known MS4 outfalls either annually or twice per year during dry weather periods. If dry weather discharge is found follow-up with investigation to determine if a portion or all the discharge is illicit. Document the findings and initiate efforts to eliminate any identified illicit discharges.	<p>The UG performed 4,655 inspections on 2,384 unique structures out of 12,677 (19%) in 2022. Eight suspected illegal connections were identified, and zero illicit discharges were identified. The illegal connections are in process to be eliminated. The summary of inspections was too big for the Appendices. A summary of outfall inspections is available upon request.</p> <p>Points Earned = 3</p>

C. Total Maximum Daily Load (TMDL) – Surface Water Monitoring Best Management Practices

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
TMDLSWM-1	Monitor the water quality of the Kansas River via sampling of tributaries (Little Turkey Creek, Brenner Heights Creek and Barber Creek) for TMDL regulated pollutants (Bacteria).	Grab samples shall be obtained in-stream during storm events at the prescribed locations. Storm events shall be considered valid if the precipitation is equal to or greater than 0.25-inches. Monitoring shall occur in the spring (March 1 to June 30) and summer (July 1 to October 31). In the event weather patterns do not cooperate, samples may be obtained in the summer. A minimum of 4 events must be sampled in the given year. Grab samples shall be obtained within 4 hours of rising stages on streams. Sampling activities are not allowed if the precipitation has occurred 24-hours prior to the targeted storm event.	The UG obtained the required samples for 2022. A summary and interpretation of the sample results can be found in Appendix 8.A.

C. Total Maximum Daily Load (TMDL) – Surface Water Monitoring Best Management Practices

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
TMDLSWM-2	Perform analysis of samples obtained from sampling activities	Lab analysis results will be recorded and a statistical analysis with previous year's sampling activities will be provided for comparison.	The lab results and graphs of the 2022 results can be found in Appendix 8.B.
TMDLSWM-3	Develop and maintain maps that illustrate the permit area, drainage basins, subbasins, locations of BMPs, TMDL stream monitoring locations, storm sewer collection system, and known outfalls in the permit area, draining to MS4 TMDL impaired waters.	<p>Prepare and maintain maps as follows:</p> <ol style="list-style-type: none"> 1. The Permit Area, boundaries of the contributing drainage basins and primary sub-basins, within and outside the Permit Area 2. The locations of structural BMPs 3. The location of TMDL stream monitoring locations 4. Storm sewer collection system which includes the known outfalls within the Permit Area where the MS4 drains to TMDL listed impaired streams or lakes 	Maps can be found in Appendix 8.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)
PE&O-01	Maintain a stormwater webpage for the permittee.	Maintain the webpage with up-to-date information with all links effective and valid information. Check all links and update website as necessary on a minimum monthly basis. Document monthly checks in logbook and indicate changes with logged summaries.	The webpage was kept up to date and all links were checked regularly. The UG is not taking points for this particular BMP due to the logbook not reflecting a check in each month. The UG is reviewing procedures to ensure monthly log ins. A summary of changes to the website can be found in Appendix 1.A.
PE&O-02	Distribute educational materials (either flyers, brochures, catalog mailings, handouts, or emails) addressing various pertinent stormwater public education topics.	Number of all flyers, brochures, catalog mailings, handouts, or emails distributed in a year shall equal or exceed the most recent U.S. Census Bureau decennial housing units value for the permit area. The applicable U.S. Census housing units value shall be documented, and the number of flyers, brochures or emails distributed shall also be documented. This information and copies of the flyers,	Census housing units' value for the permit area is 68,397. In 2022 the UG reached 73,670 households/persons. Copies of materials and a summary of distribution can be found in Appendix 1.B. Points Earned = 2

D. Stormwater Management Program Requirements (Six Minimum Controls)

1. Public Education and Outreach (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
PE&O-03	Provide either training or educational materials to permittee identified businesses at high risk of contributing to stormwater pollution. Such businesses can include, but are not limited to, food service, auto service, disaster response and janitorial services. The training or educational materials shall address best management practices they can employ to minimize or avoid adverse stormwater impacts due to their operations.	<p>brochures or emails shall be retained on file.</p> <p>Training or educational materials must be provided, within the year, to at least five separate businesses if the population of the municipality is greater than 10,000, or three businesses if the population of the municipality is between 3,000 and 9,999, or two separate businesses if the population of the municipality is less than 3,000.</p> <p>There is no requirement to provide training to business in separate business categories, although it is allowed.</p>	<p>In 2022, the UG mailed educational materials to 57 automotive businesses and 24 Landscaping businesses. The educational flyer and summary of distribution can be found in Appendix 1.B. Mailing lists can be found in Appendix 1.C.</p> <p>Points Earned = 2</p>
PE&O-05	Post the municipality’s MS4 permit and SMP document on either the stormwater web page or the municipal webpage.	The two documents must be posted for at least six months of the year to claim one point.	<p>Both documents were posted in early March of 2022 which exceeds required 6-months. A screenshot of the website with the documents can be found in Appendix 1.D.</p> <p>Points Earned = 1</p>

D. Stormwater Management Program Requirements (Six Minimum Controls)

1. Public Education and Outreach (Table)

<p>PE&O-06</p>	<p>Provide either a stormwater telephone hotline or web based or text message method for public reporting of illicit discharges.</p>	<p>Respond to all reported complaints within 10 days and, if found valid, resolve, or establish a schedule for resolution within 20 days. Actual resolution may take more than 20 days, but the schedule for resolution must be finalized and the efforts to implement resolution must begin within 20 days following receipt of complaint. Document complaints and response/resolution process for all complaints received in the year.</p> <p>Resolution of an illicit discharge can include, but is not limited to; elimination of the discharge; on-site treatment to allow discharge to the MS4 (normally requires an NPDES permit); redirecting the discharge to a location that the discharge is not considered illicit, i.e., sanitary sewer or to holding tanks to allow the waste to be hauled off for appropriate treatment, reuse/recycle or disposal.</p>	<p>The UG has a public hotline referred to as 311 that allows citizens to report complaints/concerns including illicit discharges. In 2022 the UG Engineering Division received 11 calls relating to stormwater issues from 311. None of the calls were related to illicit discharges. Responses for this report are only included when the calls are related to illicit discharges. A summary of stormwater related calls can be found in Appendix 1.E.</p> <p>Points Earned = 2</p>
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D. Stormwater Management Program Requirements (Six Minimum Controls)

1. Public Education and Outreach (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
PE&O-09	1. Operate an information booth at a large public event, (such as a sports event, fair, or music festival) where at least an estimated 1,000 or more individuals attend.	Provide information about stormwater topics of current interest.	The UG operated a table at one event where educational materials were distributed. The Wyandotte County Conservation District operated a booth at one event with approximately 800 in attendance. A summary of materials distributed can be found in Appendix 1.B. A summary can be found in Appendix 1.F. Points Earned = 1
	2. Alternately, operate an information booth at multiple public events, (such as a sports event, fair, or music festival) where a cumulative estimated total of 3,000 or more individuals attend.		
	3. And finally, a single point can be claimed for operating an information booth at a public event where at least an estimated 200 or more individuals attend.		
PE&O- 10	Provide either training or educational materials to lawn/turf care service entities addressing best management practices they can employ to minimize or avoid adverse stormwater impacts due to their operations.	Training or educational materials must be provided, within the year, to at least five lawn/turf care service entities or at least 20% of the lawn care service entities located in the municipality whichever is least.	The UG provided an educational postcard to all Landscaping services within the UG jurisdiction. The postcard can be found in Appendix 1.B and mailing list in Appendix 1.C. Points Earned = 2

D. Stormwater Management Program Requirements (Six Minimum Controls)

1. Public Education and Outreach (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
PE&O-12	Create a stormwater information brochure to provide to the public at public meetings and/or hearings	Have multiple copies of the brochure available during at least 10 meetings or hearings open to the public during the year. Provide the brochures to the public at no charge.	The UG has a display with stormwater related brochures located near Commissioner meetings which are held twice per month. The list of brochures can be found in Appendix 1.B Points Earned = 1

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)
P I/P-06	Establish a program to encourage residents to install stormwater treatment best management practices on their property.	Encouragement can include funding, grants, and other financial incentives, trainings and or giveaways. Stormwater treatment BMPs can include: rain barrels, rain gardens, native plantings, native trees, cisterns and vegetated swales. Record participation numbers annually.	The UG established a Cost Share Program for STF and planting native vegetation in August 2021. One household participated in 2022. A summary can be found in Appendix 2.A. A link to the program is included: https://www.wycokck.org/Engage-With-Us/News-articles/Stormwater-Quality-Cost-Share-Program Points Earned = 3
P I/P-09	<p>Distribute stormwater educational materials to the public within this permit area.</p> <p>Alternately, the permittee may provide stormwater educational materials, e.g. brochures, flyers, or pamphlets. These materials may address various stormwater topics. For this alternative, these materials may be provided to other nearby municipalities for distribution to the public. The nearby municipalities must be within 30 miles from this permit area.</p>	The educational materials, for each topic, which are distributed or supplied must have a value of at least \$50. Topics may be anything related to stormwater including but not limited to clean-up guidance following flooding, discouraging littering, explaining and discouraging illicit discharges to the storm sewers, guidance on constructed BMPs for home owners (rain gardens, rain barrels, etc.) guidance on area household hazardous waste receiving centers, and guidance on area recycling programs.	The UG distributes and provides displays at several locations for the public. The materials and display locations can be found in Appendix 1.B. Points Earned = 5

2. Public Involvement and Participation (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
P I/P-10	Establish a program to employ (either paid or unpaid) high school or college age environmental interns in an environmental related program including but not limited to either the wastewater utility, stormwater utility, potable water utility or solid waste utility.	The intern must receive the same environmental related training a new full-time employee would receive, within the first six months of the full-time employee's employment, during their internship.	The UG employed an intern through the VISTA program during calendar year 2022. The emphasis of their work and research focused on stormwater related issues. He received the same MS4 training as regular UG employees. A summary can be found in Appendix 2.B. Points Earned = 2

3. Illicit Discharge Detection and Elimination

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

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a program/plan been developed and is it presently implemented to detect and address illicit/prohibited discharges into the MS4?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have the ordinances, resolutions, or regulations been modified? Effective date:06/24/21

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

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
IDDE-02	Implement a program to abandon failed or failing residential or commercial on-site wastewater treatment facilities. These on-site wastewater treatment systems such as septic tank – lateral systems or lagoon systems are then connected to the municipal wastewater collection system for treatment of wastewater at the municipal wastewater treatment plant.	Redirect the wastewater generated by the facility to the municipal wastewater treatment collection system for proper treatment and disposal.	The UG policy is to require septic systems be abandoned and have the building tied-in to the public sewer system when a public system is within 200-ft of a property. Systems that are failing are required to obtain permits and are repaired or replaced to UG standards with final inspections by the UG. A summary can be found in Appendix 3.A. Points Earned = 2
	Alternately, upgrade or replace the failed system to restore performance.	Alternately, upgrade or replace the failed system with improvements which meet or exceed the present code or local requirements.	
IDDE-03	Develop a spill response plan and, if appropriate, coordinate emergency response with other agencies or organizations.	The plan shall include, at a minimum, explanation of appropriate spill response activities for spills associated with vehicle accidents, at grade or above ground storage tanks, and vehicle fluids from mechanical equipment such as construction equipment, cars, or trucks. The written plan shall be maintained on file.	A copy of the spill response plan can be found in Appendix 3.B. Points Earned = 2

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
IDDE-04	<p>Implement a program to evaluate MS4 outfalls to identify illicit discharges. Inspect at least 5% of the known MS4 outfalls during a calendar year and evaluate the ones which have dry weather discharges. Evaluate the water quality of the dry weather discharges to recognize non-stormwater contributions and trace the source of any illicit discharge.</p> <p>* Over the past 7 years the UG has only identified a handful of suspected illicit discharges and one confirmed illicit discharge at outfalls under CFR definitions. In order to increase the probability of locating an illicit discharge, the UG will henceforth consider outfalls to be defined as structures within the storm sewer system and not the ends of a pipe system, which is similar to neighboring municipalities. This definition will better reflect the level of effort that the UG invests in identifying illicit discharges.</p>	<p>When at least 5% of the known MS4 outfalls are inspected and for which at least one outfall was identified as discharging (entirely or partially) flow from an illicit discharge, the allotted points may be claimed in the year when the illicit discharge is eliminated. Document the MS4 outfalls inspected, the outfalls with dry weather discharges and the MS4 outfalls associated with illicit discharges.</p>	<p>The UG performed 4,655 inspections on 2,384 unique structures out of 12,677 (19%) in 2022. Eight suspected illegal connections were identified. The illegal connections are in process to be eliminated. The summary of inspections was too big for the Appendices. A summary of outfall inspections is available upon request.</p> <p style="text-align: center;">Points Earned = 1</p>

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
IDDE-05	<p>Distribute a letter (or flier) and/or e-mail along with a press release from a municipal official with the intent of reaching every resident and business in the MS4 permit area. The distributed documents shall provide information on how to avoid illicit discharges to the MS4, i.e., proper disposal methods for common substances or materials often discharged illicitly. Provide a link to the municipal website where applicable ordinances and disposal guidance are posted.</p>	<p>The letter (or flier) and/or e-mail along with the press release shall highlight the requirements for proper disposal of wastes and disposal methods. Copies of these documents shall be retained on file along with the distribution/ mailing lists to document distribution to the target area (minimum MS4 permit area) to avoid illicit discharges to the MS4. Provide a link to the municipal website where applicable ordinances and disposal guidance are posted.</p>	<p>The UG reserves this BMP for the event that the UG issues a press release and would like to claim points. Typically press releases from Public Works are rare. No press release for 2022.</p>
IDDE-06	<p>Inspect, by televising pipelines or direct visualization of open channel drainage, 2% of the MS4 system within the permit area all conducted within a 12-month period to aid in identifying illicit discharges as well as evaluate the condition of the storm sewer lines/drainage channels-ditches. If in a 12-month period 10% of the MS4 system is inspected a higher point value may be claimed.</p>	<p>Provide a summary report of the inspection including the number of linear feet televised, number of linear feet visually inspected, condition comments, illicit discharges identified and the results of efforts to eliminate illicit discharges, e.g., discharge line disconnected and redirected to the sanitary sewer or discharge practice terminated.</p>	<p>In 2022 the UG inspected 31,315 feet or 2.1% of storm sewer. No illicit discharges or illicit connections were identified. Pipe ratings ranged from 0 to 101. A summary can be found in Appendix 3.D. Points Earned = 3</p>

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
IDDE-08	Implement a program to increase the reliability of sanitary sewer pump stations above the minimum standard design requirements.	A pump station shall be upgraded to include the following:	The UG is currently in the process of upgrading and improving pump stations. In 2022, the UG did not perform any improvements to pump stations that match the Measurable Goals of this BMP.
		A dedicated on-site standby generator shall be installed (with automatic transfer switch) for use when main line power fails.	
		A dialer system, or telemetry system, or connection to a SCADA system shall be installed to provide real time or nearly real time notification of failures at the pump station which can potentially lead to sanitary sewer overflow.	
		The permittee shall purchase and maintain for immediate operation a trailer mounted motor driven sewage pump for use when the pump station fails to operate. The motor driven pump shall be sized to pump at a rate at least equal to the firm pumping capacity of any sanitary sewer pump station the permittee claims points for under this BMP.	

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
IDDE-08 (Continued)	Implement a program to increase the reliability of sanitary sewer pump stations above the minimum standard design requirements.	The pump station shall be modified to facilitate the connection of the trailer mounted pump discharge to the force main and convenient installation of the suction line from the trailer mounted pump into the wet well.	See previous page
IDDE-09	Provide a contribution to area recycle programs or programs (such as household hazardous waste disposal facilities, e-cycle facilities, paper shred facilities, pharmaceutical disposal facilities etc.) designed to properly dispose of types of waste or materials which have previously been discarded to or adjacent to either the MS4, streams, or lakes within or adjacent to the permittee's permit area. The area program must be within 30 miles from this permit area.	The contributions may be made to programs which take tires, automotive fluids, batteries, or other wastes for which there is any documentation such wastes have been discarded as addressed under the BMP summary. The contributions must total a minimum of \$500 in the year (\$100 in the year for alternative lower population municipalities) which points are claimed. The contributions can be monetary or can be in the form of goods and/or services with an agreed specified value. Contributions may be made to area household hazardous waste programs, private recycle/reuse facilities or civic/volunteer organizations assisting in recycle.	The reports submitted to the KDHE are by the fiscal year (July 1, 2021 to June 30, 2022). The UG hosts Household Hazardous Waste Collection Events 7 times per year. The UG contributed \$117,801. A copy of the report can be found in Appendix 3.F. Points Earned = 2

3. Illicit Discharge Detection and Elimination (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
IDDE-10	<p>Inspect, 5% of the MS4 system Stormwater inlets and/or outfalls within the permit area all conducted within a 12-month period to aid in identifying illicit discharges. If in a 12-month period 15% of the MS4 system inlets and/or outfalls are inspected a higher point value may be claimed in the year the required percentage of inspections are completed.</p>	<p>Generate a summary report of the inspection including the number of inlets and/or outfalls visually inspected, condition comments, illicit discharges identified and the results of efforts to eliminate illicit discharges, e.g., discharge line disconnected and redirected to the sanitary sewer or discharge practice terminated.</p>	<p>The UG performed 4,655 inspections on 2,384 unique structures out of 12,677 (19%) in 2022. Eight suspected illegal connections were identified. The illegal connections are in process to be eliminated. The summary of inspections was too big for the Appendices. A summary of outfall inspections is available upon request.</p> <p>Points Earned = 5</p>

4. Construction Site Stormwater Runoff Control

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

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure or program been developed requiring construction site owners and/or operators to implement appropriate erosion and sediment control best management practices?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 at construction sites likely to cause adverse impacts to water quality?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure been developed and implemented requiring site plan review which includes consideration of potential water quality impacts?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure been developed for the receipt and consideration of information submitted by the public?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a procedure been developed and implemented for construction 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)
CSSRC-01	Implement a requirement for a Soil Erosion and Sediment Control(SESC) plan for any land disturbance sites which are either equal to or greater than 1 acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.	Enact a regulatory ordinance, or other enforceable measure that requires an SESC Plan for all Developments disturbing sites which are either equal to or greater than 1 acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.	The UG ordinances requires a SWPPP and Erosion and Sediment Control Plan in accordance with the KDHE requirements for sites over 1-acre and requires erosion and sediment control measures be installed on sites under one acre per in accordance with UG Standard Details. A copy of the ordinances can be found in Appendix 10.A. Points Earned = 2
CSSRC -02	Develop and adopt a design manual for erosion and sediment control BMPs which are required to be used on sites which will be disturbed and are either equal to or greater than 1 acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.	Require implementation of BMPs in compliance with the design manual on all sites which meet the disturbed area standard as specified.in the BMP Summary.	The Guidelines for Preparing Erosion Control Drawings for Land Development can be found on the UG website. https://www.wycokck.org/Departments/Public-Works/Stormwater-Runoff-Management/DevelopersDevelopment-Requirements Points Earned = 2

4. Construction Site Stormwater Runoff Control (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
CSSRC -04	Develop a site plan review process which considers potential water quality impacts which may occur during construction as well as post construction impacts.	Review process must have written guidance for the reviewer. Issuance of a building permit or approval to start construction may not be provided until the site plan has successfully passed the review process either based on the initial site plan submittal or has been modified to comply with requirements identified during the review process. Measures must be included to enforce the installation of water quality BMPs included in the site plan.	A weblink to the site plan review process can be found: https://www.wycokck.org/Departments/Planning-Urban-Design/Applications Points Earned = 2
CSSRC-05	<p>Establish effective requirements for construction sites to control wastes. Develop through ordinance or other enforceable means requirements for construction site</p> <p>Operators or owners to control wastes. At a minimum control shall be imposed to prevent entry into the MS4 for the following wastes:</p> <ul style="list-style-type: none"> • Discarded building materials • Concrete • Truck washout • Chemicals • Litter • Sanitary waste 	Enact ordinance or other effective means to achieve control of wastes at construction sites.	The ordinances include a provision for contractors to control construction waste. A copy of the ordinances can be found in Appendix 10.A. Points Earned = 2

4. Construction Site Stormwater Runoff Control (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
CSSRC -06	Develop written procedures for inspection of construction sites. Develop a Stormwater Construction Site Inspection Guide for use by municipal inspectors.	The procedures document must address the administrative aspects associated with required inspections of construction sites, the issuance of inspection reports, notices of violations, and enforcement actions. The Inspection Guide must provide inspectors guidance on how to conduct a construction site stormwater inspection, the required procedures, and guidance on acceptable conditions of various BMPs employed on such sites, enforcement actions and/or reference of cases for enforcement by other municipal staff, guidance on photo log of the inspection and inspection checklists for use by the inspector.	In 2022 the UG created the <i>Construction Site Stormwater Runoff Control Program Guide</i> . A copy of the Inspection Guide can be found in Appendix 4.A. The Standard Operating Procedures can be found in Appendix 11.A. Points Earned = 3

4. Construction Site Stormwater Runoff Control (Table)

<p>CSSRC -07</p>	<p>Acquire or develop a software tracking system to track inspections and related tasks.</p>	<p>The tracking system must allow for scheduling inspections and follow-up activities such as re-inspections, mailing notices or reports, etc.</p>	<p>The Unifie Government of Wyandotte County/KCK has implemented Central Square EAM (formerly known as Lucity) to track and manage the Stormwater Management Program.</p> <p>It is configured to track:</p> <ul style="list-style-type: none"> • Public Education and Outreach events and documentation • Public Involvement and Participation events and documentation • Stormwater Citizen Requests • Illicit Discharge Detection and Elimination inspections and documentation • Construction Site Stormwater Runoff Sites and inspections • Post-Construction Stormwater Treatment Facility (STF) Sites and “Assets” (public or private) • TMDL documentation • Industrial Stormwater Activities inspections and documentation <p>Points Earned = 1</p>
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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	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a post-construction stormwater runoff program been implemented?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have post-construction sites been inspected? *
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are BMP's specified to minimize adverse water quality impacts?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have strategies been developed to include a combination of structural and/or non-structural BMP appropriate for the municipality?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 Ordinances. Per the ordinance, 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 its 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)
PCSM-01	<p>Develop and adopt a custom design manual for Post-Construction Stormwater Management which specifies various structural BMPs which are required for new development and re-development construction sites which are greater than 1 acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more. Alternately, adopt and implement the APWA 5600 Stormwater Design Criteria and the MARC/APWA BMP Manual</p>	<p>The custom design manual shall impose requirements to achieve at least one of the following standards:</p> <ul style="list-style-type: none"> • Capture, at least, the first 0.5 inches of precipitation on the development/re-development site and utilize methods to prevent discharge off-site, including but not limited to: <ul style="list-style-type: none"> • retain on-site • infiltrate • evaporate • transpire or • beneficially reuse • Through implementation of appropriate BMP(s) reduce the peak stormwater flow rate to a value equal to or less than the rate which would be experienced on the site prior to the development/re-development project based upon modeling a standard storm event, e.g. 1.0 inch – 6-hour event assuming saturated soil conditions. • Other sizing or detention standards generally accepted by design engineers as adequate for the permittee’s local. 	<p>The UG has adopted a modified version of the APWA 5600 and MARC/APWA BMP Manual which can be found here: https://www.wycokck.org/Departments/Planning-Urban-Design/Engineering Points Earned = 5</p>

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)
PCSM-01 (continued)		<ul style="list-style-type: none"> As an alternative to a custom design manual the APWA 5600 Stormwater Design Criteria and the MARC/APWA BMP Manual may be adopted and implemented. <p>Measures must be included to enforce the installation of the various structural BMPs required</p>	See previous page
PCSM-03	<p>Develop and implement a program to provide adequate long-term cleaning, operation, and maintenance of all municipally owned or operated post-construction structural stormwater BMP facilities. The program shall address several different types of these BMP systems. The systems, which are addressed, shall include any type of post-construction structural BMP system, contained in the MS4. These shall include, if so present, at a minimum the following:</p> <ul style="list-style-type: none"> Detention ponds Retention ponds Grass swales Pervious paving systems Wetlands Vegetative filter strips Manufactured stormwater treatment devices (swirl separators, screens, etc.) 	<p>The program shall be detailed in a written document and made available to all pertinent maintenance staff.</p>	<p>A program was developed, and a memorandum written in 2021 to address the STFs currently maintained by the UG. A copy of the <i>Long Term STF Maintenance Memorandum</i> can be found in Appendix 5.A. The UG implemented the document in 2022.</p> <p>Points Earned = 2</p>

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)
PCSM-05	<ul style="list-style-type: none"> • Drop inlet-catch basin <p>Develop and implement a program for inspection of permittee owned structural BMPs which includes implementation of needed maintenance to ensure long-term operation of the BMPs</p>	<p>The program shall require inspection of at least 10% of the structural BMPs on an annual basis.</p> <p>Identified maintenance activities shall be completed:</p> <ol style="list-style-type: none"> 1. in the same year of inspection or 2. completed as dictated by the permittee’s maintenance/O&M plan 3. or a written plan for completion of the necessary maintenance shall be completed in the same year of inspection with the objective for completion of the maintenance activity within 18 months. 	<p>The UG inspects all UG Owned STFs annually. The summary of inspections can be found in Appendix 5.B</p> <p>Points Earned = 2</p>
PCSM-06	<p>Develop and implement a program for inspection of known privately owned structural BMPs which includes providing the owner of the BMPs an inspection report which specifies needed maintenance to ensure long-term operation of the BMPs.</p>	<p>The program shall require inspection of at least 10% of the known privately owned structural BMPs on an annual basis. Identified maintenance activities shall be completed in the same year of inspection or a written plan for completion of the necessary maintenance shall be completed in the same year of inspection with the objective for completion of the maintenance activity within 18 months.</p>	<p>The UG Post-Construction Program requires that private owners of STFs must inspect their STFs annually and provide a report to the UG which documents any deficiencies and resolutions. The UG received reports, certification, or correction plan from 27 of 87 (31%) of owners in 2022. A summary of private STFs can be found in Appendix 5.C.</p> <p>Points Earned = 2</p>

6. Municipal Pollution Prevention/Housekeeping. (Table)

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

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 BMPs 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)
PP/GH-03	Develop a guidance document for municipal staff or third-party contractors which apply pesticides. The guidance shall require any municipal staff, who apply restricted use pesticides, to have a commercial applicator certification from the Kansas Department of Agriculture if required by that Department.	Require staff which apply pesticides to use such pesticides in compliance with the guidance document. The guidance document must require use of pesticides in compliance with the label instructions.	All staff and contractors are required to be certified and apply PHFs in compliance with the SOP. A copy of the SOP <i>SMP-08 - PHF Application - Rev. 2021</i> can be found in Appendix 11.A Points Earned = 1
PP/GH-04	Implement a program, with guidance to municipal staff or third-party contractors, to ensure any municipal vehicle or other mechanical equipment washing is conducted in a manner which ensures the wash water is disposed of in the sanitary sewer or otherwise receives proper treatment prior to discharge to the environment.	Maintain proper wash facilities for municipal staff to wash vehicles and/or equipment or implement a program which includes guidance to municipal staff to take vehicles and/or equipment to commercial wash facilities, either of which ensures the wash water is conveyed to the sanitary sewer, or otherwise receives proper treatment prior to discharge to the environment, and not discharged untreated to the MS4 or directly to the environment.	The Fleet Maintenance facility operates a vehicle/equipment washing facility on-site. An SOP was created as guidance on proper usage. A copy of the SOP <i>SMP-03 - Vehicle Washing - Rev. 2021</i> can be found in Appendix 11.A. Points Earned = 1

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
PP/GH-05	Implement a program for street sweeping in which the street sweepings are collected and disposed of properly or recycled/reused if possible.	<p>All paved streets which can be swept shall be listed in the schedule for street sweeping. A log shall be maintained listing the street segments which are swept and, dates of sweeping and where the street sweepings are disposed or where the material was sent to be recycled and/or reused. Alternatively, for municipalities with less than 500 population street sweeping can be limited to sweeping the gutters. The log which must be maintained need only indicate the street segments which were swept in the year and confirm the sweepings were properly disposed or recycled and/or reused.</p>	<p>The UG uses the Snowplow route list as the street sweeping list and sweeps these streets at least three times per year. The sweepings are taken to a transfer station at 47th and Orville and then taken to the landfill. A summary of street sweeping activities and a map of the street sweeping routes can be found in Appendix 6.A.</p> <p>Points Earned = 2</p>

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
<p>PP/GH-06</p>	<p>Develop an employee training program to ensure permittee’s staff understand what actions they can take in the workplace to minimize stormwater pollution.</p>	<p>Provide guidance documents in the form of either fact sheets, flyers, or e-mails to staff to coach them in appropriate actions they can take while working to minimize stormwater pollution.</p>	<p>In 2022 the UG held eight training sessions both in-person and virtual. A summary of the trainings and sign-in can be found in Appendix 6.B. Points Earned = 1</p>
		<p>Alternately, provide in-person training or videos with sign-in-sheets for signature documentation of personal or video training.</p>	
		<p>Retain copies of the guidance documents and/or sign-in-sheets. A log of when the guidance was distributed, or training was provided to staff should be maintained.</p>	
		<p>Provide appropriate guidance and/or training to staff a minimum of twice per year.</p>	

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
PP/GH-07	Implement a program to inspect stormwater inlets to identify illicit discharges and clean drop inlets of accumulated debris.	<p>Inspect at least 5% of all inlets annually.</p> <p>Additionally, if 10% of all inlets are inspected in a year an additional point may be claimed.</p> <p>For any inlets which have evidence of dumped paint, oil or other substances which are considered illicit discharges follow up with efforts to educate individuals near the impacted inlet about illicit discharges.</p> <p>For inlets which have any accumulation of debris, remove the debris for proper disposal.</p>	<p>In 2022 the UG performed 4,156 inlet inspections on 1,897 unique inlets out of 10,642 storm inlets or 18% of the total inlets. 1,022 inlets were cleaned of debris. Six illegal connections were identified and are in the process of being eliminated.</p> <p>Points Earned = 2</p>
PP/GH-08	Develop, implement, and keep updated an online storm sewer map accessible to the public.	Map shall cover the entire MS4 within the permit area and include all the MS4 lines both pipe and open drainage (i.e. ditches) and shall also illustrate all impaired waterways (i.e. 303(d) listed and TMDL listed streams/rivers) with an indication of the listed impairment.	<p>The map can be found here: https://www.wycokck.org/departments/knowledge/maps-and-GIS/DotMaps</p> <p>Points Earned = 2</p>

6. Municipal Pollution Prevention/Housekeeping. (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
PP/GH-11	Install a canopy or other covered area for load-out of salt or other de-icing chemicals where such de-icing materials are stored either within the permit area or a storage facility located within 30 miles of this permit area.	The canopy or covered area shall be large enough to allow normal load-out and cleanup of spilled de-icing materials, without mixing with precipitation and resulting in contaminated runoff from the site, during and immediately following load out operations	The salt storage is covered. There were no construction activities this year on a new canopy or other covered area.
	The canopy or other covered area for load-out of salt or other de-icing materials may be installed at a facility owned by the permittee or at a facility owned by an entity the permittee contracts with as long as the facility is located within 30 miles of this permit area.		

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	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Has the permittee developed and maintained a list of the municipal industrial facilities contributing to the pollutant loading to the MS4? *
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have at least two municipal industrial facilities on the list had inspection and sampling conducted?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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 have the capacity to contribute 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)
ISD-01	Maintain a set of Standard Operating Procedures for identifying facilities to include in Industrial Stormwater Registry, inspections, and enforcement	Annually review and when deemed necessary, revise SOPs	No revisions were made to the SOPs. Copies can be found in Appendix 11.A.
ISD-02	Maintain a Registry of Industrial Facilities as defined by 40 C.F.R. 122.26(d)(2)(iv)(C)	The UG shall maintain a list of industrial facilities consistent with 40 C.F.R. 122.26(d)(2)(iv)(C) that the UG determines may contribute a substantial pollutant loading to the MS4. The list shall include municipal landfills, hazardous waste treatment, disposal, and recovery facilities (TSDs) and industries subject to reporting requirements pursuant to SARA Title III Section 313. The list shall be updated on an annual basis.	The registry is updated annually. No revisions to the registry were made in 2022. The registry can be found in Appendix 9.A
ISD-03	Maintain an inspection program of industrial facilities on the Industrial Stormwater Registry	Annual the UG shall identify and inspect at least two (2) facilities. Inspections shall consist of a review of the facility SWPPP, compliance with the SWPPP, a site inspection with the facility manager/environmental compliance officer. A summary of the inspection results will be prepared.	The UG inspected Fuchs Lubricants and Barton Solvents in 2022. Both sites were in compliance with their SWPPPs. Stormwater samples were obtained at outfalls of both sites and analyzed. The results of the inspections and a summary of the sample results can be found in Appendix 9.B.

7. Industrial Stormwater Runoff Management Program (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
ISD-03 (Continued)	Maintain an inspection program of industrial facilities on the Industrial Stormwater Registry	<p>In addition to the facility site inspection, the UG will obtain samples of stormwater at facility outfalls identified in the SWPPP where potential pollutants are expected to discharge. A grab sample shall be obtained within the first half hour of stormwater runoff. The grab sample is invalid if the storm event precipitation total does not meet or exceed 0.25 inches. Parameters for analysis include:</p> <ol style="list-style-type: none"> 1. Oil and grease (mg/l) 2. Chemical oxygen demand, COD (mg/l) 3. pH - standard units 4. Biochemical oxygen demand -5-day (BOD5) (mg/l) 5. Total suspended solids (TSS) (mg/l) 6. Total Phosphorus (mg/l) 7. Total Kjeldahl Nitrogen (TKN) (mg/l) 8. Nitrate + Nitrite (NO3 +NO2) (mg/l) 9. Total Nitrogen (mg/l) 	See above

7. Industrial Stormwater Runoff Management Program (Table)

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress Achieving Goal(s) (Measured Result)
<p>ISD-03 (Continued)</p>	<p>Maintain an inspection program of industrial facilities on the Industrial Stormwater Registry</p>	<p>10. Any other pollutant limited in applicable effluent guidelines subcategories. (i.e.. Pollutants listed in RCRA, Toxic Release Inventory (TRI), etc.) 11. Any other pollutant listed in an existing NPDES permit for the industrial facility as reported in the format specified in the NPDES permit.</p>	<p>See above.</p>

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. RECORDKEEPING AND REPORTING - Part V of Permit – 2022

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.

1. COMPLIANCE WITH PERMIT CONDITIONS

The UG was compliant with Permit conditions during the 2022 year and earned the following point totals for the following Six Minimum Controls.

MINIMUM CONTROL	Points Required	Points Earned
Public Education and Outreach	4	11
Public Involvement/Participation	3	10
Illicit Discharge Detection and Elimination	5	15
Construction Site Stormwater Runoff Control	4	13
Post-Construction Stormwater Management in New Development and Redevelopment Projects	5	11
Pollution Prevention/Good Housekeeping for Municipal Operations	4	9
Total Maximum Daily Load (TMDL) Best Management Practices and Surface Water Monitoring	4	7

APPROPRIATENESS OF BMPS

The BMPs are generally considered to be appropriate for the local population and pollution sources and no specific concerns have been identified in 2022.

RESULTS OF INFORMATION COLLECTED AND ANALYZED

TMDL pollutants are on a positive slope due to spikes in E. Coli. Analysis of the sample results may be found in Appendix 9.B. The UG is currently working on improving response to sample results that exceed 12,000 CFU/100mL. When sample results exceed 12,000, the UG WPC reviews SSR and CSR reports, work orders to determine possible sources of the high result values.

SUMMARY AND INTERPRETATION OF WATER QUALITY RESULTS

Generally, the results of the were consistent with results of previous years. There were nine results out of 12 that were above 12,000 CFU/100mL which skewed the trends for all three creeks upward. The uptick in results is concerning and the UG is taking steps to improve response when sample results exceed 12,000 CFU/100mL and preparing additional investigation procedures to increase the chances of identifying possible sources of bacteria in the creeks. Currently when sample results exceed 12,000, the UG Water Pollution Control (WPC) staff reviews Sanitary Sewer Reports (SSR) and Combined Sewer Reports (CSR), and work orders to determine if WPC sewer leaks are the cause. Investigations were unable to identify a source for the elevated results.

Barber Creek

Three sample results exceeded 12,000. WPC reviews were unable to identify any sources with high degree of certainty.

Brenner Heights Creek

Three sample results exceeded 12,000. WPC reviews were unable to identify any sources with high degree of certainty.

Little Turkey Creek

Three sample results exceeded 12,000. WPC reviews were unable to identify any sources with high degree of certainty.

SUMMARY OF STORMWATER ACTIVITIES SCHEDULED FOR 2022

The UG will continue to Implement the same activities found in the 2020 Stormwater Management Plan that were undertaken in 2022.

SUMMARY OF PLANNED CHANGES

The UG is currently following the new Permit and has no plans to make changes to the SMP at this time.

STANDARD OPERATING PROCEDURES (SOPs)

The UG continually reviews SOPs for effectiveness on a regular basis. No changes were made in 2022. A summary of revisions and updated SOPs can be found in the Appendix 11.

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 knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Permittee:  Date Signed 1-18-23
(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 Unit

1000 SW Jackson Street, Suite 420

Topeka, Kansas 66612

KDHE.MS4@ks.gov