

KANSAS STORMWATER 2021 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:	City of Lawrence, 6 East 6 th Street
<input type="checkbox"/>	Mailing Address 2:	PO Box 708
<input type="checkbox"/>	Municipality:	City of Lawrence
<input type="checkbox"/>	State:	Kansas
<input type="checkbox"/>	Zip Code:	66044
<input checked="" type="checkbox"/>	MS4 Program Contact Person:	Caitlin Dix, Environmental Manager
<input checked="" type="checkbox"/>	Contact E-Mail Address:	mso@lawrenceks.org
<input checked="" type="checkbox"/>	Contact Phone Number:	785-832-7800
<input checked="" type="checkbox"/>	Construction E-Mail Address:	mso-eod@lawrenceks.org
<input checked="" type="checkbox"/>	Contact Phone Number:	(785) 832-2194
<input type="checkbox"/>	Kansas Permit Number: — Ex. M-MC21-SU01	M-KS31-SU01

Reporting Period covers activities from January 1, 2021, through December 31, 2021.

This annual report must be submitted to the Kansas Department of Health and Environment (KDHE) by February 28, 2021. This annual report must be submitted as a PDF file to KDHE on a standard compact disk (CD) or digital versatile disk (DVD).

IN ADDITION, provide the following:

1. A current copy of the Stormwater Management Program (SMP) Document as a PDF file on the CD or DVD.
2. Include at the end of this annual report a section which provides a final report on effectiveness of source controls and structural BMPs to achieve the measurable goals and summarize water quality data from selected monitoring sites. The water quality data should be evaluated for trends over the years of monitoring.
3. Any new stormwater ordinances or revised ordinances, which have not already been submitted to KDHE for review/retention.

This template annual report document (basic report) for the 2021 reporting period has not changed from the annual report format used in previous years.

This year's 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 listed industrial facilities is required. Although any failure to comply with a requirement of the MS4 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 of improving or enhancing their program where it is weak, or deficient in any of the core aspects.

MS4 SIX MINIMUM CONTROL MEASURES FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4'S) WITH NPDES PERMITS (MS4)

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

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

D. TMDL BMP Table — Please fill out accordingly

BMP ID NUMBER	BRIEF BMP DESCRIPTION	REGULATED TMDL PARAMETERS	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
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 and Nutrients	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.	The City currently maintains five pet waste bag stations that include signage and waste cans: <ul style="list-style-type: none"> • 4 - Mutt Run Dog Park (1330 E 902 Rd) • 1 - Riverfront Dog Park (North Second St. and Highways 24 and 40) 	1
TMDL.02	Establish a program to encourage installation of residential rain gardens.		Provide public education on rain gardens and design guidance for the installation of residential rain gardens. The rain gardens must have a minimum area of 20 square feet. The installation of rain gardens on five various residential parcels shall qualify the permittee to claim points for this BMP.		0 points claimed for 2021.
TMDL.03	Install and operate a constructed wetland.	Nutrients and Sediment	The wetland shall include a water surface area of at least one acre or equivalent submerged surface area for submerged wetlands.		0 points claimed for 2021, but 2 points planned.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	REGULATED TMDL PARAMETERS	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
TMDL.04	Enact a stream buffer ordinance, resolution, or other enforceable requirement to impose stream buffer standards.		The enactment of stream buffer standards must include enforcement capability. Consider use of the EPA stream buffer model ordinance or similar such requirement.	Enactment of a stream buffer ordinance is targeted for 2023.	0 points claimed for 2021.
TMDL.05	<p>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.</p> <p>Alternately, post the document on social media or the municipal website.</p>	Bacteria and Nutrients	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. Documents posted to social media or the website shall have the page copied and printed to retain on file.	<p>The City's pet waste flyer is provided to all new adoptive pet owners at the Lawrence Humane Society throughout the year. Additionally, Lawrence Farmers' Market attendees at an Earth Day booth received flyers and signed pet waste pickup pledges. City staff distributed a total of 2,814 flyers in 2021.</p> <p>The flyer document is also available on the City's stormwater webpage.</p> <p>Additionally, Municipal Services & Operations staff posted an educational pet waste social media post in April of 2021 via the City's Facebook and Twitter handles.</p>	1
TMDL.06	Distribute "Only Rain Down the Drain" door hangers or similar document.		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	Municipal Services & Operations created a stormwater informational rack card that was distributed at outreach events and public meetings and made available in public locations (City Hall, public library). Combined distribution of both doorhangers and rack cards was 495.	2

BMP ID NUMBER	BRIEF BMP DESCRIPTION	REGULATED TMDL PARAMETERS	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
			shall also be documented. This information and copies of the documents shall be retained on file.	The document was also included in a City social media post in August and remains accessible via the City's stormwater webpage.	
TMDL.07	Inspect 10% of all known MS4 outfalls for dry weather discharges either annually or twice per year to identify potential illicit discharges.		Complete inspection 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	The City contracted with Trekk Design Group to inspect and evaluate all sanitary and storm sewer infrastructure via CCTV over the next three years. As part of this project, staff and contractors inspected and televised 855 stormwater structures. No illicit dry weather discharges were reported.	0 points claimed for 2021, but 3 points planned.
TMDL.08	Implement an Alternative Stormwater Offsite Pollution Reduction Program.	Nutrients, sediment	This program will include installation of BMPs in alternative locations, including outside the Permit Area, within the watershed shared by urban entities or urban and non-urban entities. The alternative stormwater offsite pollution reduction program shall be developed with watershed interests, such as other communities, Watershed Restoration and Protection Strategy (WRAPS) groups and Conservation Districts lying outside the Permit Area for the joint purpose of reducing pollutant loads generated from urban and non-urban lands within the shared watershed. Candidate offsite locations and practices will be consistent with implementing existing watershed	In 2021, the City received KDHE approval for an offsite pollution reduction project with the Upper Wakarusa Watershed Restoration and Protection Strategy group. The City signed a cost-sharing agreement with Ducks Unlimited for the Shadden Marsh South Wetland project for source water protection work in the Upper Wakarusa Watershed to reduce nutrient and sediment runoff into Clinton Reservoir. Construction will be completed in 2022.	5 points claimed for 2021, but no points planned.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	REGULATED TMDL PARAMETERS	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
			plans that identify specific urban and non-urban (such as agricultural) BMP types and locations to achieve TMDLs reductions. The Alternative Stormwater Offsite Pollution Reduction Program shall be subject to KDHE approval and approved by KDHE prior to incorporation into the permittee's SMP.		
TMDL.09	Implement a program to collect and properly dispose of litter, on four separate occasions per calendar year, within areas where littering has been identified as a problem. Such areas may include municipal parks, trails, rest areas, or other public lands owned by the permittee.		The four litter collection efforts should, but are not required to, occur seasonally, i.e., winter, spring, summer, and fall. If it is unreasonable to collect litter in any season the required four collection efforts may occur in either three seasons or in a minimum of two seasons.	Municipal Services & Operations coordinated litter collection events on three separate dates, cleaning a total of five municipal parks or riparian areas in 2021. We provided a dumpster for the Friends of the Kaw river cleanup event.	0 points claimed for 2021.
TMDL.10	Establish a program to encourage Rainwater Harvesting.		Provide public education on rainwater harvesting and design guidance for the installation of rain barrels, cisterns, raingardens, and other rainwater harvesting devices. When rain barrels are utilized, they must be a minimum size of 50 gallons. When raingardens are utilized they must be a minimum of 20 square feet. A rain harvesting system on a commercial setting must have adequate capacity to hold the runoff from the impervious surface for which it is designed to collect on the commercial parcel		0 points claimed for 2021.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	REGULATED TMDL PARAMETERS	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
			equal to that generated by a 0.1-inch rainfall event. The installation of rain barrels or rain gardens on five residential lots, or the installation of one rain harvesting system in a commercial setting shall qualify the permittee to claim points for this BMP.		
TMDL.11	Construct and maintain a structural BMP to reduce loadings of sediment and nutrients, including bioretention, detention basins, porous pavement, retention ponds, media filters and any composite treatment trains of multiple BMPs		A construction project installing a structural BMP must be completed prior to awarding of points. Any individual project will be awarded points scaled on the basis of the extent of the contributing area that the BMP will control. The permittee will document maintenance of the constructed BMP in subsequent years to continue to be awarded points.		0 points claimed for 2021.
TMDL.12	Construct a stream bank stabilization project.		Install a minimum of 100 feet of bank stabilization at a site(s) with a history of erosion.	Over 550 linear feet of riverbank protection as part of "Kansas Riverbank Stabilization PW17-E9."	3
Total Maximum Daily Load (TMDLs) - TOTAL POINTS CLAIMED:					12

E. Stormwater Management Program Requirements (Six Minimum Control Measures)

1. Public Education and Outreach (Table) - Please fill out accordingly

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

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
1.01	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.	<p>City of Lawrence Stormwater Management (https://lawrenceks.org/mso/stormwater/) 2021 page views totaled 1,419, averaging 118 views/month. Within the stormwater page, The Jayhawk Watershed Project Website link was added in May (site traffic data unavailable).</p> <p><i>Other changes of note in 2021 were:</i></p> <ul style="list-style-type: none">• Adding the Stormwater Program Map (1/2021)• Added Stormwater Management Criteria (2/2021)• Added General Informational "Rack card" (04/2021)• Edit and re-post Pet Waste and Rain Barrel brochure (04 and 05/2021)• Post updated Stormwater Management Plan (07/2021)• Add Jayhawk Watershed Project site (09/2021)• Fall Leaves links updated (11/2021) <p>Related City informational pages of interest include:</p> <p>Yard Waste Management</p> <ul style="list-style-type: none">• 7,904 views <p>Recycling</p> <ul style="list-style-type: none">• 13,030 and <p>Household Hazardous Waste</p> <ul style="list-style-type: none">• 14,453 views	3

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
1.02	Distribute educational materials (either flyers, brochures, catalog mailings, handouts, or e-mails) addressing various pertinent stormwater public education topics.	Number of all flyers, brochures, catalog mailings, handouts, or e-mails 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 e-mails distributed shall also be documented. This information and copies of the flyers, brochures, or e-mails shall be retained on file.	<p>The City prints and mails approximately 22,000 utility bills each month. Printed mailouts distributed in 2021 included City newsletter (The Flame) articles (inserted into all monthly bills), standalone inserts, and “Important Messages” appearing on utility bills:</p> <ul style="list-style-type: none"> • Backflow/Water conservation (March Flame) • Annual Floodplain Utility Bill Insert (Planning & Development Services) 5/28-6/22, • Illicit Discharge (August Flame) • Fall leaves “important message” on utility bill (October) • FOG messaging (December Flame) <p>Approximate total messaging reach of 22,000 x 5 = 110,000. Mailouts exceeded US Census bureau, 43,528 Housing units (Lawrence Planning and Development Services estimate for Lawrence, KS.</p>	2
1.03	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.	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.	<ul style="list-style-type: none"> • Builders/Developers – Through the Lawrence Home Builders Association (LHBA) January newsletter, the City offered a Lawrence-specific online Stormwater compliance training and CE credits for license renewal through August of 2021. The training host could not report number of trainings completed. <u>177</u> LHBA members were offered the training free of charge. • Food Service – Our Fats, Oils, and Grease prevention program mailed <u>245</u> food service businesses on 04/13/21, and 250 businesses on 11/03/21. Both mailings included FOG management best practices and Grease Interceptor Maintenance guidelines. We engaged food service establishment on a new ordinance passed 12/21/2021. • Lawn Service - Best Management Practices related to lawn care/landscaping were emailed to <u>51</u> 	2

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
			lawn/landscape companies on 08/23/21. <ul style="list-style-type: none"> On a case-by-case basis, educational or counsel documents were distributed in 2021 to at least five additional businesses including a Concrete (Ready Mix) Supplier (03/03/21), a Painting Contractor (04/14/21), a Chemical Manufacturer (07/2021), a Laboratory (9/22/21) and a Property Manager (10/18/21). 	
1.04	Apply notification, placard, covers/hatches with message, or stencil, on stormwater inlets to provide a message like "No Dumping – Drains to River"	Apply this notification on at least 10% of all known stormwater inlets in the MS4.	Since 2000, all newly constructed inlets are stamped "No Dumping-Drains to River". During 2021, Environmental Interns and GIS staff <ul style="list-style-type: none"> Inspected 707 stormwater inlets for marking and condition, Marked at least 600 inlets with decals for public education on storm inlets throughout Lawrence. Total number of curb inlets: >5,219 (*decrease from 2020 due to correction of ownership/classification). Total number of stamped inlets: 2,479. Total number of structures with decals: 1,764 Notification has been applied on 85.6% of all curb inlets.	2
1.05	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.	The City of Lawrence MS4 Permit has been available on website throughout 2021. The updated Stormwater Management Plan was added to the Stormwater Management Webpage on 07/02/2021, and available for at least 6 months.	1

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
1.06	Provide either a stormwater telephone hotline or web based or text message method for public reporting of illicit discharges.	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. 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.	785-832-7800 and Lawrence Listens were available for all of 2021. The Lawrence Listens App, (https://lawrenceks.org/listens/), promoted in two (January, March) newsletter utility billing inserts, became a convenient alternative for citizens to report illicit discharges or other code issues.	0 points claimed for 2021.
1.07	Provide educational material annually to at least four groups, including each of the following types: Residents, Businesses/Institutions, Commercial entities/Developers, and Industrial facilities. The educational material may be provided as any of the following: • Brochures • Flyers • E-mails • Press release	Identify and educate at least 4 groups/entities from the listed types annually developing topics that are group specific and address activities and or pollutants of concern.	1) PET OWNERS: All 2021 new adoptive pet owners at the Lawrence Humane Society received current copies of the City's Pet Waste Management Flyer, and Lawrence Farmers' Market attendees at an Earth Day booth received flyers and signed pet waste pickup pledges. Total distribution = 2,814. 2) LANDSCAPERS: mailed "BMPs for Lawn and Landscape Companies" on 08/23/21 to 51 companies. 3) BUILDERS/DEVELOPERS: Training offered to Lawrence Home Builders Association membership (177) as CEUs to renew licensing. (LHBA January Newsletter Offering) 4) FOODSERVICE: mailings in April and November. To 245 and 250 FSE's respectively, who received or	3

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
			<p>were linked to Fat, Oil and Grease (FOG) BMPs and Grease Interceptor Maintenance Tips.</p> <p>5) RESIDENTS:</p> <ol style="list-style-type: none"> 1. 681 Multi-Family dwelling Residents received educational recycling “tote bags” meant to carry proper recyclables to parking lot receptacles. 2. Approximately 940 informational Stormwater and Household Hazardous Waste (HHW) pieces were distributed to area residents attending a local e-waste recycling event in June. 	
1.08	Provide stormwater education for students at a school campus within K-12 (those grades present at the campus) within the permittee’s jurisdiction or within 30 miles from this permit area.	<p>Provide or fund an educator or speaker that will reach at least 5% of the K-12 students as normally attend school in the selected school campus.</p> <p>Alternately, the funding of BMPs at the school campus may provide for any of the following:</p> <ul style="list-style-type: none"> • Installation of BMPs at the school • Stormwater related field trips • Water quality stream sampling activities • Construction of rain gardens on school property • Rain barrel workshops • Rain garden workshops 		0 points claimed for 2021.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
1.09	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. 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 attends. 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.	Provide information about stormwater topics of current interest. (All events shall have the booth staffed by the permittee for at least 50% of the days the event occurs.)	Staff attended Grassland Heritage Native Plant sale Saturday May 15th, 2021, and offered BMP Landscaping brochure at a booth.	0 points claimed for 2021.
1.10	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.	Municipal Services & Operations emailed Best Management Practices for Lawn and Landscape Companies to 51 companies on 08/23/2021.	2
1.11	Adopt a public education program to reduce littering.	Install and/or maintain signs to discourage littering. Signs are to be located in areas where littering has been a problem.		0 points claimed for 2021.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
1.12	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.	A new informational brochure or “rack card” was created, printed, and available (as of June 2021) for public distribution at City Hall (1 st floor entry for City Commission and other public meetings) for public distribution in 2021. The Stormwater Information Card was posted to the website in April.	1
1.13	Operate an adopt a highway program to utilize public volunteers to clean road right-of-way.	The volunteers shall clean at least a two-mile segment of road either within the permit area or adjacent to the permit area. Alternately multiple spots (such as roadways, parks, and waterways) which are cleaned and equate to or exceed a two-mile road clean-up can qualify for a point."		0 points claimed for 2021.
1.14	Hold a media campaign addressing various pertinent stormwater public education topics.	Estimated media exposure during prime-time broadcasting for the duration of the campaign shall be 10 times the most recent U.S. Census Bureau decennial population value for the permit area. The date, time, and estimated media exposure for each spot broadcast shall be documented and kept on file along with the applicable U.S. Census population value.		0 points claimed for 2021.
1.15	Develop or participate in an ongoing social media program on pertinent stormwater public education topics.	Publish or share on City Facebook at least six stormwater educational posts throughout the year.	Throughout 2021, monthly educational posts were made through the City’s Facebook and Twitter accounts. Posts included topics of litter, eco-friendly deicer, pet waste, lawn care, car washing, HHW, illicit discharges and Fall leaf management. Twelve posts received 79,974 impressions.	2

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
1.16	Operate an information booth at a large public event/environmental themed event.	At least an estimated 800 or more individuals must attend the event.	Staff participated in the Douglas County e-waste recycling event, (estimated attendance of 1,085) in June of 2021. Approximately 950 stormwater educational pieces were distributed to area residents.	0 points claimed for 2021.
1.17	Operate an adopt a street program to utilize public volunteers to clean street right-of-way.	The volunteers shall clean at least a two-mile segment of street, either a single street or multiple streets, either within the permit area or adjacent to the permit area.		0 points claimed for 2021.
1. Public Education and Outreach - TOTAL POINTS CLAIMED:				18

E. Stormwater Management Program Requirements (Six Minimum Control Measures) (CONTINUED)

2. Public Involvement and Participation (Table) - Please fill out accordingly

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

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
2.01	Hold a public hearing or public forum to notify the public about stormwater program activities and to solicit public comments regarding stormwater issues.	Provide public notice of the hearing/forum, invite local news media, either newspaper, radio, or TV, and document the hearing with attendance sign-in sheet and minutes of the hearing which include public comments and responses.	Two public comment events (8/24/21 and 11/17/21) were held for the Jayhawk Watershed Project, which addresses localized flooding. The combined total attendance was approximately 47. Stormwater rack cards were distributed at the first public event. Citizens were invited to provide feedback, ask questions, and guide project by placing pins/comments on a map or via an interactive website , created specifically for the Project. which addresses flooding in the area. Public comments were accepted through December 15, 2021.	2 points claimed for 2021, but 0 points planned.
2.02	Establish a citizens advisory committee.	Host the citizens advisory committee meetings twice yearly and receive comments and guidance from the committee regarding the SMP. Retain on file copies of the attendance list and minutes of the meetings.		0 points claimed for 2021.
2.03	Hold park or stream bank clean-up events for public volunteers to aid municipal staff in removing trash, debris, or pollutant sources from the selected clean-up area.	Clean an area which must be equal to or greater than one acre or alternately at least 200 yards of streambank.	We organized and outfitted park clean ups with two volunteer organizations during 2021: Clinton Parkway II HOA (Atchison Creek/park on 5/26) and Plymouth Church (five City parks cleaned: four on 06/26 and one on 11/13). These were opportunistic events that came up and not originally planned for 2021.	3 points claimed for 2021, but 0 points planned.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
2.04	Train either citizen watch groups, homeowner associations (HOAs), or public service groups to recognize illicit discharge activities and communicate observations to appropriate municipal staff.	Provide training or distribute training materials to the group participants like HOA at least once annually.	<p>Municipal Services & Operations staff developed and presented Stormwater education to the Clinton Parkway II HOA on 05/12/2021. Audience of 25 was primarily youth. Staff provided the group with “Stormwater Walk” activity, t-shirt giveaways and the loan of tools; trash pickers, safety vests, trash bags and gloves for a follow up Creek Cleanup (9 youth, 6 adults) in the neighborhood on 05/26.</p> <p>Staff addressed a church congregation on June 13 (approx. 225 attending). Municipal Services & Operations Staff and the Church volunteer Corps then cleaned up four parks in four watersheds, Mary’s Lake, Jayhawk, Centennial, Windmill, on June 26. 17 youth and adults participated. Another group of volunteers from the church then organized and returned to clean Centennial Park/Creek on November 13.</p>	2
2.05	Provide at least two events for residents to engage in cleanup activities and improve water quality in the municipality.	Provide at least two events in streams, streamside parks, areas adjacent to public waterways, and/or other green infrastructure/water resources. These events can be any of the following: Environmental restoration events, stream cleanups, tree plantings, or stream monitoring.	Cleanup events paired with educational presentations were conducted on 05/26, 06/26 and 11/13, respectively	3 points claimed for 2021, but 0 points planned.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
2.06	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.	35 Earth Machine Composters (valued at \$55 each.) were donated by the City to Douglas County Sustainability for Outreach efforts. Water conservation/Irrigation notice for backflow, March https://assets.lawrenceks.org/assets/flame/2021/March-Flame-Web.pdf	0 points claimed for 2021, but 2 points were planned.
2.07	Enact either an ordinance, a resolution, or other enforceable requirement that requires: Pet owners or their keepers to immediately and properly dispose of their pet's solid waste deposited at parks or rest areas owned by the permittee.	The ordinance or resolution or other enforceable measure shall be enacted, and signs posted informing the public of their obligation at the park. The installation of a pet waste bag dispenser in the public area qualifies as adequate signage.	City Code 9-902 (C) (7) requires that pet waste be disposed of as solid waste or sanitary sewage. (Stormwater Pollution Prevention Ordinance No. 7373) (https://assets.lawrenceks.org/pds/planning/documents/fp-pollutionprevent.pdf) This is also referenced in Park Regulations 6(a) on the City's Parks & Recreation webpage, which states, "Owners are required to dispose of pet waste properly. "with reference to applicable City Code. Pet waste bag dispensers and signs are installed at the City's two dog parks.	1
2.08	Provide a monetary donation to a scholarship fund for students pursuing a degree in an environmental program which would qualify them to work in a field which can result in water pollution control.	A \$500 contribution in a year is the minimum acceptable amount to achieve this goal.		0 points claimed for 2021.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
2.09	<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 that address various stormwater topics. Other nearby municipalities may distribute these materials to the public. The nearby municipalities must be within 30 miles from this permit area.</p>	<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 homeowners (rain gardens, rain barrels, etc.) guidance on area household hazardous waste receiving centers, and guidance on area recycling programs.</p>	<ul style="list-style-type: none"> • PDS Floodplain Insert, (Utility Billing insert #309, June) • Battery Bags (DG Co. HHW/e-waste event) • SW Rack Cards (DG Co. HHW/e-waste event) • HHW Rack Cards (DG Co. HHW/e-waste event) • Multi-Family Tote bags 	1
2.10	<p>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.</p>	<p>Hire two college age environmental interns to assist in Household Hazardous Waste and Compost and Wood Waste Facilities during the busy summer season.</p> <p>\$500 minimum contribution. Internship must last at least 8 weeks.</p>	<p>Two summer interns, Environmental Studies Majors at the University of Kansas, were hired to work approximately 20 hours per week, for \$12/hour.</p> <p>After the busy summer season for HHW, their internship was extended through December 2021, for them to undertake a stormwater project to inspect and decal unmarked inlets within the City. They continued to provide public services at the Compost Facility on Saturdays.</p> <p>The Interns added 545 “No Dumping-Drains to River Decals” to municipal storm inlets in 2021.</p>	2

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
2. Public Involvement and Participation – TOTAL POINTS CLAIMED:				14

E. SMP Requirements (Six Minimum Control Measures) (Continued)

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>	<p>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?</p> <p>Effective dates: September 1, 2001, for Ordinance 7373, and July 1, 2019, for the plumbing code modification.</p> <p>Grease bin storage ord.</p> <p>In addition, the land disturbance and stream buffer ordinance are in review.</p>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Have the ordinances, resolutions, or regulations been modified?</p> <p>Effective date:</p>

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

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E. Stormwater Management Program Requirements (Six Minimum Control Measures)

3. Illicit Discharge Detection and Elimination (Table) - Please fill out accordingly

List all the illicit discharge detection and elimination BMPs as identified in the SMP and provide the requested information in the following table.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
3.01	Hold a public hearing or public forum to educate the public about illicit discharges and alternate acceptable methods of disposal or reuse of substances and/or materials.	Provide public notice of the hearing/forum, invite local news media (either newspaper, radio, or TV), and document the hearing with attendance sign-in sheet and minutes of the hearing which include questions/comments from the attendees and answers/comments from the permittee staff.		0 points claimed for 2021.
3.02	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. Alternately, upgrade or replace the failed system to restore performance.	Redirect the wastewater generated by the facility to the municipal wastewater treatment collection system for proper treatment and disposal. Alternately, upgrade or replace the failed system with improvements which meet or exceed the present code or local requirements.	Existing City Ord. No. 3218 forbids the use or construction of cesspool or septic tank usage within the City, except on an approved, temporary basis pending construction of sanitary sewer main in the area. Wells Acre Sanitary Sewer Improvements added 600 ft of sewer that eliminated 3 septic systems (mostly funded by property owners via a benefit dist.) Single-family residence on N Minnesota St abandoned septic system and connected to existing sanitary sewer	3

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
3.03	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.		0 points claimed for 2021.
3.04	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.	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.	The City contracted with TREKK Design Group to inspect and evaluate all sanitary and storm sewer infrastructure via CCTV over the next three years. As part of this project, staff and contractors inspected and televised 855 stormwater structures. No illicit discharges were reported.	0 points claimed for 2021, but 1 point planned.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
3.05	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.	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>In 2021, the Municipal Services & Operations department posted an online news release with tips for citizens to help prevent illicit discharges, especially during warm weather activities: https://lawrenceks.org/2021/09/01/play-your-part-help-prevent-stormwater-pollution/</p> <p>Similar information regarding best residential and business practices to prevent stormwater pollution were included in an issue of the City's monthly newsletter, The Flame. A paper copy of The Flame is mailed to 22,000 customers per month. It is also emailed to 212 online subscribers, and remains accessible on the City's website: https://assets.lawrenceks.org/assets/flame/2021/August-Flame-Web.pdf and https://mailchi.mp/lawrenceks/the-flame-online-august-080221</p> <p>Both documents provide a link to the City's Stormwater Management webpage, which contains additional information and applicable City ordinances.</p>	2

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
3.06	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.	Generate 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>City field operators regularly perform CCTV inspection of stormwater lines and channels as part of regular workflow. In 2021, staff inspected and televised 75,719 feet of storm sewer lines. This represents 5.05% of the MS4 system.</p> <p>The City also partnered with a contractor (Trek Design Group) to inspect and evaluate all sanitary and storm sewer infrastructure via CCTV over the next three years. As part of this project, staff and contractors inspected and televised an additional 40,188 ft. of stormwater lines and channels in 2021, representing 2.7% of the total storm system.</p> <p>In 2021, City staff corrected 4 sanitary sewer overflows and 9 sanitary sewer backups (2 due to grease) and completed 69 sewer repairs.]</p>	3 points are claimed for 2021, but 5 points were planned.
3.07	Implement a Household Hazardous Waste Collection Program (HHWCP) or document others have implemented such a program to provide such service to all property owners or residents located within the permit area.	Document the residents and property owners within the MS4 permit area were able to dispose of such wastes at the HHWCP during a calendar year (specifies throughout calendar year). Retain this documentation on file.	<p>During 2021, the HHW facility logged 3,816 total visits. There were 3,075 household drop-off appointments, and 36 business hazardous waste drop-offs. There were 705 product reuse appointments.</p> <p>This resulted in 139,570 pounds of waste collected, 21,558.47 pounds of which were reusable items given back out to the public.</p>	3

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
3.08	Implement a program to increase the reliability of sanitary sewer pump stations above the minimum standard design requirements.	<p>A pump station shall be upgraded to include the following:</p> <p>A dedicated on-site standby generator shall be installed (with automatic transfer switch) for use when main line power fails.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>All wastewater lift stations are currently connected to the City's SCADA system to indicate near real time notification of pump functions and failures, and wet well levels. Stations also have bypass pumping ability and can be hooked up to the force main.</p> <p>Three lift stations currently have backup generators on site, but no new generators have been added in 2021.</p> <p>No additional lift stations improvements are currently planned.</p>	4 points claimed for 2021, but 0 points were planned.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
3.09	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 City provided printed materials (200 HHW information cards, 370 stormwater rack cards) and approximately 370 battery collection bags to be distributed at the county-sponsored electronic waste collection event on 06/05/2021.	0 points claimed for 2021.
3.10	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.	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.	In 2021, City staff inspected 707 inlets for marking and condition while checking for/applying "drains to river" decals. The City also partnered with a contractor (Trek Design Group) to inspect and evaluate all sanitary and storm sewer infrastructure via CCTV over the next three years. As part of this project, staff and contractors inspected and televised an additional 429 inlets, representing greater than 5% of the total storm system.	3
3. Illicit Discharge Detection and Elimination - TOTAL POINTS CLAIMED:				18

E. SMP Requirements (Six Minimum Control Measures) (Continued)

3. 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: September 1, 2001
<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 BMPs as identified in the SMP and provide the requested information in the following table.

E. Stormwater Management Program Requirements (Six Minimum Control Measures)

4. Construction Site Stormwater Runoff Control (Table) - Please fill out accordingly

List all the Site Stormwater Runoff Control BMPs as identified in the SMP and provide the requested information in the following table.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
4.01	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.	Land disturbance ordinance targeted for 2022.	0 points claimed for 2021.
4.02	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.	<p>The City currently uses the Manual of Best Management Practices For Stormwater Quality developed by KC APWA and Mid-America Regional Council (MARC). (http://kcmetro.apwa.net/content/chapters/kcmetro.apwa.net/file/Specifications/BMPManual_Oct2012.pdf)</p> <p>The City's Erosion and Sediment Control standard detail sheet is available on the City's Technical Resources page. (https://lawrenceks.org/wp-content/uploads/2021/02/0010-Erosion-and-Sediment-Control.pdf)</p>	3

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
4.03	Provide access to at least one training class for contractors, developers or others involved with land disturbance projects which provides training on requirements for a Stormwater Pollution Prevention Plan (SWP2 Plan) and implementation of appropriate BMPs.	This training class must address all local requirements for a SWP2 Plan, requirements for implementation of BMPs and address the requirements for permits.	Through the Lawrence Home Builders Association (LHBA) January newsletter, the City offered a Lawrence-specific online Stormwater compliance training and CE credits for license renewal through August of 2021. The training host, unfortunately, could not report number of trainings completed. 177 LHBA members were offered the training free of charge.	3
4.04	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.	The City's Stormwater Engineer performs a review of site plans for SWPPP and NOI using a written stormwater plan review process. The Environmental Program Administrator reviews food service-specific site plans for FOG/grease interceptor compliance.	3

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
4.05	<p>Establish effective requirements for construction sites to control wastes. Develop through ordinance or other enforceable means requirements for construction site 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, and sanitary waste 	Enact ordinance or other effective means to achieve control of wastes at construction sites.	<p>City code Chapter 5-1, 131 and Chapter 9, Article 9 (https://lawrenceks.org/attorney/City_code/) support stormwater pollution prevention by addressing Construction Site Maintenance, general stormwater pollution prevention provisions, and enforcement of notice of violations. City staff monitored for and enforced these code parameters on sites throughout 2021. City Planning staff also provide a sediment control brochure to building site permit applicants and contractors.</p> <p>Additionally, the City's Erosion and Sediment Control standard detail sheet is available on the City's Technical Resources page. (https://lawrenceks.org/wp-content/uploads/2021/02/0010-Erosion-and-Sediment-Control.pdf)</p>	3
4.06	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.	As of March 2016, the City required development consultants to use design standards (https://lawrenceks.org/wp-content/uploads/2021/02/0010-Erosion-and-Sediment-Control.pdf) available on the City's website. Construction sites monitored for compliance with these standards throughout 2021. City staff continue to monitor compliance with these standards throughout the construction duration.	0 points claimed for 2021, but 3 points planned.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
4.07	Acquire or develop a software tracking system to track inspections and related tasks.	The tracking system must allow for scheduling inspections and follow-up activities such as re-inspections, mailing notices or reports, etc.		0 points claimed for 2021.
4. Construction Site Stormwater Runoff Control - TOTAL POINTS CLAIMED:				12

E. SMP Requirements (Six Minimum Control Measures) (Continued)

4. Post-Construction Site Stormwater Management in New Development and Redevelopment

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: September 1, 2001
<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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Has a post-construction stormwater runoff program been implemented?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Have post-construction sites been inspected?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are BMPs specified to minimize adverse water quality impacts?
<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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.

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E. Stormwater Management Program Requirements (Six Minimum Control Measures)

5. Post - Construction Site Stormwater Runoff Control (Table) - Please fill out accordingly

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

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
5.01	<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.</p> <p>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> <p>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:</p> <ul style="list-style-type: none"> • retain on-site • infiltrate • evaporate • transpire • beneficially reuse <p>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.</p> <p>Other sizing or detention standards generally accepted by design engineers as adequate for the permittee's local. 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> <p>Measures must be included to enforce the installation of the various structural BMPs required.</p>	<p>Development code enacted in 2006 uses the Mid-America Regional Council/APWA BMP manual. (http://kcmetro.apwa.net/content/chapters/kcmetro.apwa.net/file/Specifications/BMPManual_Oct2012.pdf)</p> <p>Per City Code Chapter 20 Article 9 Section 20-901 (c) Parking in Excess of Required Standard(i), "Developments that provide parking in excess of the required standards must mitigate the impacts of the increased impervious surface through use of storm drainage Best Management Practices (BMPs) as provided in the City's adopted BMP manual. [Mid-America Regional Council and American Public Works Association Manual for Best Management Practices for Stormwater Quality – Sept. 2003 and subsequent updates]." (https://assets.lawrenceks.org/pds/planning/documents/DevCode.pdf)</p>	6

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
5.02	Develop post-construction structural or non-structural BMPs, which are required to be incorporated in any development/re-development project. The list must include guidance regarding the BMPs which must be incorporated in various projects as determined appropriate by the permittee. The list is to be provided to entities involved with the design of projects prior to site plan review by the permittee.	Development and implementation of the list and guidance is necessary to claim points in the first year. The list of required BMPs must be enforceable through ordinance or other means.	Enacted development code in 2006 (rev. July 2020) states that all new developments must provide impervious parking surface when offering additional parking area over a certain threshold. The City uses Development Code Chapter 20, Article 9, 901(c) (https://assets.lawrenceks.org/pds/planning/documents/DevCode.pdf) which states that “Developments that provide parking more than the required standards must mitigate the impacts of the increased Impervious Surface through use of storm drainage Best Management Practices (BMPs) as provided in the City’s adopted BMP manual (MARC).”	0 points claimed for 2021.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
5.03	<p>Develop and implement a program to ensure 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 • wetlands • pervious paving systems • vegetative filter strips • drop inlet-catch basin • manufactured stormwater treatment devices (swirl separators, screens, etc.) 	The program shall be detailed in a written document and made available to all pertinent maintenance staff.		0 points claimed for 2021, but 3 points planned.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
5.04	Develop a master plan or comprehensive development plan which establishes zoning and development standards with establishment of both structural and non-structural BMPs intended to avoid or minimize adverse water quality impacts post-construction.	Runoff problems can be addressed efficiently with sound planning procedures. This master or comprehensive development plan must include, if not already implemented, a zoning ordinance, a stream buffer ordinance, site plan development requirements which include minimizing the increase of impervious surfaces and maximization/preservation of open space. The plan must also impose requirements for new development or re-development projects to utilize stormwater retention or detention BMPs and vegetative BMPs (such as grassy swales, filter strips, artificial wetlands, and rain gardens).	Stream buffer ordinance targeted for 2022/2023.	0 points claimed for 2021.
5.05	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>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> <ul style="list-style-type: none"> • in the same year of inspection or • completed as dictated by the permittee's maintenance/O&M plan 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. 		0 points claimed for 2021, but 3 points planned.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
5.06	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>The program shall require inspection of at least 10% of the known privately owned structural BMPs on an annual basis.</p> <p>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>		0 points claimed for 2021.
5.07	Enact either an ordinance, a resolution, or other enforceable requirement which requires the installation of pervious surfaces on property.	The ordinance or resolution or other enforceable requirement must specify when installation of impervious surfaces is not acceptable and what allowable pervious surfaces can be installed in lieu of impervious surfaces.	<p>City Code Chapter 20, Article 9 - 20-901 C. (Adopted July 2006, revised via Ord. No. 9772, July 2020 states that all new developments must mitigate impervious parking surface when offering additional parking area over a certain threshold. The City uses Development Code Chapter 20, Article 9, 901(c) (https://assets.lawrenceks.org/pds/planning/documents/DevCode.pdf) which states that “Developments that provide parking in excess of the required standards must mitigate the impacts of the increased Impervious Surface through use of storm drainage Best Management Practices (BMPs) as provided in the City’s adopted BMP manual (MARC).”</p>	3

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
5.08	Implement a program to encourage residential owners to install stormwater BMPs, including but not limited to, native trees, native flower gardens, rain gardens, rain barrels, pervious surfaces, and vegetated swales.	A program which results in installation of such BMPs on 1% of the residential parcels in a year will allow two points to be claimed for that year. In a year when installation of such BMPs on 5% of the residential parcels occurs, a larger number of points may be claimed.		0 points claimed for 2021.
5. Post-Construction Site Stormwater Runoff Control – TOTAL POINTS CLAIMED:				9

E. SMP Requirements (Six Minimum Control Measures) (Continued)

5. Municipal Pollution Prevention/Housekeeping

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.

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E. Stormwater Management Program Requirements (Six Minimum Control Measures) (CONTINUED)**6. Municipal Pollution Prevention / Housekeeping (Table) - Please fill out accordingly**

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

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
6.01	Install a screening device or method at a single municipal storm sewer outfall or on the storm sewer line immediately upstream of the outfall to reduce the discharge of floatable or other objects to receiving waters.	The screening device or method is required to remove objects that exceed at least 1½ inches in size. The device or method must be capable of continuous operation during stormwater discharges. An emergency bypass or overflow line can be included to avoid surcharging/flooding in the event the screening device or method fails to operate properly at any time. A log of the material captured and prevented from discharge to the receiving water shall be maintained.		0 points claimed for 2021.
6.02	Implement a recycle and proper waste disposal program for municipal staff to reduce potential for litter, to recycle waste oil, batteries, glass containers, plastic containers, and paper products.	A log of the materials directed to recycle shall be maintained. Entries in the log shall record either weight or volume of recycle materials removed from the containers and transported to the recycle facility as well as the date of transport.	All City facilities utilize or can access the City's single-stream recycling collection and/or cardboard-only collection service. In 2021, City departments recycled 110 tons of cardboard, 185 tons of single-stream materials, 86 tons of metals, 1,110 lbs. of electronic waste, and 19,326 lbs. of hazardous waste. Additionally, 1,525 gallons of oil and antifreeze were recycled from the City's garage facility.	3

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
6.03	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.	<p>The City requires all staff/contractors who apply pesticides to be properly licensed as applicators, and since its 2008 adoption, uses the Integrated Pest Management Policy Manual (https://lawrenceks.org/lprd/parks/ipm/) for guidance.</p> <p>Per the policy, restricted-use pesticides are not on the Allowed Pesticide List (2018), and when used, can only be applied under direct supervision of or by a trained, certified applicator. The policy also stipulates those applicators must comply with all label instructions.</p>	2
6.04	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.		0 points claimed for 2021.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
6.05	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.</p> <p>At least 10% of the streets which are listed in the street sweeping schedule must be swept at least once in a year to claim points for the year. In years when street sweeping equipment is purchased for use by the permittee additional points may be claimed.</p>	All City streets were swept approximately 3-4 times in 2021 for a total of 3,945 miles swept and 5,406.5 cubic yards of sweepings collected. 1721 cubic yards (464.63 tons) of leaves collected from sweeping were hauled to the City's compost facility.	2 points claimed for 2021, but 3 points planned.
6.06	Develop an employee training program to ensure permittee's staff understand what actions they can take in the workplace to minimize stormwater pollution.	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.	An online, standardized training program was developed for Municipal Services & Operations and other City staff to effectively recognize and inspect stormwater pollution issues about City ordinances, especially on construction sites. 90 staff completed the training in 2021.	1

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
6.07	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. 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. For inlets which have any accumulation of debris, remove the debris for proper disposal.</p>	In 2021, City staff inspected and cleaned 4,557 inlets (not unique inlets). Interns inspected 652 inlets across 13 watersheds while installing or replacing "drains to river" decals.	2 points claimed for 2021, but 1 point planned.
6.08	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>A public Stormwater Program Map is available on the City Stormwater webpage under "Other Information" heading - https://lawrenceks.org/mso/stormwater/)</p> <p>The map shows MS4/City boundaries, stormwater assets and infrastructure (including pipes, open streams, inlets, outfalls, etc.) and indicates impaired (303(d), TMDL) streams/rivers/lakes with links to information regarding the impairment(s).</p>	3
6.09	Identify permittee owned facilities, open space and buildings that can be retrofitted for stormwater BMPs.	Retrofit projects can include green infrastructure, catchment improvements, Pollutant of Concern targeted BMPs, and native plant restoration projects.		0 points claimed for 2021.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
6.10	Install and operate a constructed wetland at a municipal facility such as at a parking lot, shop, maintenance facility, rest area or any other industrial/commercial type facility, e.g., recycling facility, transfer station, kennel, or airport.	The wetland shall include a water surface area of at least 1/4 acre or equivalent submerged surface area for submerged wetlands.	One constructed wetland is currently in operation: <ul style="list-style-type: none"> • South of the USD 497 Facilities and Operations Dept. (711 E 23rd St) 	1
6.11	<p>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.</p> <p>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.</p>	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	<p>The City continues to operate from three covered storage areas for de-icing materials:</p> <ul style="list-style-type: none"> • Farmland salt building (1608 N 1400 Rd) • Dome at Streets division (1120 Haskell Ave) • Dome at West 40 Fueling site (1901 Wakarusa Dr) <p>The Farmland site is large enough to allow normal load-out operations.</p> <p>The City is currently trialing the use of an alternate de-icing material (beet brine) in two sections of the City. City staff are also in the second year of a winter water quality assessment, collecting samples from snowmelt after roadway treatment to measure chloride concentrations (and nutrient levels in beet brine trial areas) in surface waters.</p>	3

BMP ID NUMBER	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS
6.12	<p>Install a stormwater treatment system for capture of either trash, sediment, or debris. Systems may include any proprietary stormwater treatment system including CDS, Hancor, Enviro 21, etc. or similar custom designed systems. A system can be installed at a single municipal storm sewer outfall or on the storm sewer line immediately upstream of the outfall to reduce the discharge of floatables or other objects to receiving waters.</p> <p>Alternately, a system may be installed on a stormwater line to provide treatment at problem locations</p>	<p>The treatment system or method must be capable of continuous operation during stormwater discharges.</p> <p>An emergency bypass or overflow line can be included to avoid surcharging/flooding in the event the system is overloaded or fails to operate properly at any time.</p> <p>A log of the material (noting either volume or weight) captured and prevented from discharge to the receiving water shall be maintained.</p>		0 points claimed for 2021.
6. Pollution Prevention/Good Housekeeping for Municipal Operations – TOTAL POINTS CLAIMED:				17

E. SMP Requirements (Six Minimum Control Measures) (Continued)

6. **PHASE ONE OPERATORS ONLY:** Monitoring Industrial and High-Risk Runoff

The permit requires the permittee to enact a program to address post-construction site stormwater runoff from new development and redevelopment.

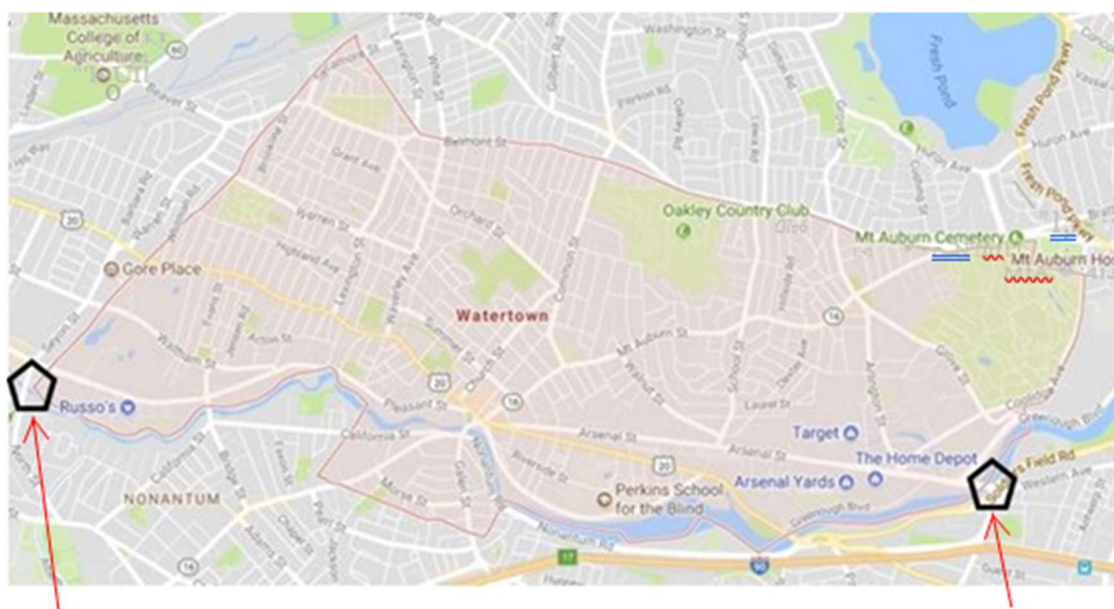
Please place an "X" in the left boxes to complete the table below.

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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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.

F. 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.

Example map and table below—Please fill out map and table on page 26 and adjust as needed.



Upstream Site: Farwell Street Bridge over Charles River

Downstream Site: Arsenal Street Bridge over Charles River

<i>Local Site Name</i>	<i>Farwell</i>	<i>Arsenal</i>
<i>Local Site Identifier</i>	<i>C1</i>	<i>C2</i>
<i>Sample Location Description</i>	<i>On the east side of this bridge is a pedestrian walkway where a rope and bucket are lowered to the middle of the river to obtain a sample.</i>	<i>From the bike path on the southeast end of the bridge a path extends down to the bank of the river. A 10-foot-long sample pole with bucket at the end is used to reach out past littoral vegetation and obtain a sample.</i>
<i>KDHE EDMR Code if Known</i>	<i>Far2002C5</i>	<i>Arse1001C6</i>
<i>Lat/Long Data Decimal & Degree Format</i>		
<i>Latitude</i>	<i>42.367056°</i>	<i>42358910°</i>
<i>Longitude</i>	<i>-71.218089°</i>	<i>-71161087°</i>

Map

Please fill out map and table below accordingly and review the example map and table on the previous page for reference.

*Please clearly label upstream and downstream sites

2021 City of Lawrence MS4 Stormwater Monitoring Data Summary:

The City of Lawrence performed stormwater sampling for nine separate storm events during 2021, for six permitted sampling sites. Samples were collected during qualifying events (as described in the permit) from the four permit-required locations and two optional sites between March and September.

Under the new permit wet weather surface water quality monitoring is required on Yankee Tank Creek, Wakarusa River, and Baldwin Creek. However, the Stormwater Management Plan indicates the City will also sample two optional locations, one on Inverness Creek and one upstream on Yankee Tank Creek, to supplement the required sampling data.

Permit Required Sampling Locations:

SURFACE WATER MONITORING LOCATIONS			
LOCAL SITE NAME	LOCAL ID.	LOCATION DESCRIPTION	KDHE EDMR CODE
Wakarusa River Upstream	WKR Up	Wakarusa River Upstream at the outfall of Clinton Lake Reservoir.	WAKUP006A6
Wakarusa River Downstream	WKR Down	Wakarusa River Downstream at E. 1900 Rd.	WAKDN006B6
Baldwin Creek	BLD	Baldwin Creek at N. 1800 Rd.	BLD007B6
Yankee Tank Creek	YKE	Yankee Tank Creek at E. 1200 Rd.	YKE008B6



Legend

Stormwater Sample Points - Required

- Baldwin Creek @ E. 1150 Rd.
- Wakarusa River - Downstream
- Wakarusa River - Upstream
- Yankee Tank Creek @ E. 1200 Rd.

Stormwater Sample Points - Optional

- Inverness Tributary @ 27th & Crossgate
- Yankee Tank Creek @ Lake Estates Dr.

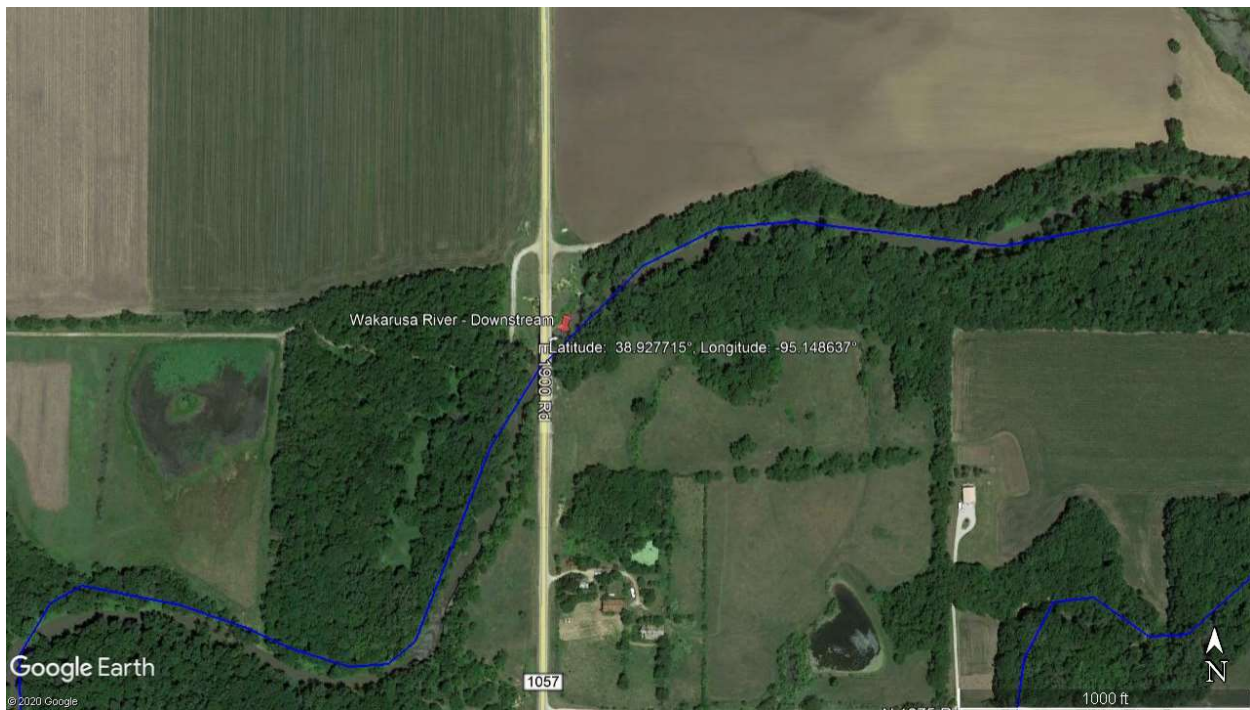


City of Lawrence
MUNICIPAL SERVICES & OPERATIONS

Stormwater Sampling Points 2020



Local Site Name	Wakarusa River – Upstream
Local Site Identifier	WKR Up
Sample Location Description	Wakarusa River upstream at the outfall of Clinton Lake Reservoir.
KDHE eDMR Code (if known)	WAKAUP006A6
Latitude/Longitude Data – Decimal & Degree Format	
Latitude	38.931568
Longitude	-95.329182
Years Monitoring will be conducted	All years
Parameters to analyze	TP, NO2/NO3, TKN, TSS, Turb, <i>E. coli</i>



Local Site Name	Wakarusa River – Downstream
Local Site Identifier	WKR Down
Sample Location Description	Wakarusa River downstream at E. 1900 Rd.
KDHE eDMR Code (if known)	WAKADN006B6
Latitude/Longitude Data – Decimal & Degree Format	
Latitude	38.927715
Longitude	-95.148637
Years Monitoring will be conducted	All years
Parameters to analyze	TP, NO2/NO3, TKN, TSS, Turb, <i>E. coli</i>

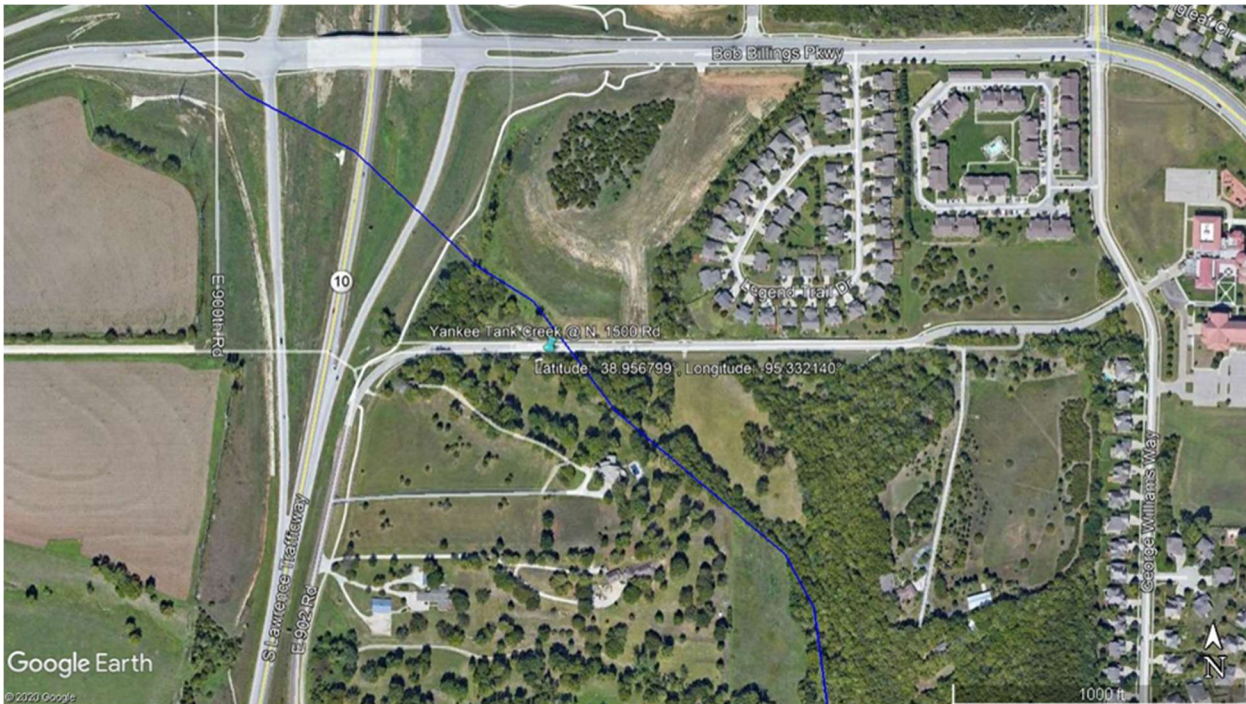


Local Site Name	Baldwin Creek
Local Site Identifier	BLD
Sample Location Description	Baldwin Creek at E. 1150 Rd.
KDHE eDMR Code (if known)	BLD007B6
Latitude/Longitude Data – Decimal & Degree Format	
Latitude	39.010013
Longitude	-95.288642
Years Monitoring will be conducted	All years
Parameters to analyze	TP, NO2/NO3, TKN, <i>E. coli</i>

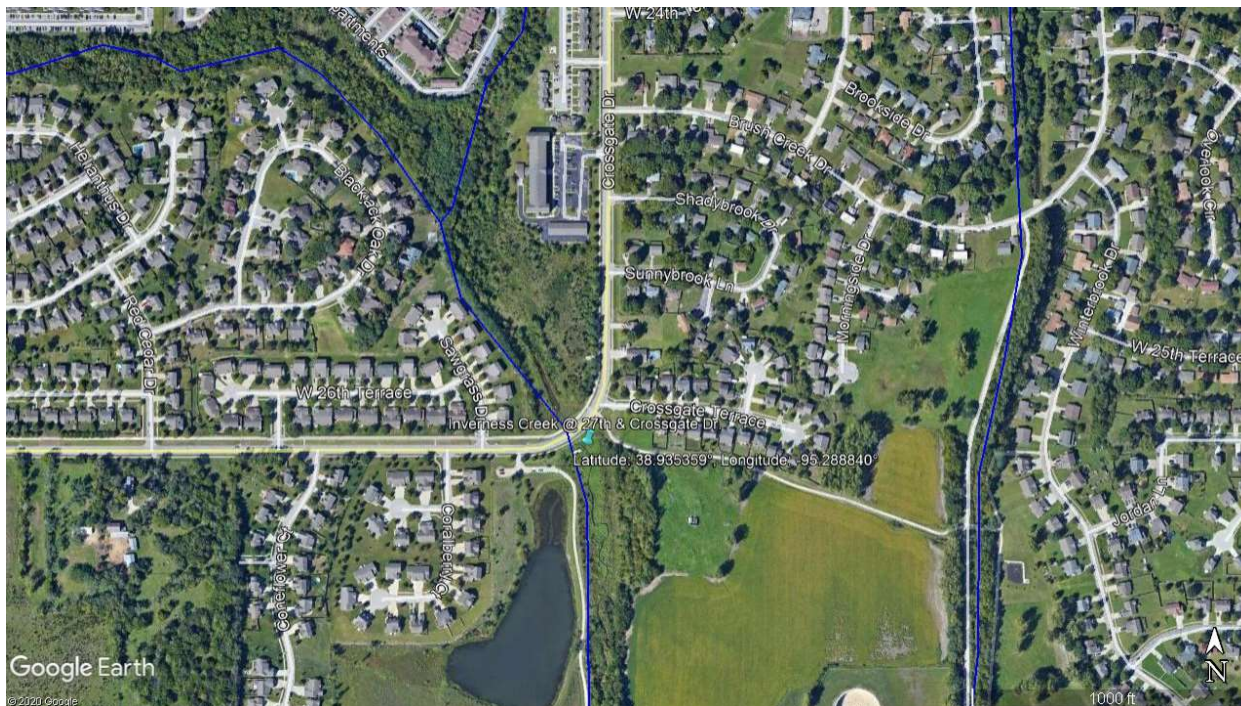


Local Site Name	Yankee Tank Creek
Local Site Identifier	YKE
Sample Location Description	Yankee Tank Creek at E. 1200 Rd.
KDHE eDMR Code (if known)	YKE008B6
Latitude/Longitude Data – Decimal & Degree Format	
Latitude	38.924441
Longitude	-95.279076
Years Monitoring will be conducted	All years
Parameters to analyze	TP, NO2/NO3, TKN, <i>E. coli</i>

City of Lawrence Optional Sampling Locations:



Local Site Name	Yankee Tank Creek – Optional
Local Site Identifier	YKEopt
Sample Location Description	Yankee Tank Creek at N. 1500 Rd.
KDHE eDMR Code (if known)	
Latitude/Longitude Data – Decimal & Degree Format	
Latitude	38.956799
Longitude	-95.332140
Years Monitoring will be conducted	Optional, all years as staff time and resources allow
Parameters to analyze	TP, NO2/NO3, TKN, <i>E. coli</i>



Local Site Name	Inverness Creek – Optional
Local Site Identifier	INVopt
Sample Location Description	Inverness Creek at 27 th and Crossgate Dr.
KDHE eDMR Code (if known)	
Latitude/Longitude Data – Decimal & Degree Format	
Latitude	38.935359
Longitude	-95.288840
Years Monitoring will be conducted	Optional, all years as staff time and resources allow
Parameters to analyze	TP, NO2/NO3, TKN, <i>E. coli</i>

- Required parameters in **bold**

Parameters: The parameters to be monitored in the permit are based off approved Total Maximum Daily Loads. All permitted sites are required to be sampled for bacteria (*E. coli*). The sampling sites on the Wakarusa River are additionally required to be sampled for nutrients and sediment per the table below. The City intends to analyze nutrients and *E. coli* at all optional and required sampling sites if resources allow. Sediment samples will only be collected from the Wakarusa River sampling sites as required.

TMDL Impairment	Parameter to be Monitored *	MRL **	Sample Type
Nutrients	Total Phosphorus as P (mg/l)	0.05 (mg/l)	Grab or Composite
Nutrients	Nitrate + Nitrite as N (mg/l)	0.10 (mg/l)	Grab or Composite
Nutrients	Total Kjeldahl Nitrogen (mg/l)	1 (mg/l)	Grab or Composite
Nutrients	Total Nitrogen (mg/l)		Calculate ***
Sediment	Total Suspended Solids (mg/l)	10 (mg/l)	Grab or Composite
Sediment	Turbidity (NTU)		Grab or Composite
Bacteria	<i>E. coli</i> (Col/100 ml or MPN)	10 (Col/100 ml or MPN)	Grab

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.

The next final report on effectiveness of source controls and structural BMPs will be submitted, as scheduled, at the end of the current permit term in 2023.

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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 2-25-2022
(Legally responsible person)

Name Printed: R. Trevor Flynn Title Assistant Director, MSO

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