

KS Permit No. M-AR64-SU01

TABLE OF CONTENTS	Page No's
SECTION I - General SWP Overview	1
SECTION II - Program Description and Management	. 2-5
SECTION III - Public Education and Outreach	. 6-7
SECTION IV - Public Involvement and Participation	. 8-9
SECTION V - Illicit Discharge Detection and Elimination	10-12
SECTION VI - Construction Site Stormwater Runoff Control	13-14
SECTION VII - Post-Construction Stormwater Management in New and Re-developments	15-16
SECTION VIII - Pollution Prevention/Good Housekeeping for Municipal Operations Goals	17-19
SECTION IX - Stormwater Quality and Quantity Monitoring	20
APPENDIX	

- A1 Storm Sewer Outfall Locations, Mulvane, KS
- A2 Resolution No. 2015-14, "Storm Water Drainage Policy for the City of Mulvane, Kansas"
- A3 Paragraph A of Title VII, Chapter 720, Section 720.015: Storm Drainage Fee, of the existing Code of the City of Mulvane, Kansas, supp. #3, 3/03.
- A4 An Ordinance Amending and Restating Paragraph A of Title VII, Chapter 720, Section 720.015: Storm Drainage Fee, of the existing Code of the City of Mulvane, Kansas, supp. #3, 3/03.
- A5 Kansas Water Pollution Control Municipal Separate Storm Sewer System (MS4) Permit and Authorization to Discharge under the National Pollutant Discharge Elimination System. City of Mulvane, Kansas Permit No.: MAR64-SU01 Federal Permit No.: KSR410024.

February 26, 2024

Mr. Jacob Coy Public Works Director / SMP Coordinator City of Mulvane 211 North Second Ave. Mulvane, Kansas 67110

Re:

2024-2029 Stormwater Management Plan (SMP)

City of Mulvane, Sedgwick-Sumner County, Kansas

Y&A Project No. 99-097

Dear Mr. Coy:

Transmitted herewith as requested are six (6) bound hard copies of the City's updated 2024-2029 Stormwater Management Plan (SMP). Revisions have been incorporated into the attached plan per our MS4 review meeting on February 22, 2024. A copy has also been submitted with the 2023 MS4 Annual Report.

We greatly appreciate the input and assistance from you, the MS4 work group and other City staff in the preparation of the City's Stormwater Management Plan. Please feel free to contact us if you have questions or need additional information and assistance with the SMP.

Sincerely,

YOUNG & ASSOCIATES, PA

Christopher R. Young, PE

City Engineer

CC: Austin St. John, City Administrator

Joel Pile, Zoning and Planning Administrator

Lachelle Tootle, City Utility Billing Clerk

Melissa Hudson, Public Works Administrative Assistant

Spencer Walker, Public Works Foreman

Attachments

SECTION I – General SMP Overview

I.1 Scope and Objectives

This Stormwater Management Plan (SMP) outlines measures to be taken by the City of Mulvane, Kansas to comply with the National Pollutant Discharge Elimination System (NPDES) General Permit as regulated by the Kansas Department of Health and Environment (KDHE). This SMP will be implemented within the boundary limits of the City of Mulvane. Any changes to this plan may be made only as allowed by the current MS4 Permit or otherwise approved by the KDHE.

The City of Mulvane requires all new development projects and re-development projects that disturb one acre or more of land to be permitted and approved by the KDHE. These projects shall have a Notice of Intent (NOI) to discharge stormwater from the project site and accompanying Storm Water Pollution Prevention Plan (SWPPP). No work will be allowed prior to furnishing the City with a signed approved NOI permit. All projects shall be required to have erosion protection and utilize Best Management Practices (BMP's), regardless of the area disturbed.

This SMP describes how pollutants in local stormwater runoff will be monitored and controlled and describes the BMP's used to address the six minimum measures. The objectives of the SMP are as follows:

- Reduce the discharge of pollutants from the municipal separate storm sewer system (MS4) to the Maximum Extent Practicable (MEP).
- Continue to implement the six minimum control measures as listed in PART I Section C of the City's MS4 Permit.
- Satisfy the requirements of the City's MS4 Permit, the Clean Water Act and Kansas surface water quality statues and regulations.

I.2 NPDES General Permit

This SWP was prepared and submitted to the Kansas Department of Health and Environment (KDHE), Bureau of Water, Municipal Programs Section as required for compliance with the requirements of the City's Kansas Water Pollution Control MS4 Permit No. M-AR64-SU01.

The General Permit requires the implementation of six types of minimum control measures through its development of a Stormwater Management Plan and MS4 Permit Program. The six minimum control measures are as follows:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management in New and Re-developments
- Pollution Prevention/Good Housekeeping for Municipal Operations Goals

SECTION II – Program Description and Management

II.1 Program Goals

- II.1.1 Comply with the General Permit as follows:
 - Effectively prohibit non-stormwater discharges.
 - Protect water quality from the impacts of stormwater runoff from small MS4's.
 - Reduce, to the maximum extent practicable (MEP), pollutants in stormwater runoff.

II.1.2 Determine Success as follows:

- Evaluate changes in public awareness and behavior.
- Evaluate the effectiveness of specific control measures on reducing pollution.
- Utilize information learned to plan next steps.

II.1.3 Achieve Acceptance of SMP Activities as follows:

- Effectively facilitate public input to the Stormwater Management Program.
- Integrate stormwater runoff goals at various intra-agency levels.
- Develop and maintain a proactive relationship with regulatory authorities.

II.2 Program Organizational Structure

The City will assemble a team to prepare and implement the SMP. This team will address the requirements of the stormwater requirements and provide a consistent approach to communicating with local residents and business. This team will be led by a SMP Program Coordinator. The City's Public Works Director will act as the program's coordinator and will be responsible for coordinating with the appropriate City departments to implement the SMP. The SMP team will include the following departments and functions as outlined below.

At a minimum, the SMP team will conduct bi-annual meetings to review the implementation of the SMP. The first meeting shall be conducted in January and will include a review of the MS4 annual report (for the prior year) and will address any organizational changes and updates to the SMP. The second meeting will focus on data collection and the performance of BMP's including stormwater sampling and testing.

The City's SMP team and responsibilities have been designed to address the six minimum control measures as outlined below.

II.2.1 <u>Public Works Director/SMP Coordinator</u>. Specific responsibilities include the following:

- Coordinate with neighboring municipalities, Sedgwick County, Sumner County and Kansas State agencies to monitor maintain updated stormwater technologies/BMP's and stormwater regulations.
- Provide representation on behalf of the City's SMP to community groups, businesses, boards and committees.
- Coordinate the functions of the MS4 team including scheduling team meetings,

- stormwater sampling, flow measuring, water quality analysis and annual reports.
- Construction Site Stormwater Runoff Control (Section C.4 of the MS4 Permit).
- Pollution Prevention/Good Housekeeping for Municipal Operations Goals (Section C.6 of the MS4 Permit).
- II.2.2 Public Works Administrative Assistant. Specific responsibilities include the following:
 - Public Education and Outreach (Section C.1 of the MS4 Permit).
 - Public Involvement/Participation (Section C.2 of the MS4 Permit).
- II.2.3 <u>Public Works Foreman</u>. Specific responsibilities include the following:
 - Illicit Discharge Detection and Elimination (Section C.3 of the MS4 Permit).
 - Construction Site Stormwater Runoff Control (Section C.4 of the MS4 Permit).
 - Post-Construction Stormwater Management in New and Re-developments (Section C.5 of the MS4 Permit).
 - Pollution Prevention/Good Housekeeping for Municipal Operations Goals (Section C.6 of the MS4 Permit).
- II.2.4 <u>City Utility Billing Clerk</u>. Specific responsibilities include the following:
 - Public Education and Outreach (Section C.1 of the MS4 Permit).
 - Public Involvement/Participation (Section C.2 of the MS4 Permit).
- II.2.5 <u>City Planning and Zoning Administrator</u>. Specific responsibilities include the following:
 - Public Involvement/Participation (Section C.2 of the MS4 Permit).
 - Illicit Discharge Detection and Elimination (Section C.3 of the MS4 Permit).
 - Construction Site Stormwater Runoff Control (Section C.4 of the MS4 Permit).
 - Post-Construction Stormwater Management in New and Re-developments (Section C.5 of the MS4 Permit).
- II.2.6 <u>City Engineering Consultant Support</u>. The City contracts engineering services and water quality testing associated with the following MS4 Permit tasks:
 - Participate in MS4 bi-annual meetings and make recommendations for improvements in BMP design and construction.
 - Collect stormwater runoff samples when requested by the SMP Coordinator. Deliver samples to a certified water quality laboratory (Meridian Labs, Wichita, KS).
 - Received water quality sampling bottles and analytical reports from a certified water quality laboratory and transfer results to KDHE submittal standards. Transmit analytical reports to KDHE via KEIMS.
 - Prepare a draft of the annual MS4 report and review draft report with the MS4 team.
 Address review comments, obtain reporting information and prepare final draft report for City approval/signature. Send report to KDHE via KEIMS.

II.3 Legal Authority

Chapter 720 of the City of Mulvane's Municipal Code establishes the provisions for operating, constructing, maintaining and repairing a stormwater management system. Chapter 725 of the City's Code addresses definitions, general prohibitions City of Mulvane's Municipal Code The Public Works Director/SMP Coordinator has reviewed existing municipal code and determined there is sufficient legal authority has been established for implementing the SMP as follows:

- Effectively prohibiting non-stormwater discharges to storm drains and implementing appropriate enforcement procedures and actions.
- Requiring that persons engaged in activities that are potential sources of pollutants implement best Management Practices (BMP's) to reduce pollutant discharges to the Maximum Extent Practicable (MEP).
- Requiring erosion and sediment controls, sanctions or other effective mechanisms to ensure compliance from construction site activities that result in a land disturbance of greater than or equal to one acre.
- Addressing post-construction runoff from new development and re-development projects that disturb greater than or equal to on acre; including project less than one acre that are port of a larger common plan of development or sale.

II.4 Funding Mechanism and Structure

The allocation of public funds is necessary for the capital, operation and maintenance and enforcement required to implement and enforce the City's SMP. Chapter 720 of Mulvane's Municipal City Code establishes a stormwater management system for the purpose of operating, constructing, maintaining and repairing such stormwater management system. Section 720.015 of the City Code establishes the assessment of a storm drainage fee against all property within the City that is connected to the water and/or sanitary sewer system. Revenues from this fund are set aside in a special fund to be used for the acquisition, construction, reconstruction, maintenance and repair of stormwater system facilities.

On November 21, 2016 the Mulvane City Council approved Ordinance No. 1483 "An ordinance amending and restating paragraph A of Title VII, Chapter 720 Stormwater Management System, Section 720.015 entitled Storm Drainage Fee; providing for an adjustment in the drainage fees for users of the Stormwater Management System furnished by the City of Mulvane, Kansas".

II.5 Reporting

The City's SMP Coordinator, together with input from the SMP team, will prepare an Annual Report summarizing the progress of implementing the SMP. The Annual Report will be submitted to the KDHE in a format acceptable to the KDHE staff. Unless otherwise revised by the KDHE, the Annual Report will be submitted using the Kansas Environmental Information Management System (KEIMS) and will be submitted on or before February 28th.

II.6 Geographic Description and Permit Boundaries

The majority of the City's current boundary lies along the eastern banks of the Lower Arkansas River. The City's approx. 2,617-acre boundary includes 770-acres of commercial and agricultural land located west of the Arkansas River. The remaining easterly portion of the City is primarily residential with a mix of commercial properties, schools, parks and other community land uses. Several tributaries to the Arkansas River flow through and adjacent to the City limits including; Northwest and West Tributaries to the Arkansas River, Styx Creek, and East and Southeast

tributaries to Dog Creek.

As shown in Appendix A1 "Storm Sewer Outfall Locations, Mulvane, KS", Styx Creek and its West Tributary is the primary drainage basin inside the City limits. This drainage basin originates approx. 2-miles north of 103rd Street and flows south-southwesterly through the central part of the City, including the downtown area.

II.7 Pollutants of Concern

The City's MS4 Permit identifies Dog Creek as an impaired stream. Total Maximum Daily Loads (TMDL's) for Bacteria, Nutrients and Sediments have been established on the CWA Section 303d list for impaired waters. Two surface water monitoring sites are identified in the MS4 for monitoring upstream and downstream of the City's influence. Appendix A1 identifies drainage basin outfalls and sampling sites in or adjacent to the City limits of Mulvane.

II.8 General SMP Management

The stormwater management activities of the City cover a broad range of responsibilities involving the governing body and almost every department of the City. The City Council approves budgets, ordinances and policies to provide direction for the stormwater program. City departments must mange stormwater run-off in every development and construction project considered in the City. Each project must be designed to follow stormwater design criteria and provide flood protection during large rainfall events. Maintenance is provided to ensure the drainage system performs properly at all times. Water quality issues are considered during all phases of construction and maintenance of the system. Public agencies must be consulted, and a permit obtained when any work is performed that involves the City's stormwater drainage system. The joint efforts of the City Council and City staff provide to the residents of Mulvane, grater protection from future flooding, a safer and cleaner environment to line in, and a program to replace inadequate or deteriorated drainage systems where needed.

SECTION III – Public Education and Outreach

III.1 Program Objectives

Public education is an effective way of preventing stormwater pollution at its source. Understanding the influence each individual has on the quality of stormwater runoff and an awareness of the consequences of polluting local streams and drainage ways is a positive first step in improving water quality for the enjoyment of the community and overall environment.

The following Public Education and Outreach Program objectives have been established to mitigate stormwater pollution:

- Increase public awareness about stormwater pollution.
- Educate the community about specific pollutant sources and how they can reduce them in stormwater runoff.

III.2 Program Tasks and BMP's

III.2.1 <u>Conduct Public Education and Outreach to Households</u> – Educating the public and households is intended to increase the community's awareness about stormwater pollution and discourage the release of non-stormwater discharges into the storm drainage system. The following Public Education and Outreach BMP's are to be conducted by City staff:

(LBMP P Ed & O - 01) - The City maintains a Web Page to provide information on stormwater issues including links to other appropriate sites.

(LBMP P Ed & O - 02) - The City produces brochures concerning the "Do's and Don'ts" for handling stormwater runoff. These brochures are provided at City Hall and are distributed to every new utility service customer.

(LBMP P Ed & O - 04) - The City will continue to promote and perform the installation of placards on storm drainage inlet structures. Placards will read "Only rain...Down the Storm Drain".

(LBMP P Ed & O - 05) - The City posts the MS4 permit and SMP on their Web Page. (LBMP P Ed & O - 14) - Information on the impacts of stormwater discharge on lakes, streams and rivers is posted and maintained on the City's public TV channel 7. Public service announcements are updated on Channel 7 monthly to address current efforts being made to improve the quality of stormwater runoff.

The City will update tasks and BMP's based on annual evaluations of public education and outreach and any changes/advancements in stormwater pollution prevention.

- III.2.2 <u>Conduct Targeted Outreach Programs</u> The stormwater program has been developed to target education and outreach to the following groups:
 - Unified School District 263, Grade Schools, Middle School and High School.
 - City officials and staff.
 - The general public.

The Public Works Administrative Assistance, City Utility Billing Clerk and City Planning and

Zoning Administrator will develop and coordinate all public education and outreach programs. These programs may include presentations at public schools and other community groups, installing signs with pollution prevention information, performing website campaigns and posting channel 7 advertisements.

III.3 Program Evaluation, Documentation and Annual Reporting

The City will maintain records to document program implementation and annual progress. This information is in the form of water quality data and will be included in the annual MS4 report submitted to KDHE.

III.4 BMP's, Measurable Goals and Implementation Schedule

Section C.1 of the City's MS4 permit lists various BMP's, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year. Measurable goals and schedules for the City's Public Education and Outreach program are summarized as follows:

(LBMP P Ed & O - 01) Check and update the City's website on a monthly basis. Create a log book for documenting monthly checks and updates performed.

(LBMP P Ed & O - 02) Document the number of brochures distributed in the year and retain a copy of the brochure on file.

(LBMP P Ed & O - 04) Document the total number of placards installed on stormwater inlets during the year.

(LBMP P Ed & O - 05) Document the length of time the City has posted the MS4 permit and SMP on their Web Page.

(LBMP P Ed & O - 14) Document the date, time and estimated media exposure for each stormwater broadcast made on City's public TV Channel 7. Document the City's US Census population value.

SECTION IV - Public Involvement and Participation

IV.1 Program Objectives

Public involvement and participation can provide valuable input and assistance in effectively implementing the SMP. The Public Works Director/SMP Coordinator will target those public groups to engage with on various issues concerning urban runoff within the community. The participation of these groups is intended build support for improving the quality of stormwater runoff.

The following Public Involvement and Participation Program objectives have been established to mitigate stormwater pollution:

- Raise public awareness about urban runoff pollution through their involvement in the SMP.
- Raise public awareness about stormwater pollution prevention
- Encourage and provide guidance for community groups and/or volunteers to perform stormwater related projects within the community.

IV.2 Program Tasks and BMP's

IV2.1 <u>Public Involvement and Participation</u> - Engaging the public on stormwater issues and promoting public participation on stormwater projects is intended to increase the community's awareness about stormwater pollution and discourage the release of non-stormwater discharges into the storm drainage system. The following Public Involvement and Participation BMP's are to be conducted by City staff:

(LBMP P I/P - 01) - The City will hold a public hearing or public forum to notify the public about stormwater program activities and to solicit public comment.

(LBMP P I/P - 04) - The City will provide training for employees in the Public Works Street Department. This training will include recognizing, documenting and reporting illicit discharge activities.

(LBMP P I/P - 05) - The City will coordinate at least two events for residents to engage in cleanup activities to improve stormwater runoff in the community.

The City will update tasks and BMP's based on annual evaluations of public involvement and participation and any changes/advancements in stormwater pollution prevention.

- IV.2.2 <u>Conduct Targeted Public Involvement and Participation Programs</u> The stormwater program has been developed to target public involvement and participation from the following groups:
 - Neighborhood (HOA) and business associations.
 - Commercial property owners
 - Local service and trade organizations
 - Mulvane Chamber of Commerce
 - Watershed and environmental organizations

The Public Works Administrative Assistance, City Utility Billing Clerk and City Planning and

Zoning Administrator will develop and coordinate all public involvement and participation programs. These programs may include presentations at neighborhood meetings and other community groups, purchasing and installing signs with pollution prevention information, developing website campaigns and Channel 7 advertisements.

IV.3 Program Evaluation, Documentation and Annual Reporting

The City will maintain records to document program implementation and annual progress. This information is in the form of water quality data and will be included in the annual MS4 report submitted to KDHE.

IV.4 BMP's, Measurable Goals and Implementation Schedule

Section C.2 of the City's MS4 permit lists various BMP's, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year. Measurable goals and schedules for the City's Public Involvement and Participation program are summarized as follows:

(LBMP P I/P - 01) - The City will hold a public hearing or public forum to notify the public about stormwater program activities and to solicit public comment.

(LBMP P I/P - 04) - The City will provide training for employees in the Public Works Street Department. This training will include recognizing, documenting and reporting illicit discharge activities.

(LBMP P I/P - 05) - The City will coordinate at least two events for residents to engage in cleanup activities to improve stormwater runoff in the community.

SECTION V – Illicit Discharge Detection and Elimination

V.1 Program Objectives

Illicit stormwater discharges are those discharges that are not composed entirely of stormwater. Illicit discharges enter streams, creeks, rivers and other bodies of water via the City's storm drainage system including street curb & gutters, storm sewer inlets and conduits and drainage channels. Illicit stormwater discharges can occur by direct connection of a wastewater pipe into a storm drain or by indirect connection through wastewater inflow/infiltration (e.g., cracks in sanitary sewer piping and manholes) or surface spills that drain into the stormwater system. Illicit stormwater discharge can result in the significant polluting of stormwater with heavy metals, toxics, oil, grease, solvents, nutrients, sediments and bacteria which ultimately impact the quality of water in local streams, creeks, rivers and other bodies of water.

The following Illicit Discharge Detection and Elimination Program objectives have been established to mitigate stormwater pollution:

- Control illicit discharges by conducting field surveys of the municipal storm drainage conveyance system and identifying and eliminating the source of non-stormwater discharges.
- Detect and eliminate illegal disposal of wastes to the storm drainage system through public education, disposal alternatives and enforcement.
- Effectively coordinate spill response and clean-up with existing programs.
- Optimize illicit discharge control activities through planning and prioritization.
- Partner with other agencies and groups to increase public awareness on how to effectively and efficiently prevent pollutant discharges to the storm drainage systems.

V.2 Program Tasks and BMP's

V.2.1 Outfall and Storm Sewer Mapping - In 2015 the City prepared their first stormwater sewer map. Produced in both AutoCAD and ArcGIS file formats, this map identifies locations and sizes of storm sewer pipes, street curb and open area inlet locations, drainage channels and dry/wet stormwater detention facilities. A separate "Storm Sewer Outfall Locations" map was also produced and is used to identify stormwater sampling sites. The City's 2024-2029 Capitol Improvement Plan (CIP) budgets funds for updating their GIS maps including transitioning to a web-based mapping system and GIS mapping administrator. The goal of stormwater facility mapping is to provide reliable utility records and to assist the Public Works staff in scheduling and prioritizing maintenance of the City's drainage infrastructure.

The City has budgeted CIP funds for mapping their sanitary sewer system. Mapping of the City's water distribution system was completed in 2018. These mapping projects will assist in the planning and execution of stormwater sewer, sanitary sewer and water projects and, will assist Public Works crews in identifying problematic drainage areas and potential sanitary-storm sewer cross connections.

- V.2.2 <u>Detect and Eliminate Non-Stormwater Discharges</u> An Illicit Discharge and Elimination Program are based on the following two elements:
 - The Illicit Discharge Detection Plan.

- Field Screening Inspections.
- V.2.2.1 <u>Develop an Illicit Discharge Detection Plan</u> The City will develop a procedural plan and schedule for locating potential problem areas, locating pollution source areas, removing illicit connections and documenting actions takes. The following items will be addressed in the plan:
 - Identify procedures and staff for conducting initial and follow-up screening investigations.
 - Develop a database to track illicit discharge reports and follow-up actions.
 - Evaluate existing programs including recycling programs to reduce illicit discharge issues.
 - Establish a method for receiving and tracking information received from the public concerning non-stormwater discharges.
- V.2.2.2 Conduct Field Screening Investigations The investigations will be based on the Illicit Discharge Detection Plan. The goal of performing field screening investigations is to detect and eliminate existing illicit connections including improper plumbing and to eliminate improper disposal of pollutants into the storm drain system. Field screening will including manhole, outfall and drainage way inspections primarily during dry-weather periods, and will track discharges from outfalls and manholes to their source. Storm sewer maps will be used to identify potential areas of illicit connections and discharges.
- V.2.3 <u>Prohibit Non-Stormwater Discharges</u> Municipal Code will be used to enforce nonstormwater discharges as outlined in Section II.
- V.2.4 Education and Training City staff has been trained on the administrative process for illicit discharge detection and screening including inspection of outfall and manhole site inspections and record keeping. Annual training of City staff will be performed.
- V.3 Program Evaluation, Documentation and Annual Reporting

Measurable goals are used to assess the efforts to reduce urban runoff pollution and to evaluate the success of the program annually. The Public Works Director/SMP Coordinator maintains records to document program implementation and annual progress. This information will be included in the annual report submitted to KDHE.

V.4 BMP's, Measurable Goals and Implementation Schedule

Section C.3 of the City's MS4 permit lists various BMP's, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year. Measurable goals and schedules for the City's Illicit Discharge Detection and Elimination program are summarized as follows:

(LBMP I D D & E - 01) - The City will 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.

(LBMP I D D & E - 03) - The City will continue to maintain their Hazardous Mitigation Plan and coordinate emergency response with other agencies or organizations.

(LBMP I D D & E - 05) - The City will prepare and distribute a flier or letter and/or email with a press release from the Public Works department with the intent of reaching every resident and business in the MS4 permit area. This document shall provide information on how to avoid illicit discharges to the MS4 and provide information on household hazardous waste disposal (Please contact the City of Mulvane Public Works Department for more information).

(LBMP I D D & E - 08) - The City operates (4) sanitary sewer lift stations (LS's). All LS's are equipped with telemetry and SCADA systems. One LS is equipped with on-site standby power generation. Standby power for the other LS's are provided via trailer mounted generator. The City maintains a vacuum truck capable of addressing pump failures. The City plans to add on-site standby power generation at the remaining sites pending available funds.

SECTION VI – Construction Site Stormwater Runoff Control

VI.1 Program Objectives

The overall objective of controlling stormwater runoff from construction sites is to reduce pollutants generated from construction activities that result in a land disturbance of greater than or equal to one acre. For construction sites disturbing less than one acre of land but are part of a larger common development plan, the same runoff controls will be required.

The following Construction Site Stormwater Runoff Control Program objectives have been established to mitigate stormwater pollution:

- Prohibit non-stormwater discharges and require controls to reduce the discharge of pollutants during construction.
- Minimize land disturbances at construction sites
- Protect the quality of water runoff from pollutants generated by construction activities.
- Require BMP implementation at construction sites.
- Develop and implement measurable goals to evaluate the success of the BMP's.

VI.2 Program Tasks and BMP's

- VI.2.1 Regulatory In 2015 the City adopted Resolution No. 2015-14 "A resolution declaring, establishing and defining a storm water drainage policy for the City of Mulvane, Kansas". This drainage policy is in addition to existing regulatory requirements by FEMA, DWR and the USACE. The City's drainage policy addresses the following:
 - New developments and redevelopments shall be designed to have a zero increase in stormwater runoff.
 - Where possible stormwater runoff should be combined for various land uses or ownerships and where deemed necessary shall be directed into rain gardens, infiltration trench, detention pond or other drainage device to filter or otherwise enhance water quality prior to discharge off-site.
 - Builders or general contractors shall install and maintain temporary erosion control devices to protect grassed areas from erosion until all grassed areas are re-established
 - For sites disturbing one acre of land, or more, a KDHE Notice of Intent (NOI) and Stormwater Pollution Prevention Plan (SWPPP) shall be provided.
- VI.2.2 <u>Site Plan Review and Inspection</u> The City will examine existing site review and inspection procedures to address stormwater issues. The review will include evaluating current sediment and erosion control programs, revising existing City permit requirements and developing additional controls into planning documentation and policies. The following procedures will be examined:
 - Pre-construction site plan and BMP review and consideration of potential water quality impacts from proposed construction activities.
 - Site inspection and enforcement of control measures.
 - Implementation of appropriate erosion and sediment control BMP's by construction site operators.

- Record keeping and reporting, including developing a database of ongoing development projects and tracking the status of construction projects.
- VI.2.3 <u>Staff Training</u> Training will be performed to educate and advise City staff on proper inspection of structural controls and BMP installations and record keeping procedures.

VI.3 Program Evaluation, Documentation and Annual Reporting

Measurable goals are used to assess the efforts to reduce urban runoff pollution and to evaluate the success of the program annually. The Public Works Director/SMP Coordinator maintains records to document program implementation and annual progress. This information will be included in the annual report submitted to KDHE.

VI.4 BMP's, Measurable Goals and Implementation Schedule

Section C.4 of the City's MS4 permit lists various BMP's, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year. Measurable goals and schedules for the City's Construction Site Stormwater Runoff Control program are summarized as follows:

(LBMP C S S R C - 01) - The City will 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.

(LBMP C S S R C - 04) - The City will develop a site plan review process which considers potential water quality impacts which may occur during construction as well as post construction impacts.

(LBMP C S S R C - 5) - The City will establish effective requirements for construction sites to control wastes, and will develop through ordinance or other enforceable means requirements for construction site operators or owners to control wastes, including at a minimum control shall be imposed to prevent entry into the MS4 for the following wastes:

- Discarded building materials,
- Concrete waste.
- Truck washout,
- Chemicals,
- Litter, and
- Sanitary waste

SECTION VII - Post-Construction Stormwater Management in New Development and Re-Development Projects

VII.1 Program Objectives

The overall objective of the Post-Construction Stormwater Management program is to reduce the potential for discharge of pollutants into urban runoff from new developments and redevelopment areas and manage site runoff volumes and flow rates such that they are similar to preconstruction raters.

VII.2 Program Tasks and BMP's

- VII.2.1 <u>Regulatory</u> In 2015 the City adopted Resolution No. 2015-14 "A resolution declaring, establishing and defining a storm water drainage policy for the City of Mulvane, Kansas". This <u>drainage</u> policy is in addition to existing regulatory requirements by FEMA, DWR and the USACE. The City's drainage policy addresses the following:
 - New developments and re-developments shall be designed to have a zero increase in stormwater runoff.
 - Where possible stormwater runoff should be combined for various land uses or ownerships and where deemed necessary shall be directed into rain gardens, infiltration trench, detention pond or other drainage device to filter or otherwise enhance water quality prior to discharge off-site.
 - Builders or general contractors shall install and maintain temporary erosion control devices to protect grassed areas from erosion until all grassed areas are reestablished
 - For sites disturbing one acre of land, or more, a KDHE Notice of Intent (NOI) and Stormwater Pollution Prevention Plan (SWPPP) shall be provided.
- VII.2.2 <u>Post-Construction Program Development</u> To address stormwater runoff concerns from new developments and re-developments the City will review and evaluate current construction inspection programs, revise existing permit requirements and update design criteria to include BMP standards. The following procedures will be developed:
 - A mechanism to inform permit applicants of new requirements regarding stormwater runoff.
 - Guidance for applicants on potential design measures.
 - Revised staff permit/design review process to include urban runoff issues.
 - Criteria to determine if stormwater controls are needed for a proposed project.
 - A post-construction runoff controls checklist to allow inspectors to verify that runoff controls were properly implemented.
 - A procedure for verifying that connections to the storm drains were property installed.
 - Evaluate structural and non-structural stormwater controls. Structural BMP's would include detention storage practices (including slow release rates to promote particle settling for pollutant removal), infiltration/percolation practices (including infiltration trenches, rain gardens and porous pavements) and vegetative practices (including landscaping, grass swales, filter strips and artificial wetlands). Non-structure BMP's

would include creating buffer strips, minimizing land disturbance, minimizing impervious areas and maximizing open spaces.

VII.2.3 <u>Staff Training</u> - Training will be performed to educate and advise City staff on proper inspection and monitoring of structural controls, BMP's and record keeping procedures.

VII.3 Program Evaluation, Documentation and Annual Reporting

Measurable goals are used to assess the efforts to reduce urban runoff pollution and to evaluate the success of the program annually. The Public Works Director/SMP Coordinator maintains records to document program implementation and annual progress. This information will be included in the annual report submitted to KDHE.

VII.4 BMP's, Measurable Goals and Implementation Schedule

Section C.5 of the City's MS4 permit lists various BMP's, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year. Measurable goals and schedules for the City's Post-Construction Stormwater Management in New Development and Re-Development Project program are summarized as follows:

(LBMP P-C S M - 01) - The City will develop a list of post-construction structural or non-structural BMP's which are required to be incorporated in any new development or re-development project. The list will be provided to entities involved with the design of projects prior to site plan review. (LBMP P-C S M - 03) - The City will develop a comprehensive plan establishing zoning and development standards with both structural and non-structural BMP's intended to avoid or minimize adverse water quality impacts post-construction.

(LBMP P-C S M - 04) - The City will develop a comprehensive plan establishing zoning and development standards with both structural and non-structural BMP's intended to avoid or minimize adverse water quality impacts post-construction.

(LBMP P-C S M - 08) - The City will implement a program to encourage residential owners to install stormwater BMP's, including but not limited to, native trees, native flower gardens, rain gardens, rain barrels, pervious surfaces and vegetated swales.

SECTION VIII - Pollution Prevention/Good Housekeeping for Municipal Operations

VIII.1 Program Objectives

The overall objective of the Pollution Prevention/Good Housekeeping for Municipal Operations program is designed to address pollutant sources and to reduce pollutants generated by municipal maintenance activities as follows:

- Optimize pollutant removal during routine maintenance activities such as street sweeping and maintenance of storm drainage facilities.
- Prevent or minimize discharges to storm drains and watercourses from road maintenance, parks, corporation yards and other publicly owned facilities.
- Provide information and education about the Stormwater Program to City employees.
- Develop and implement measurable goals to evaluate the success of the BMP's.

VIII.2 Program Tasks and BMP's

- VIII.2.1 <u>Update Good Housekeeping Procedures for Municipal Operation Areas</u> The City owns, operates and maintains a number of municipal operations facilities ranging from public works buildings and yards to police/fire/EMS stations. These sites typically conduct equipment repair, fueling and washing activities. Some of these sites are also used to store and handle waste chemicals such as paints, pesticides, lubricating oils, soaps, solvents and cleaners. Urban runoff concerns from sites include the following:
 - Vehicle washing.
 - Equipment cleaning.
 - Engine steam cleaning.
 - Discharge of soaps, cleansers, heavy metals, and sediments to the storm drain.
 - Changing auto fluids and inadvertent spills, especially in outdoor or uncovered areas.
 - Vehicle fueling and inadvertent spills.
 - Parked vehicles and equipment.
 - Fuel leaks and drips outdoors.
 - Outdoor materials and waste storage.
 - Release/spill of stored materials.

The City maintains secondary spill containment for all on-site fuel storage tanks located at the (Boxelder) Public Works Maintenance facility, (111th Street) Electric Generation Facility and (E. Main Street) Fire Station No. 1. Vehicle maintenance at these facilities includes indoor wash bays with wastewater directed into grease/oil/sediment traps then discharged into sanitary sewers.

- VIII.2.2 <u>Update Storm Drain Facilities Inspection and Cleaning Program</u> The City currently inspects and cleans stormwater catch basins and inlets. Drainage swales and creeks are cleared of vegetation and debris to facilitate the flow of stormwater. The City will continue to address, evaluate and make necessary improvements in the following:
 - Developing storm drain maintenance BMP's.

- Evaluating and documenting existing silt and grease trap maintenance procedures.
- Tracking inlet maintenance and identifying area requiring more frequent cleaning.
- Record keeping.
- VIII.2.3 Review Street Sweeping Program The City currently conducts street sweeping for aesthetic, safety and public health reasons. The following practices are utilized by the Mulvane street sweeping program to reduce polluted runoff:
 - Increased street sweeping frequency in area most prone to litter, leaves and dirt accumulation.
 - Timed street sweeping prior to the onset of the rainy season, especially in the fall when leaves begin to accumulate on streets and in storm drainage facilities.
- VIII.2.4 <u>Update Road Repair and Maintenance Program</u> The City Public Works and contractors conduct street maintenance and repair activities including asphalt and concrete pavement removal/replacement, pothole patching, crack repairing and slurry sealing. Current operating practices include procedures to keep materials from entering the storm drain system. The City has developed street repair and maintenance BMP's based on existing practices and stormwater concerns. These BMP's will address the following:
 - General street repair practices.
 - Patching and resurfacing.
 - Equipment storage and cleaning.
 - Asphalt and concrete removal/replacement.
 - Contractor requirements.
- VIII.2.5 <u>Staff Training</u> Training will be performed to educate and advise City staff on those pollution prevention and good housekeeping practices applicable to their areas of responsibility.
- VIII.3 Program Evaluation, Documentation and Annual Reporting

Measurable goals are used to assess the efforts to reduce urban runoff pollution and to evaluate the success of the program annually. The Public Works Director/SMP Coordinator maintains records to document program implementation and annual progress. This information will be included in the annual report submitted to KDHE.

VIII.4 BMP's, Measurable Goals and Implementation Schedule

Section C.6 of the City's MS4 permit lists various BMP's, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year. Measurable goals and schedules for the City's Pollution Prevention/Good Housekeeping for Municipal Operations are summarized as follows:

(LBMP P P/G H - 03) - The City will develop a guidance document for municipal staff or third-party contractors which apply pesticides. The guidance shall require any municipal staff who applies restricted use pesticides to have a commercial applicator certification from the Kansas Department of Agriculture if required by that department.

(LBMP P P/G H - 04) - The City will 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.

(LBMP P P/G H - 05) - The City will implement a program for street sweeping in which the street sweepings are collected and disposed of properly or recycled/reused if possible.

(LBMP P P/G H - 07) - The City will implement a program to inspect stormwater inlets to identify illicit discharges and clean drop inlets of accumulated debris.

(LBMP P P/G H - 08) - The City will develop, implement and keep updated an online storm sewer map accessible to the public.

SECTION IX – Stormwater Quality and Quantity Monitoring

IX.1 Program Objectives

The overall objective of the Stormwater Quality and Quantity Monitoring program is designed to assess the improvements in the quality of water in receiving streams due to BMP control measures implemented under the SMP. Sampling and analysis will include, at a minimum, instream monitoring of the main streams entering and leaving the jurisdictional Permit Area for the pollutants identified by the governing TMDL's during or immediately after a specified storm event. In addition to the storm event monitoring, the City may want to conduct dry weather monitoring to determine the effectiveness or violations of the six minimum control measures or to confirm baseline water quality data.

IX.2 Monitoring Frequency and Periods

Following are the parameters for stormwater sampling:

- Four storm events per year per monitoring site.
- Monitoring will normally be conducted in the spring (between March 1 and June 30) and summer (between July 1 and October 31).
- Additional monitoring may be conducted outside these timeframes if needed to meet the requirements of the permit.
- For parameters refer to the current effective MS4 permit.
- The data shall be submitted annually to KDHE on data sheets acceptable to KDHE

IX.3 BMP's, Measurable Goals and Implementation Schedule

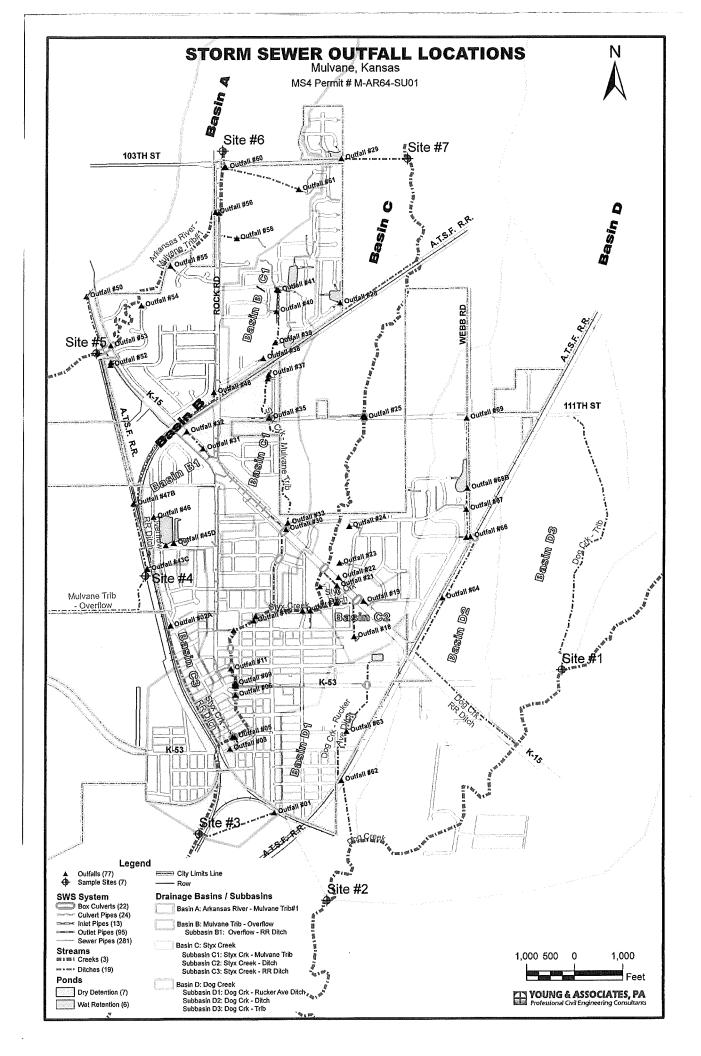
Part II, Section A of the City's MS4 permit lists various BMP's, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year. Measurable goals and schedules for the City's Total Maximum Daily Load (TMDL) best Management Practices and Surface Water Monitoring are summarized as follows:

(LBMP T M D L - 01) - The City will install pet waste stations which include a glove/bag dispenser with signage and waste can to encourage pet waste disposal at either parks or other public lands owned by the permittee.

(LBMP T M D L - 05) - Develop a pet waste brochure or flyer document to educate the public about animal waste contamination of stormwater. The document encourages pet owners to pick up their pet's waste. Alternately, the City will post the document on their municipal website. (LBMP T M D L - 06) - Distribute "Only Rain Down the Drain" door hangers or similar document. (LBMP T M D L - 12) - Construct a stream bank stabilization project.

APPENDIX

- A1 Storm Sewer Outfall Locations, Mulvane, KS
- A2 Resolution No. 2015-14, "Storm Water Drainage Policy for the City of Mulvane, Kansas"
- A3 Paragraph A of Title VII, Chapter 720, Section 720.015: Storm Drainage Fee, of the existing Code of the City of Mulvane, Kansas, supp. #3, 3/03.
- A4 An Ordinance Amending and Restating Paragraph A of Title VII, Chapter 720, Section 720.015: Storm Drainage Fee, of the existing Code of the City of Mulvane, Kansas, supp. #3, 3/03.
- A5 Kansas Water Pollution Control Municipal Separate Storm Sewer System (MS4) Permit and Authorization to Discharge under the National Pollutant Discharge Elimination System. City of Mulvane, Kansas Permit No.: MAR64-SU01 Federal Permit No.: KSR410024.



RESOLUTION NO. 2015-14

A RESOLUTION DECLARING, ESTABLISHING AND DEFINING A STORM WATER DRAINAGE POLICY FOR THE CITY OF MULVANE, KANSAS

BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF MULVANE, KANSAS:

- 1. The following requirements shall be imposed on land developers, builders, contractors, engineers, and others planning to develop, build, or otherwise install improvements on properties under the jurisdiction of the City of Mulvane:
 - 1.1 New Subdivisions and new plats, including re-plats of existing subdivisions shall prepare and submit for approval a *PRELIMINARY DRAINAGE PLAN* and *FINAL DRAINAGE PLAN*.
 - 1.1.1 A PRELIMINARY DRAINAGE PLAN shall be submitted together with the sketch or preliminary plat, and shall indicate the manner in which storm water will be accepted from adjacent properties, handled through the new development, and received by adjacent downstream properties. The PRELIMINARY DRAINAGE PLAN shall include supporting drainage computations for the storm water improvements proposed in the FINAL DRAINAGE PLAN. Computations shall be prepared by a licensed professional engineer, and shall include an analysis of the pre-development and post-development drainage conditions. Pre-developed and Post-developed Stormwater runoff at each outfall on the proposed development or redevelopment site shall be calculated for a 2-year, 10-year, 25-year, and 100-year return frequency, with a 24-hour storm duration.
 - 1.1.2 A FINAL DRAINAGE PLAN shall be submitted to the City together with the final plat for review and approval. The FINAL DRAINAGE PLAN shall be submitted a minimum of two weeks prior to consideration by the Mulvane Planning Commission. This plan shall establish the drainage improvements to be implemented with the development, and shall include the following information:
 - 1.1.2a Indicate each lot suitable for a buried basement (B), view-out (VO), or walk-out (WO) basement.
 - 1.1.2b A minimum of four finish grades for each buildable lot shall be shown. These grades shall include, but not be limited to, the following:
 - (A) Top of street curb elevation or street flow line elevation adjacent to the lot, including but not limited to the highest and lowest adjacent curb elevations.
 - (B) Minimum top of foundation elevation.
 - (C) Minimum top of view-out (VO) or walk-out (WO) wall elevation.
 - (D) Rear lot drainage swale flow line elevations, and/or lot corner elevations, including but not limited to the highest and lowest flow line elevations on the lot.

- 1.1.2c Preliminary street grades, including preliminary grades for all storm sewers, open channels, and/or storm water detention facilities.
- 1.1.2d Detailed information for individual builders as necessary to determine the type of residences that can be built on certain lots.
- 1.1.3 The policy of the City of Mulvane is to have a zero increase in storm water run-off from new developments or redevelopments that increase the impervious area or alter the storm water discharge from the property.
- 1.1.4 Where possible, storm water detention facilities should be combined for various land uses or ownerships. Where deemed necessary by the City, all surface runoff from hard surfaces (e.g., streets, driveways, buildings, etc.) shall be directed into a rain garden, infiltration trench, detention pond or other drainage device to filter or otherwise provide enhancement of water quality prior to discharge off-site.
- 1.1.5 The subdivision plat shall clearly state that a *FINAL DRAINAGE PLAN* has been developed for the subdivision and that all drainage easements, right-of-ways, or reserves shall allow for the unobstructed conveyance of storm water.
- 1.1.6 If the subdivision FINAL DRAINAGE PLAN calls for the drainage of properties by back lot line drainage swales, the minimum allowable swale slope shall be 1.0%. Flatter slopes may require the paving of the swales or the installation of underground pipe and inlets to maintain positive drainage.
- 1.1.7 All elevations, including any contours, shown in the *PRELIMINARY DRAINAGE PLAN* and *FINAL DRAINAGE PLAN* shall be in NAV88 (North American Datum, 1988). Where an existing MSL (Mean Sea Level) benchmark is located on the development site; an equation shall be provided for converting MSL to NAV88. The City of Mulvane recommends the use of State Plane Coordinates for horizontal datum.
- 1.1.8 All current City Zoning and Subdivision regulations pursuant to site drainage and storm sewers and the installation of improvements shall be complied with and considered a part of the City's Storm Water Drainage Policy.
- 1.2 When deemed necessary by the City's Building Official, development and redevelopments of existing platted subdivisions and/or plats shall be performed in accordance with the approved FINAL DRAINAGE PLAN as outlined in paragraph 1.1 above. If the existing subdivision and/or existing plat do not have an approved FINAL DRAINAGE PLAN, as outlined in paragraph 1.1 above, then the following requirements shall be met:
 - 1.2.1 The Developer, Builder, Contractor or their designated engineer shall prepare a LOT DRAINAGE PLAN showing the manner in which storm water will be accepted from adjacent properties, handled through the new building site, and received by adjacent downstream properties. This plan shall establish the drainage improvements to be implemented with the new building site, and shall include the information as outlined in the above sections 1.1.1 and 1.1.2b.
 - 1.2.2 If the LOT DRAINAGE PLAN calls for the drainage by back lot line drainage swales, the minimum allowable swale slope shall be 1.0%. Flatter slopes may

require the paving of the swales or the installation of underground pipe and inlets to maintain positive drainage.

- 1.2.3 The LOT DRAINAGE PLAN shall include existing street grades, grades for all storm sewers, open channels, and/or storm water detention facilities on or adjacent to the property.
- 1.2.4 The LOT DRAINAGE PLAN shall show all existing topographic features of the site including spot elevations and 1-foot interval contours. Existing underground, at grade, and overhead utilities shall be shown on the plan, together with any proposed changes in utility service.
- 1.2.5 The LOT DRAINAGE PLAN shall show all existing property boundary lines, including lot line distances and bearings to accurately show the property boundary relative to topographic features as outlined in section 1.2.4 above, including all building setbacks, easements and reserves. The subject plan shall include the legal description of the property being developed. The Developer, Builder, Contractor or their designated engineer are encouraged to obtain updated property title and abstract research to ensure all land title information, including easements or other encumbrances by separate instrument are shown on the subject plan.
- 1.3 A "PRELIMINARY DRAINAGE PLAN CHECK-LIST", developed as part of the Drainage Policy, shall be completed and submitted together with the PRELIMINARY DRAINAGE PLAN and a "FINAL DRAINAGE PLAN CHECK-LIST" together with the FINAL DRAINAGE PLAN (or together with the LOT DRAINAGE PLAN).
- 2. The following requirements shall be imposed on builders or general contractors:
- 2.1 Builders or general contractors shall be required to develop an individual LOT GRADING PLAN consistent with the approved subdivision's FINAL DRAINAGE PLAN or LOT DRAINAGE PLAN and to construct basement and foundation walls to comply with said plans. The objective of these requirements is to make sure that final grades can be set so that they will work in substantial compliance with the FINAL DRAINAGE PLAN or LOT DRAINAGE PLAN. Minor variances may be allowed providing there is no negative impact on drainage. Any variations to the approved FINAL DRAINAGE PLAN or LOT DRAINAGE PLAN shall be submitted to the City in writing for approval prior to and or together with the individual LOT GRADING PLAN. Following City approval, a revised FINAL DRAINAGE PLAN shall be submitted to the City.
- 2.2 Builders or general contractors are encouraged to verify top of foundation and wall elevations prior to initiating plumbing groundwork inspection to ensure compliance with the approved lot grading plan. It is further recommended that Builders or general contractors employ a licensed engineer or surveyor to perform site grade verifications and reference platted benchmark datum.
- 2.3 Builders or general contractors shall submit a SITE GRADE VERIFICATION CERTIFICATE. This document certifies that the final grades constructed on the lot comply with the FINAL DRAINAGE PLAN. For buildings constructed on lots with platted minimum building pad elevation requirements, or lots on or adjacent to designated FEMA flood zones; the SITE GRADE VERIFICATION CERTIFICATE shall be signed and sealed by a registered land surveyor or engineer licensed to practice in the State of Kansas. The SITE GRADE VERIFICATION

<u>CERTIFICATE</u> must be reviewed and approved by the City prior to obtaining a Certificate of <u>Occupancy.</u>

- 2.4 The following field elevations shall be obtained and included in the Builder's SITE GRADE VERIFICATION CERTIFICATE document:
 - 2.4.1 Top of building foundation and lowest opening elevations (e.g., walk-out or view-out elevations).
 - 2.4.2 Top of street curb elevations and or flow line elevations on or adjacent to the lot.
 - 2.4.3 Manhole and storm sewer inlet top elevations on or adjacent to the lot.
 - 2.4.4 Side and rear lot flow line elevations on or adjacent to the lot.
 - 2.4.5 Other site features, including landscaping, trees, special drainage structures, power poles and transformers, and other utility services.
- 2.5 Builders or general contractors shall install and maintain temporary erosion control devices at all areas disturbed by construction in accordance with Federal, State, and Local regulations, and as directed by the City or designated City Engineer. For sites that disturb one acre, or more, a KDHE Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) shall be provided. Two full-size hard copies of the approved NOI shall be submitted to the City prior to commencing any on-site construction activity. If requested by the City, the approved NOI and accompanying SWPPP and other supporting documentation shall be provided in electronic file format.
- 2.6 Erosion control devices shall be designed and constructed to ensure that on-site soils disturbed by construction activity are not discharged off-site and onto existing public or private properties. All areas disturbed that are proposed to be grass shall be protected from erosion until such time as a permanent stand of grass is established. Newly constructed detention ponds shall be further protected to ensure the hydraulic design capacity is not reduced.
- 2.7 The use of detention ponds or other approved storm water facilities for the mitigation of surface water runoff shall be located in a permanent drainage easement, drainage reserve or other appropriate dedication of land as approved by the City. These easements or reserves shall be dedicated in perpetuity by platting or separate instrument and shall indicate that the property owner(s) shall own, operate and maintain the detention pond facility.
- 2.8 Drainage easements and or reserves shall be made accessible from public street Right-of-Way or other publicly owned land. If needed, ingress/egress or other access easement(s) shall be dedicated to the City to allow City crews and equipment access to the drainage easement and or reserve.
- 2.9 Sanitary sewer manholes and other public infrastructure facilities located inside drainage easements or reserves shall be set a minimum of 12-inches above the calculated 100-year water surface elevation.
- 2.10 Private property fences, screening walls and other landscaping materials located inside or adjacent to drainage easements, reserves or other planned drainage ways shall be

constructed as to not impede or otherwise alter the planned flow of surface water runoff into, across or out of the property.

- 2.11 A post-construction AS-BUILT SURVEY of newly constructed or improved detention pond(s) shall be performed by, or on behalf of, the property owner(s) to confirm the design capacity of the detention pond and shall include sufficient information to demonstrate substantial conformance with the approved plan. The AS-BUILT SURVEY plan shall be stamped by the appropriate design professional as required to stamp the original plan or drainage computations, and/or a registered land surveyor or engineer licensed to practice in the State of Kansas. A completed AS-BUILT SURVEY must be reviewed and approved by the City prior to obtaining a Certificate of Occupancy.
- 3. The City's Storm Water Drainage policy is not intended to replace or modify the drainage policies, floodplain management requirements, or other storm water regulations, permits or regulatory requirements of the Federal Emergency Management Agency (FEMA), Kansas Department of Water Resources (DWR) and U.S. Army Corps of Engineers. Meeting the requirements of the City's Drainage Policy shall be in addition to any other Federal, State, or Local regulatory requirements, and are in addition to meeting the requirements of all local building codes and floodplain management policies.
- 4. This Storm Water Drainage Policy replaces the City's Resolution No. 2004-8, "A Resolution Declaring, Establishing and Defining a Storm Water Drainage Policy for the City of Mulvane, Kansas".

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PASSED, ADOPTED AND APPROVED by the governing body of the City of Mulvane, Kansas on November 2, 2015.

CITY OF MULVANE, KANSAS

Ву____

Shelly Steadman, Mayor

By <u>A.M. W. Panku</u> Debra M. Parker City Clerk



Submit completed forms to:

Zoning and Subdivision Administrator City of Mulvane - City Hall 211 N. Second Ave. Mulvane, KS 67110

The following checklist shall be completed and submitted with the Preliminary Drainage Plan(s) to the City of Mulvane.

Project Name:		Total Area of Project:	acres
Development Type:		Other:	
Property Owner: Mailing Address:			
Email Address:		and the second s	
Phone:			
Developer / Contractor: Contact:		And appropriate of the second	
Mailing Address:			
Email Address:			
Phone:			
Engineer:			
Gontact:			and the second s
Mailing Address:			
Email Address:			
Phone:			
	must be signed by the Engineer certifying th		
Onunty vocativomente and vocation	s comply will all applicable city ordinan ations. In addition, I certify that this cho nd that if I fail to address all applicable on-compliance.	ecklist has been completed ensuring a	iii iteilis noten ar
Engineer's Signature:		Date:	
Reviewed:	City Engineer	Date:	
	City Engineer		
Amanaradi		Date:	
Approved:	Zoning and Subdivision Administrator		

Directions:

- This checklist should be included with the Preliminary Drainage submittal. Incomplete Preliminary Drainage Plans, supporting drainage computations and checklists will not be accepted.
- Engineer (ENG) must fill out all boxes in the first column as "Y" (Yes Item Addressed and Included) or "N" (No Item Not Addressed). An explanation must be provided for all " N" answers.
- City Engineer/Plan Reviewer (CPR) shall check the second column as "X" (required) when item is not complete or not satisfactorily addressed by the Engineer.

	City of Mulvane Preliminary Drainage Plan Checklist			
ENR	CPR	Item	Plan Item Description	Explanation / Notes
	OI II		General Information	And the second of the second o
			Plans on 24"x36" sheets.	A Company of the Comp
			Plans include north arrow, scale and legend identifying all	
		1,2	features illustrated on drawings.	
		4.0	Plans include a vicinity map illustrating the project	
		1.3	boundaries.	
		1 /	Plans show public and private utilities, dimensioned	
		1.4	boundary lines, easements, reserves, regulated	
			waterways, floodplains, and floodways.	
		1 5	Plans show topography and 1-foot contours in North	
		1.0	American Vertical Datum 1988 (NAVD88)	
		1.6	All features, topography and text are legible with a	The state of the s
		110	drawing scale not less than 1"=100'.	
		1.7	Plans include Owner's, Developer's and Engineer's name,	
			address, and telephone number.	
		1.8	Kansas licensed professional engineer's seal, signature	
			and date are on all drainage plans, and on the cover of	
			drainage report.	
		1.9	Two (2) full size, scaled hard copies of "Preliminary	
			Drainage Plan" included with the "Preliminary Plat", and	
			one (1) hard copy of the drainage report.	
		2.0	Pre-Developed (Existing) Drainage Conditions	
			Plans are titled "Pre-Developed Drainage Conditions".	
			Plans Include items identified in Section 1.	
		2.3	Plans identify hydrologic soil groups, type of ground	
			cover and limits of the drainage basin(s).	
		2.4	Plans show location and type of impervious surfaces	
			correlating to the runoff coefficients and composite	
			coefficient computations.	
		2.5	Plans show and dimension the existing drainage path	
			correlating with the time of concentration computations.	
			Plans show direction of runoff with flow arrows.	
		2.7	Plans identify and describe existing outfall structures,	
			including structure type, size and condition.	
-		2.8	Plans include a summary of pre-developed runoff for 2,	
			10, 25, 100-year return frequencies with 24-hour storm	
			durations for each drainage basin outlet. Summary	
			includes curve number (or runoff coefficient), time of	
		0.0	concentration, and flow rate. Plans show how pre-developed stormwater runoff is	
		2.8	accepted from upstream properties, conveyed through	
			the site and received by downstream properties.	
	<u> </u>	3 0	Pre-developed Hydrologic Analysis	
_	T	3.0	Analysis includes composite SCS Curve Numbers (or	
		3,1	runoff coefficients) computations.	
		2 (2 Analysis includes pre-developed time of concentration	
		0.4	computations as appropriate for each drainage basin.	
		7,	3 Analysis includes pre-developed runoff computations for	
		0,	2, 10, 25, 100-year return frequencies for 24-hour storm	
	ļ	<u> </u>	durations.	

	City of Mulvane Preliminary Drainage Plan Checklist			
ENR	CPR	Item	Plan Item Description	Explanation / Notes
		4.0	Post-Developed (Proposed) Drainage Conditions	
		4.1	Plans are titled "Post-Developed Drainage Conditions".	
			Plans include items identified in Section 1.	
	<u> </u>		Plans show location and type of post-developed	
		7,0	impervious surfaces correlating to the runoff coefficients	
			and composite coefficient computations.	
			Plans show and dimension the proposed drainage path	
			correlating with the time of concentration computations.	
			Direction of surface runoff indicated with flow arrows.	
		4.5	Plans include a summary of post-developed runoff for 2,	
			10, 25, 100-year return frequencies with 24-hour storm	
			durations for each drainage basin outlet. Summary	
			includes curve number (or runoff coefficient), time of	
			concentration, and flow rate.	
		4.6	Plans identify and describes all proposed stormwater	
			drainage systems, including runoff rates, slope, length,	
		1	material, type, flow line elevations, and top elevation. Plans identify and describes proposed outfall structures.	
		4.7	Includes flow line elevation and discharge.	
		4.0	Plans identify any proposed water quality devices,	
		4.0	including detention ponds, rain gardens, infiltration	
			trenches, etc.	
		40	Plans include tables summarizing detention pond "Stage	
		7.0	vs. Storage" and Pre- and Post-Developed Runoff versus	
			proposed discharge, volume and water surface	
			elevations at all discharge/outfall locations on the site.	
				A Particular Control of the Control
		4.10	Plans illustrate how post-developed stormwater runoff is	
			accepted from upstream properties, conveyed through,	
			and received by downstream properties.	
		4.11	The plan clearly indicates stormwater runoff does not	
			Increase due to the proposed site improvements.	
		5.0	Post-Developed Hydrologic Analysis	
		5.1	Analysis provides post-developed composite SCS Curve	
			Numbers (or runoff coefficients) computations accounting for all hydrologic soil groups.	
ALLONG-W-11-11-7-		E 0	Computations for post-developed time of concentration.	
		5.2	Tournharations for host-neverboa arise of concountations	
		5.3	Computations include post-developed runoff	
		0.0	computations for 2, 10, 25, 100-year return frequencies	
			for 24-hour storm durations.	
		5.4	Analysis includes hydraulic computations for proposed	
			public stormwater drainage systems, including detention	
			ponds and any water quality devices.	
L		6.0	Drainage Report	
		6.1	Report addresses existing conditions, acceptance of "Off-	
			Site" runoff, treatment of "On-Site" runoff produced by	
			proposed development, conveyance of stormwater	
			through property, and impact to downstream properties.	

	City of Mulvane Preliminary Drainage Plan Checklist			
ENR	CPR	Item	Plan Item Description	Explanation / Notes
			Report identifies source of hydrologic soil groups, curve numbers (or runoff coefficients), and rainfall intensities.	
			Report defines methods used for determining time of concentration, and runoff.	
			Report defines methods used for analyzing proposed detention pond, stormwater drainage systems, and water quality devices.	
	End of City of Mulvane Preliminary Drainage Plan Checklist			



SITE GRADE VERIFICATION CERTIFICATE

SECTION A:	от при				
I certify that the	nsas complies w		of oved Lot Grad	ding Plan on fi	Subdivision of the City le with the City of
Contractor/Buile	der			Date	
Received By: _ F	Raymond Flemir	ng- Building Offici	al	Date	
SECTION B: 7 subject lot has a	To be completed a platted Minim	if the subject lot is um Building Pad	s adjacent to Elevation.	a FEMA Flo	od Hazard Zone, or if the
FEMA Flood H	azard Zone	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		<u>,</u>	
FEMA BFE (10	0-year water sui	face flood elevation	on)	(N	AV88)
Platted Minimu	m Building Pad	Elevation		(N	AV88)
Field Surveyed	Lowest Opening	g to Structure		(N.	AV88)
This certification elevation informa data available.	is to be signed an tion. I certify tha	nd sealed by a land s at the information on	aurveyor, engin This Certifica	neer, or archited te represents m	ct authorized by law to certify v best efforts to interpret the
Certifier's Name	e	License No.			
Title		Company Na	nme		
Address	City	State	Zip C	ode	
Signature					Place Seal Above
Date	Phone				

CHAPTER 720: STORMWATER MANAGEMENT SYSTEM

SECTION 720.010: CREATION OF STORMWATER MANAGEMENT SYSTEM

Pursuant to the provisions of Charter Ordinance No. 20, the City of Mulvane does hereby establish a stormwater management system and declares its intention to operate, construct, maintain and repair such stormwater management system. It is hereby found, determined and declared that the elements of the stormwater management system which provide for the collection, treatment and disposal of stormwater are of benefit and provide services to property within the incorporated City limits. The beneficiaries of the system include all real properties within the City which benefit by the provisions, operation and improvement of the system. Such benefits may include, but are not limited to, the provision of adequate systems of collection, conveyance, detention, treatment and release of stormwater, the reduction of hazard to property and life resulting from stormwater runoff, improvement in general health and welfare through reduction of undesirable stormwater conditions, and improvement to the water quality in the storm and surface water system and its receiving waters. (Ord. No. 1125 §3, 7-15-02)

SECTION 720.015: STORM DRAINAGE FEE

- A. There is hereby assessed against all property within the City that is connected to either the water or sanitary sewer systems, or both, of the City a monthly storm drainage fee. Such fee is based upon a determination of a comparable amount of impervious area for uses within each rate category as set forth hereinafter. The owner, occupant and any person who is responsible for the payment of water and/or sewer service to the property shall all be jointly and severally responsible for the payment of said fee. Persons responsible for the payment of water and/or sewer service to the property shall include the person responsible for payment for water provided to a master meter that is then distributed to multiple users, whether or not said users are located on the same property as the master meter. The fee shall be calculated as follows:
 - 1. All property devoted to a residential use shall be assessed the sum of one dollar (\$1.00) per month per non-commercial living unit. The term "residential" shall include single-family homes, mobile homes and mobile home parks, duplexes and apartment units. The term "residential" shall not include rooming and boarding houses, fraternities, sororities and similar facilities. The term "living unit" shall mean and include one (1) or more rooms in a residential building and subordinate support structures which are arranged, designed, used or intended for use by one (1) family and which includes cooking space and lawful sanitary facilities reserved for the occupants thereof.
 - 2. Property devoted to any use other than residential, as set forth above, shall be assessed a monthly fee based upon the number of square feet developed for that particular use, as follows:

Less than or equal to 500,000 square feet	\$	1.00
500,001 to 1,000,000 square feet	•	5.00
1,000,001 to 1,500,000 square feet		10.00
1,500,001 to 2,000,000 square feet		20.00

For all properties in excess of two million (2,000,000) square feet (forty-six $(46\pm)$ acres), the fee shall be fifty cents (\$0.50) multiplied by the number of acres in the property.

- 3. In determining the area of property developed for a particular use, the area measured shall include all property contiguous to the particular use and under the same ownership, except that portion of said property that is both unimproved and legally subject to being subdivided from that portion actually devoted to the primary use. In situations where property is used in common with more than one (1) use, the common area shall be included with each use in the same proportions as the area of each use bears to the area of the total of all uses. In situations where property is devoted to uses on more than one (1) level, the area of the property shall be proportionately divided among the levels.
- B. The revenue generated by this fee shall be set aside in a special fund to be used only for the acquisition, construction, reconstruction, maintenance and repair of stormwater system facilities and infrastructure appurtenant thereto, including the acquisition and related costs thereof, of real estate for such use. In addition, said fund may be used to pay fees to study and prepare documents related to such facilities and to make payments of principal and interest on bonds issued for such improvements. Nothing in this Chapter shall be deemed to limit or restrict the City's ability to use and obtain other sources or funds for the same or similar purposes.
- C. The monthly fees set forth above may be included as part of the monthly bill for water and sanitary sewer service but shall be identified separately on said billing, said fees shall be due at the same time as water charges are due and the failure to pay said fees shall be considered a failure to pay water charges and enforceable pursuant to Section 715.050 of this Code. If the monthly fees are not included as part of a water or sewer bill, they shall be billed at least annually. In addition, anytime water service is established or re-established to a property, all fees hereunder shall be paid current as of the date such water service is established or re-established.

D. Appeals.

- 1. Any person who disagrees with the calculation of their storm drainage fee or who believes that the actual amount of impervious area located upon their property justifies a reduction in the square footage of their property used to calculate the fee, in order to make their fee consistent with other uses with a similar amount of impervious area, may appeal the determination of their fee to the Building Inspector. The appeal shall be in writing. The Building Inspector shall thereafter hold an informal hearing. The Building Inspector, prior to such hearing, may request that the appealing party provide information concerning the basis of the appeal, including a land survey showing dwelling units, total property area and impervious area, as appropriate, if such information is deemed to be material by the Building Inspector. Based upon information provided, the Building Inspector shall make a determination of the storm drainage fee for such property. The Building Inspector shall notify parties in writing of his/her decision.
- 2. A person shall have the right to appeal the decision of the Building Inspector to a Board comprised of the City Administrator, or his/her designee, the Utilities Director and the Street Superintendent. Such appeal shall be made within fifteen (15) days of the date of the written decision of the Building Inspector. Such appeal shall be in writing and filed with the Building Inspector. A hearing on such appeal shall be held within thirty (30) days from the date of filing and the applicant shall be given seven (7) days' advance notice of the time and date of such hearing. Within seven (7) days after the conclusion of such hearing, the Board shall render a decision in writing that sets forth findings that support its decision. The decision of the Board shall be final and any further appeal of such decision shall be to the district court pursuant to K.S.A. 60-2101(d). (Ord. No. 1125 §4, 7-15-02)

(Ordinance Summary published in The Mulvane News on ______, 2016 and the full text of the Ordinance made available at www.mulvanekansas.com for a minimum of one (1) week from the date of publication.)

ORDINANCE	NO.
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AN ORDINANCE AMENDING AND RESTATING PARAGRAPH A OF TITLE VII, CHAPTER 720 STORMWATER MANAGEMENT SYSTEM, SECTION 720.015 ENTITLED STORM DRAINAGE FEE; PROVIDING FOR AN ADJUSTMENT IN THE DRAINAGE FEES FOR USERS OF THE STORMWATER MANAGEMENT SYSTEM FURNISHED BY THE CITY OF MULVANE, KANSAS.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF MULVANE, KANSAS, that Paragraph A of Title VII, Chapter 720, Section 720.015 of the Code of the City of Mulvane, Kansas is deleted and amended to read as follows:

SECTION 720.015: STORM DRAINAGE FEE

- A. There is hereby assessed against all property within the City that is connected to either the water or sanitary sewer systems, or both, of the City a monthly storm drainage fee. Such fee is based upon a determination of a comparable amount of impervious area for uses within each rate category as set forth hereinafter. The owner, occupant and any person who is responsible for the payment of water and/or sewer service to the property shall all be jointly and severally responsible for the payment of said fee. Persons responsible for the payment of water and/or sewer service to the property shall include the person responsible for payment for water provided to a master meter that is then distributed to multiple users, whether or not said users are located on the same property as the master meter. The fee shall be calculated as follows:
 - 1. All property devoted to a residential use shall be assessed the sum of One and 25/100 Dollars (\$1.25) per month per non-commercial living unit. The term "residential" shall include single-family homes, mobile homes and mobile home parks, duplexes and apartment units. The term "residential" shall not include rooming and boarding houses, fraternities, sororities and similar facilities. The term "living unit" shall mean and include one (1) or more rooms in a residential building and subordinate support structures which are arranged, designed, used or intended for use by one (1) family and which includes cooking space and lawful sanitary facilities reserved for the occupants thereof.
 - 2. Property devoted to any use other than residential, as set forth above, shall be assessed a monthly fee based upon the number of square feet developed for that particular use, as follows:

Less than or equal to 500,000 square feet	\$ 1.25
500,001 to 1,000,000 square feet	7.50
1,000,001 to 1,500,000 square feet	15.00
1,500,001 to 2,000,000 square feet	30.00

For all properties in excess of two million (2,000,000) square feet (forty-six (46±) acres), the fee shall be Two Dollars (\$2.00) multiplied by the number of acres in the property.

3. In determining the area of property developed for a particular use, the area measured shall include all property contiguous to the particular use and under the same ownership, except that portion of said property that is both unimproved and legally subject to being subdivided from that portion actually devoted to the primary use. In situations where property is used in common with more than one (1) use, the common area shall be included with each use in the same proportions as the area of each use bears to the area of the total of all uses. In situations where property is devoted to uses on more than one (1) level, the area of the property shall be proportionately divided among the levels.

Paragraphs B, C and D of said Section 720.015 shall remain unchanged.

This Ordinance shall take effect on and be in full force on January 1, 2017, after its adoption by the governing body of the City, approval by the Mayor and either (a) publication once in the official newspaper of the City, or (b) publication of a summary hereof certified as legally accurate and sufficient by the City Attorney.

[Remainder of Page Intentionally Left Blank]

PASSED, ADOPTED AND APPROVED by the governing body of the City of Mulvane, Sedgwick and Sumner Counties, Kansas this 21st day of November, 2016.

CITY OF MULVANE, KANSAS

[seal]		
	By Shelly Steadman, Mayor	
- I mrora cro	y	
ATTEST:		
Ву		
Debra M. Parker, City Clerk		

Kansas Permit No.: M-AR64-SU01

Federal Permit No.: KSR410024

KANSAS WATER POLLUTION CONTROL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT AND AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to the provisions of Kansas Statutes Annotated 65-164 and 65-165, the Federal Water Pollution Control Act as amended, 33 U.S.C. 1251 et seg., the "Act",

Permittee:

Mulvane, City of

Permittee's Address: 211 North 2nd Street

Mulvane, KS 67110

Drainage Basin:

Lower Arkansas River

County:

Sedgwick

is hereby authorized to discharge stormwater from the municipal separate storm sewer system (MS4) as described herein in accordance with the limitations, conditions and requirements set forth in this permit.

This permit is effective December 1, 2019, supersedes the previously issued MS4 general permit M-AR64-SU01 and expires November 30, 2024.

PERMIT AREA AND AUTHORIZED DISCHARGES

This permit covers all areas within the permittee's MS4 jurisdiction which are also located in the urbanized area as defined by the 2010 U.S. Census (the Permit Area). The Permit Area may change based upon areas incorporated into or removed from the permittee's jurisdictional area during the term of this permit.

This permit authorizes the discharge of all existing or new stormwater point source discharges from the Municipal Separate Storm Sewer System (MS4) located within the Permit Area. New stormwater discharges are those which are created and/or incorporated into the permittee's MS4 during the term of this permit.

Lee a. noma mo

Secretary, Kansas Department of Health and Environment

November 27, 2019

Date

Kansas Permit No.: M-AR64-SU01 Page 2 of 57

PART I. STORMWATER MANAGEMENT PROGRAM (SMP) DOCUMENT REQUIREMENTS

A. Current Stormwater Management Program

The permittee shall continue to implement and enforce the current Stormwater Management Program (SMP), as documented in the SMP document, until an updated SMP is implemented. Revised or modified surface water monitoring may be implemented in 2019 as allowed and if so required by this permit.

Any updated SMP shall be designed to:

- 1. Reduce the discharge of pollutants from the municipal separate storm sewer system (MS4) to the Maximum Extent Practicable (MEP),
- 2. Continue to implement the six minimum control measures as listed in PART I Section C_{\star}
- 3. Satisfy the requirements of this permit, the Clean Water Act and Kansas surface water quality statutes and regulations.

Implementation of Best Management Practices (BMPs) consistent with the provisions of the SMP document and this permit constitutes compliance with the standard of reducing pollutants to the Maximum Extent Practicable.

B. Updated Stormwater Management Program document

The SMP shall be updated and submitted to KDHE between January 1 and February 28 of 2021 (submitted with the Annual Report and the updated SMP must be effective in 2021). As this permit imposes additional requirements for implementation of BMPs and/or surface water monitoring [see PART II. Total Maximum Daily Load (TMDL) Best Management Practices and Surface Water Monitoring] beyond what the previous permit imposed, the current SMP shall be modified with the SMP document updated to include the additional requirements imposed by this permit. Some specific requirements for updating the SMP document are addressed in PART I Section D. "Total Maximum Daily Load (TMDL) Regulated Pollutants." Additionally, to comply with new EPA regulations [National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System General Permit Remand Rule (Remand Rule)], as finalized and effective January 9, 2017, this permit must include requirements in clear, specific, and measurable terms. Tables of BMPs are listed along with point values, and the permittee must implement sufficient listed BMPs to achieve minimum point requirements for each year beginning in 2021. The Remand Rule was published on December 9, 2016 in the Federal Register, Vol. 81, No. 237 beginning on page 89320.

This rule clarifies that terms and conditions must be expressed in terms which are "clear, specific, and measurable." The permit requirements must be enforceable and must provide a set of performance expectations and schedules readily understood by the permittee, the public, and the permitting authority alike. To provide as much flexibility to the permittee in implementing their stormwater management program in compliance with this permit and the Remand Rule, KDHE has elected to establish a point system and a list of various BMPs, tasks, or other conditions with associated point values to be tallied and demonstrate compliance with the total point requirement for each of the Six Minimum Control Measures and TMDL BMPs when required.

Modification of the SMP is permitted as the need arises. Modifications can be accomplished with any of the following methods:

- 1. Normally the SMP document is updated near the end of the calendar year and submitted to KDHE for review along with the annual report which is due after the first of the calendar year but before the 28th of February. In this case the permittee can begin implementation of the new SMP as soon as they have submitted the SMP to KDHE. The permittee is required to implement the SMP, which was most recently submitted to KDHE along with the annual report, throughout the entire year and may continue to implement the updated SMP until subsequently modified. The updated SMP as submitted must be approved by KDHE. If KDHE finds the SMP is not approvable, requirements for modification and resubmittal will be addressed to the permittee.
- 2. If it becomes necessary to modify the SMP at some time other than when the annual report is submitted to KDHE, the permittee may make the modifications to the SMP document and submit the SMP document to KDHE for approval. The permittee shall not begin implementation of the modified SMP until after KDHE has provided approval. KDHE may provide full approval of the modified SMP, or may provide conditional approval, may require revision of the modified SMP document and resubmission for subsequent review or may elect to not approve the modified SMP.
- 3. KDHE may require the permittee modify the SMP at any time, requirements for modification and resubmittal will be addressed to the permittee

C. Six Minimum Control Measures

The Permittee shall continue to review, update and implement BMPs with measurable goals for each of the six minimum control measures. The six minimum control measures and requirements are as follows:

1. Public Education and Outreach

The permittee shall continue to 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.

a. The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 4 points total on an annual basis for each calendar year 2021 and 2022. The point total requirement increases to 7 points for each calendar year beginning in 2023. The following table lists various BMPs, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year.

In cases where the permittee is already implementing a BMP which qualifies for points, they may continue implementation of the BMP and earn the listed points as allowed for the first year of implementation under this permit as well as subsequent years.

Multiple BMPs involve holding public hearings or public forums; a single public hearing or forum can be held which addresses multiple topics and points claimed for all of the multiple BMPs implemented.

In addition to implementing a Public Education and Outreach program as required above, the permittee must implement sufficient listed BMPs in the table below to qualify for the required number of points.

BMP Summary	Measurable Goal	Implementation Time Schedule etc.	Points
Lbmp P Ed & O - 01			
Maintain a stormwater webpage for the permittee.	Maintain the webpage with up to date information with all links effective and valid information. Check all links and update website as necessary on a minimum monthly basis. Document monthly checks in log book and indicate changes with logged summaries.	The webpage must be available throughout the year once it is posted and initially made available. In the initial year posted it must be available for a minimum of 3 months to qualify for the points. In subsequent calendar years the points may be claimed if the webpage has been maintained throughout the twelve months.	3 points may be claimed in the first year implemented, and 2 points may be claimed for each successive year the webpage is maintained available.
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.	Either flyers, brochures, catalog mailings, handouts, or e-mails are to be distributed in at least two separate batches, ideally in separate seasons (either winter, spring, summer or fall). However, the required number of flyers, brochures, or e-mails must be distributed in a single calendar year and the points can be claimed for that year.	2 points may be claimed in a year in which the required number of flyers, brochures, catalog mailings, handouts, or e-mails are distributed.
Lbmp P Ed & O - 03 Provide either training or educational materials to permittee identified businesses at high risk of contributing to stormwater pollution.	Training or educational materials must be provided, within the year, to at least five separate businesses	The required amount of training or distribution of educational materials must occur within the	2 points may be claimed in any year in which the required amount of training or distribution of educational

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. Lbmp P Ed & O - 04	if the population of the municipality is greater than 10,000, or three businesses if the population of the municipality is between 3,000 and 9,999, or two separate businesses if the population of the municipality is less than 3,000. There is no requirement to provide training to business in separate business categories, although it is allowed.	year for which points are claimed.	material occurs.
Apply notification, placard, covers/hatches with message, or stencil, on stormwater inlets to provide a message similar to "No Dumping - Drains to River"	Apply this notification on at least 10% of all known stormwater inlets in the MS4.	The required number of placards, covers/hatches with message, or stencils must be placed within the year for which points are claimed. Alternately, points may be claimed in any subsequent year when an additional 5% of all known stormwater inlets in the MS4 bear the placard, covers/hatches with message, or stencil.	2 points may be claimed in years when the required number of inlets (10%) receive placards, covers/hatches with message, or stencils or in subsequent years when an additional 5% of all known stormwater inlets in the MS4 bear the placard, covers/hatches with message, or stencil.
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.	Months for which the posting occurs must be within the year for which points are claimed. No "carryover" of months from one year to the next.	1 point may be claimed for posting each year (minimum of at least six months).
Provide either a stormwater telephone hotline or web based or	Respond to all reported complaints within 10 days and,	The hotline/reporting system must be	2 points may be claimed for each year the hotline / reporting system is

text message method for public reporting of illicit discharges.

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.

available to the public for at least six months in the year to claim the points.

maintained and available. An additional point may be claimed for each illicit discharge resolved in the year up to a limit of 2 additional points per year. One point allowed per illicit discharge resolved.

Lbmp P Ed & O - 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:

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.

All the requirements for sending educational material to the various groups must occur in a single year to qualify for the points in that year.

3 points may
be claimed
each year this
BMP is
implemented in
compliance
with the
specified
requirements.

> Brochures > Flyers > E-mails > Press release Lbmp P Ed & O - 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. The training may be limited to the individual campus (local school buildings associated with a single address). This training does not need to be provided to the entire school system, e.g., USD. Alternately, funding stormwater BMP installations and/or field trips at the school campus will qualify.	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. Alternately, the funding of BMPs at the school campus may provide for any of the following: Installation of BMPs at the school 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	All of the required students (5% minimum) in K-12 at the selected campus must be educated in a single year to qualify for the points in that year. Alternately, stormwater BMPs may be funded at a school campus where students may participate in installation or observe operation of the BMPs. Any of the items listed under measurable goals qualify.	3 points may be claimed each year this BMP is implemented in compliance with the specified requirements (provide education and/or fund stormwater BMP installations at the school campus).
1. Operate an information booth at a large public event, (such as a sports event, fair, or music festival) where at least an estimated 1,000 or more individuals attend. 2. Alternately, operate an information booth	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.	2 points may be claimed each year this BMP is implemented in compliance with the specified requirements for alternative 1. (1,000 or more attendees) or alternative 2. (3,000 attendees).

at multiple public events, (such as a sports event, fair, or music festival) where a cumulative estimated total of 3,000 or more individuals attend. 3. And finally, a single point can be claimed for operating an information both at a public event where at least an estimated 200 or more individuals attend.			Finally, 1 point may be claimed each year this BMP is implemented in compliance with the specified requirements for alternative 3(200 attendees).
Lbmp P Ed & O - 10			
Provide either training or educational materials to lawn/turf care service entities addressing best management practices they can employ to minimize or avoid adverse stormwater impacts due to their operations.	Training or educational materials must be provided, within the year, to at least five lawn/turf care service entities or at least 20% of the lawn care service entities located in the municipality whichever is least.	The required amount of training or distribution of educational materials must occur within the year for which points are claimed.	2 points may be claimed in any year in which the required amount of training or distribution of educational material occurs.
Lbmp P Ed & O - 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.	Credit can be claimed for any year in which signs are installed and in place for greater than six months or in cases where signs have previously been installed in any year where the signs remain posted for the full year.	1 point may be claimed for the year when signs are posted for six months or more, or 1 point may be claimed in subsequent years where the signs remain posted throughout the year.
Lbmp P Ed & O - 12 Create a stormwater information brochure to provide to the public at	Have multiple copies of the brochure available during at least 10 meetings or	The brochures shall address stormwater topics of concern.	1 point may be claimed in any year the brochures are made available to the public at meetings

public meetings and/or hearings	hearings open to the public during the year. Provide the brochures to the public at no charge.		and/or hearings as required.
Lbmp P Ed & O - 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.	The road right-of- way shall be cleaned at least once per year. Points may be claimed for any year in which cleaning has occurred.	1 point may be claimed in any year a two-mile road segment is cleaned or alternately multiple spots are cleaned which equate to or exceed a two-mile road clean-up.
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.	The media campaign shall be run within the year for which points are claimed. A new media campaign shall be run for each year points are claimed.	2 points may be claimed in a year in which the media campaign meeting the minimum exposure rate is conducted.
Lbmp P Ed & O - 15 Develop or participate in an ongoing social media program on pertinent stormwater public education topics.	Publish or share social media content on the permittee's social media accounts at least six times per year. Record post topic, the number of impressions and engagement for each post. Include link to permittee's	The required number of social media posts must occur within the year for which the posts are claimed.	2 points can be claimed in a year which the required number of content is shared.

Lbmp P Ed & O - 16	stormwater education website.		
Operate an information booth at a public event or hold a public event which is intended to improve public understanding of issues related to water quality. The event may be associated with any environmental related issue including but not limited to an environmental expo, earth day, world wetlands day, international day of action for rivers, world fish migration day, world biodiversity day, world oceans day, world cleanup day, world water monitoring day, world rivers day, and America recycles day.	At least an estimated 800 or more individuals must attend the event.	The booth must be staffed at least 50% of the time the event is open to the public.	2 points may be claimed each year this BMP is implemented in compliance with the specified requirements. Municipal staff from multiple permittees may staff the both and claim points, for their municipality, for this BMP if their staff meet the 50% of the time staffing requirement.
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.	The street right- of-way shall be cleaned at least once per year. Points may be claimed for any year in which cleaning has occurred.	1 point may be claimed in any year at least two miles of street right-of-way is cleaned by volunteers.

- b. Documentation of compliance with the goal and implementation time schedule must be maintained on file to claim the associated points. Permittee is responsible for implementing adequate BMPs to comply with the Public Education and Outreach requirements of this permit and be able to claim at least the required number of points in the calendar years as specified above. Extent of compliance, i.e., equal or exceed the required annual point total or failure to reach the required annual point total, must be reported in the Annual Report.
- c. The permittee is not limited to implementation of the BMPs listed in the above table. Several other BMPs may be implemented, however, only implementation of the BMPs listed in the table may be documented and counted toward the required annual point total.

Kansas Permit No.: M-AR64-SU01
Page 11 of 57

2. Public Involvement/Participation

The permittee shall continue to implement a public involvement and participation program to solicit public comments and recommendations regarding the BMPs 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.

a. The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 3 points total on an annual basis for each calendar year 2021 and 2022. The point total requirement increases to 6 points for each calendar year beginning in 2023. The following table lists various BMPs, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year.

In cases where the permittee is already implementing a BMP which qualifies for points, they may continue implementation of the BMP and earn the listed points as allowed for the first year of implementation under this permit as well as subsequent years.

Multiple BMPs involve holding public hearings or public forums; a single public hearing or public forums can be held which addresses multiple topics and points claimed for all of the multiple BMPs implemented.

In addition to implementing a Public Involvement/Participation program as required above, the permittee must implement sufficient listed BMPs in the table below to qualify for the required number of points.

BMP Summary	Measurable Goal	Implementation Time Schedule etc.	Points
Lbmp P I/P - 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.	Retain copies of the notices to public, invitations to attend, attendance sign-in sheets, and minutes. Points may be claimed in year which hearing is held.	2 points may be claimed each year this BMP is implemented in compliance with the specified requirements.
Lbmp P I/P - 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.	The citizens advisory committee must hold at least two meetings in the year which points are claimed.	3 points may be claimed each year this BMP is implemented in compliance with the specified requirements.

Lbmp P I/P - 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. Alternately, for municipalities with less than 500 population clean an area which must be equal to or greater than a quarter of an acre or alternately at least 100 feet of streambank.	At least one such clean-up activity must occur in the year for which points are claimed.	3 points may be claimed each year this BMP is implemented in compliance with the specified requirements.
Lbmp P I/P - 04		To response Ello Boscolos — Ello despeny dense en di america de pada de Solo.	Medical Angle (1997年)
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 at least once annually.	At least one such training activity or distribution of training materials must be provided to the group in the year for which points are claimed.	2 points may be claimed each year this BMP is implemented in compliance with the specified requirements.
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.	At least two events in compliance with the stated goals must be conducted within the year for which points are claimed.	3 points may be claimed each year this BMP is implemented in compliance with the specified requirements.
Establish a program to encourage residents to install stormwater	Encouragement can include funding, grants, and other	One or more of the listed methods of encouragement must	2 points may be claimed each year this BMP is implemented in compliance

treatment best management practices on their property.	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.	be implemented in the year for which points are claimed.	with the specified requirements, with the addition of 1 additional point (for a total of 3 points in the year) each year that participation increases 10% from the previous year.
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. Lbmp P I/P - 08	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.	In the year the Measurable Goal requirement is implemented the point may be claimed and for each year thereafter.	1 point may be claimed for the year in which the Measurable Goal requirements are enacted, and 1 points may be claimed for each subsequent year the Measurable Goal requirements remain in effect.
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.	The donation must be made in the year the points are claimed.	2 points may be claimed each year this BMP goal is achieved.
Lbmp P I/P - 09 Distribute stormwater educational materials to the public within this permit area. Alternately, the permittee may provide	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	For educational materials distributed or provided to nearby municipalities each year points may be claimed	1 point may be claimed per topic addressed in compliance with the requirements, up to a total of 5 points/topics.

stormwater educational materials, e.g. brochures, flyers, or pamphlets. These materials may address various stormwater topics. For this alternative these materials may be provided to other nearby municipalities for distribution to the public. The nearby municipalities must be within 30 miles from this permit area.	stormwater including but not limited to clean-up guidance following flooding, discouraging littering, explaining and discouraging illicit discharges to the storm sewers, guidance on constructed BMPs for home owners (rain gardens, rain barrels, etc.) guidance on area household hazardous waste receiving centers, and guidance on area recycling programs.	when materials are provided with equal or greater value as required for each separate topic.	
Establish a program to employ (either paid or unpaid) high school or college age environmental interns in an environmental related program including but not limited to either the wastewater utility, stormwater utility, potable water utility or solid waste utility.	The intern must receive the same environmental related training a new full-time employee would receive, within the first six months of the full-time employee's employment, during their internship.	The internship must last at least 8 weeks in the year when points are claimed.	2 points may be claimed each year this BMP goal is achieved per intern.

- b. Documentation of compliance with the goal and implementation time schedule must be maintained on file to claim the associated points. Permittee is responsible for implementing adequate BMPs to comply with the Public Involvement/Participation requirements of this permit and be able to claim at least the required number of points in the calendar years as specified above. Extent of compliance, i.e., equal or exceed the required annual point total or failure to reach the required annual point total, must be reported in the Annual Report.
- c. The permittee is not limited to implementation of the BMPs listed in the above table. Several other BMPs may be implemented, however, only implementation of the BMPs listed in the table may be documented and counted toward the required annual point total.

Kansas Permit No.: M-AR64-SU01
Page 15 of 57

3. Illicit Discharge Detection and Elimination

The permittee shall:

- a. Continue to implement and enforce a program to detect and eliminate illicit discharges into the MS4.
- b. Maintain 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 receiving discharges from those outfalls. A copy of the map shall be submitted to KDHE with the annual report if requested by KDHE. This map may be submitted as a PDF file(s) on a compact disk (CD) or a digital versatile disk (DVD).
- c. Implement and enforce an ordinance, a resolution, or other enforceable requirement, if the permittee has the authority to do so, to prohibit non-stormwater discharges into the storm sewer system and implement appropriate enforcement procedures and actions. A copy of the ordinance or resolution shall be submitted to KDHE with the annual report if requested by KDHE.
- d. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.
- e. Develop and implement a plan to detect/inspect for and address prohibited non-stormwater discharges, including illegal dumping, to the storm sewer system. The plan must include efforts to identify and evaluate dry weather MS4 discharges to detect and eliminate any associated illicit discharge. Unless identified by either the permittee or KDHE as a significant source of pollutants to waters of the state, several types of non-stormwater flow are not normally prohibited from entering the Municipal Separate Storm Sewer System:

Discharges which are not necessarily prohibited include:

- I. Water line flushing
- II. Diverted stream flows
- III. Rising ground waters
- IV. Uncontaminated groundwater infiltration as defined under 40 CFR
 35.2005(20) to separate storm sewers
- V. Uncontaminated pumped groundwater
- VI. Contaminated groundwater if authorized by KDHE and approved by the municipality
- VII. Discharges from potable water sources
- VIII. Foundation drains
 - IX. Air conditioning condensation
 - X. Irrigation waters
 - XI. Springs
- XII. Water from crawl space pumps

- XIII. Footing drains
- XIV. Lawn watering
- XV. Individual residential car washing
- XVI. Occasional not-for-profit car wash activities
- XVII. Flows from riparian habitats and wetlands
- XVIII. Dechlorinated swimming pool discharges excluding filter backwash
 - XIX. Street wash water (excluding street sweepings which have been removed from the street)
 - XX. Discharges or flows from firefighting activities
 - XXI. Heat pump discharge waters (residential only)
- XXII. Treated wastewater meeting requirements of an NPDES permit
- XXIII. Sump pump drains
- XXIV. Other discharges determined not to be a significant source of pollutants to waters of the state, a public health hazard or a nuisance.
- f. The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 5 points total on an annual basis for calendar years 2021 and 2022. The point total requirement increases to 7 points for each calendar year beginning in 2023. The following table lists various BMPs, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year.

In cases where the permittee is already implementing a BMP which qualifies for points, they may continue implementation of the BMP and earn the listed points as allowed for the first year of implementation under this permit as well as subsequent years.

Multiple BMPs involve holding public hearings or public forums; a single public hearing or public forums can be held which addresses multiple topics and points claimed for all of the multiple BMPs implemented.

In addition to implementing an Illicit Discharge Detection and Elimination program as required above, the permittee must implement sufficient listed BMPs in the table below to qualify for the required number of points.

BMP Summary	Measurable Goal	Implementation Time Schedule	Points
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. Lbmp I D D & E - 02	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.	Retain copies of the notices to public, invitations to attend, attendance sign-in sheets, and minutes. Hearing must be held in year for which points are claimed.	2 points may be claimed for any year a hearing/forum is held.
Implement a program to abandon failed or failing residential or commercial on-site wastewater treatment facilities. These onsite 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.	For each failed or failing on-site system which is abandoned, and the wastewater is redirected to the municipal wastewater treatment system, the permittee may claim points in the year the system is initially connected into the municipal wastewater treatment system. Alternately, for systems which are upgraded or replaced to restore adequate performance a lower number of points may be claimed in the year the upgrade or replacement is completed.	3 points may be claimed for each abandoned system in the year it is abandoned, alternately for systems which are upgraded or replaced as per the requirements a total of 2 points may be claimed in the year upgrade or replacement is completed.
Lbmp I D D & E - 03 Develop a spill response plan and, if appropriate, coordinate emergency	The plan shall include, at a minimum, explanation of appropriate spill	The plan may be implemented in any year and points claimed for the	3 points may be claimed in the year initially implemented, and

response with other agencies or organizations.	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.	initial implementation or for each year the plan remains effective.	2 points may be claimed for each successive year the plan remains effective.
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 nonstormwater 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 evaluation of a group of at least 5% of the known MS4 outfalls may be completed all in one year or may occur in up to two consecutive years and a point can be claimed. The larger number of points may be claimed only for the year in which the illicit discharge(s), associated with this group of evaluated outfalls is/are eliminated.	1 point may be claimed in the year when a total of at least 5% of the known MS4 outfalls are finally inspected, and 2 additional points may be claimed in which the illicit discharge(s), associated with this group of evaluated outfalls is/are eliminated.
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	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	The distribution of these various documents, letter (or flier) and/or e-mail along with the press release, shall all occur in the same month. Permittee may claim these points in the year these documents are distributed.	2 points

municipal website where applicable ordinances and disposal guidance are posted. Lbmp I D D & E - 06	where applicable ordinances and disposal guidance are posted.		
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 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.	The inspection process can occur in a single calendar year or may be conducted over a period extending from one year into the succeeding year. Points may be claimed in the year when the televised and/or visual inspection of this portion of the MS4 system (either 2% or 10%) is completed.	3 points may be claimed for inspection of 2% of the MS4 system, alternately if 10% of the MS4 system is inspected 5 points may be claimed.
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. Retain this documentation on file.	The property owners or residents located within the permit area must be able to dispose of waste accepted by the HHWCP throughout a calendar year. Points may be claimed for any such year.	3 points may be claimed for any year in which this BMP was implemented in compliance with the requirements.
Implement a program to increase the reliability of sanitary sewer pump stations above the minimum standard design requirements.	A pump station shall be upgraded to include the following: A dedicated onsite standby generator shall be installed (with automatic transfer switch) for use	In the year all improvements, as listed under measurable goals, are installed and ready for operation the points may be initially claimed and in subsequent years these improvements remain	5 points may be claimed (for each pump station upgraded in compliance with this BMP) in the first year the improvements, as listed under measurable

when main line power fails.

A dialer
system, or
telemetry
system, or
connection to a
SCADA system
shall be
installed to
provide real
time or nearly
real time
notification of

failures at the

pump station

potentially

sanitary sewer overflow.

which can

lead to

> 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.

> The pump station shall be modified to facilitate the connection of the trailer mounted pump discharge to the force main and convenient

operational points may be claimed.

goals, are installed and ready for operation, 4 points may be claimed for (for each pump station upgraded in compliance with this BMP) each successive year the improvements, as listed under measurable goals, remain operational.

	installation of the suction line from the trailer mounted pump into the wet well.		
Lbmp I D D & E - 09 Provide a contribution	The contributions may	The total value of	
to area recycle programs or programs	be made to programs which take tires,	donation (either in-kind work,	
(such as household hazardous waste disposal facilities,	automotive fluids, batteries, or other wastes for which there	materials, supplies or cash) in a minimum amount of	
e-cycle facilities, paper shred	is any documentation such wastes have been	\$500 must be made in the year points	
facilities, pharmaceutical	discarded as addressed under the BMP summary.	are claimed.	
disposal facilities etc.) designed to	The contributions must total a minimum of	Alternatively, for municipalities with	
properly dispose of types of waste or	\$500 in the year (\$100 in the year for	less than 500 population the	2 points may be claimed
materials which have previously been discarded to or	alternative lower population municipalities) which	total value of donation in a minimum amount of	each year this BMP goal is achieved.
adjacent to either the MS4, streams, or lakes	points are claimed. The contributions can	\$100 must be made in the year points	is achieved.
within or adjacent to the permittee's permit	be monetary or can be in the form of goods	are claimed.	
area. The area program must be within	and/or services with an agreed specified		
30 miles from this permit area.	value. Contributions may be made to area household hazardous		
	waste programs, private recycle/reuse		
	facilities or civic/volunteer		
	organizations assisting in recycle.		
Lbmp I D D & E - 10	Generate a summary	The increation	3 points may be claimed for
Inspect, 5% of the MS4 system Stormwater	report of the	The inspection process can occur	inspection of
inlets and/or outfalls within the permit area	inspection including the number of inlets and/or outfalls	in a single calendar year or may be conducted	2% of the MS4 system in the
all conducted within a 12-month period to aid	visually inspected, condition comments,	over a period extending from one	year the required percentage of
in identifying illicit discharges. If in a 12-month period 15% of	illicit discharges identified and the results of efforts to	year into the succeeding year. Points may be	inlets and/or outfalls are finally
the MS4 system inlets and/or outfalls are inspected a higher	eliminate illicit discharges, e.g., discharge line	claimed in the year when the televised and/or visual	inspected, alternately if 15% of the
point value may be	disconnected and	inspection of this	MS4 system is

claimed in the year	redirected to the	portion of the MS4	inspected 5
the required	sanitary sewer or	system (either 2%	points may be
percentage of	discharge practice	or 15%) is	claimed.
inspections are	terminated.	completed.	
completed.		_	

- g. Documentation of compliance with the goal and implementation time schedule must be maintained on file to claim the associated points. Permittee is responsible for implementing adequate BMPs to comply with the Illicit Discharge Detection and Elimination requirements of this permit and be able to claim at least the required number of points in the calendar years as specified above. Extent of compliance, i.e., equal or exceed the required annual point total or failure to reach the required annual point total, must be reported in the Annual Report.
- h. The permittee is not limited to implementation of the BMPs listed in the above table. Several other BMPs may be implemented, however, only implementation of the BMPs listed in the table may be documented and counted toward the required annual point total.

4. Construction Site Stormwater Runoff Control

The permittee shall continue to maintain 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 pollutant discharge associated with stormwater 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, at a minimum, all the following:

- a. Maintain and enforce an ordinance, a resolution, or other enforceable requirement, if the permittee has the authority to do so, to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State and local law. A copy of the ordinance or resolution shall be submitted to KDHE with the annual report if requested by KDHE.
- b. Maintain requirements for construction site owners or operators to implement appropriate erosion and sediment control best management practices.
- c. Maintain 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. Maintain procedures for site plan review which incorporate consideration of potential water quality impacts.
- e. Maintain procedures for receipt and consideration of information submitted by the public.
- f. Maintain procedures for site inspection and enforcement of control measures.
- g. The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 4 points total on an annual basis for each calendar year 2021 and 2022. The point total requirement increases to 6 points for each calendar year beginning in 2023. The following table lists various BMPs, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year.

In cases where the permittee is already implementing a BMP which qualifies for points, they may continue implementation of the BMP and earn the listed points as allowed for the first year of implementation under this permit as well as subsequent years.

Multiple BMPs involve holding public hearings; a single public hearing can be held which addresses multiple topics and points claimed for all of the multiple BMPs implemented.

In addition to implementing a Construction Site Stormwater Runoff Control program as required above, the permittee must implement sufficient listed BMPs in the table below to qualify for the required number of points.

BMP Summary	Measurable Goal	Implementation Time Schedule etc.	Points
Lbmp C S S R C - 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. Lbmp C S S R C - 02	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.	Points may be claimed in the year the ordinance/enforceab le requirement first becomes effective, and for each full calendar year thereafter for which the ordinance/enforceab le requirement remains effective.	3 points may be claimed in the year the ordinance initially becomes effective, and 2 points may be claimed for each successive year thereafter for which the ordinance remains effective.
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.	Points may be claimed for the year which the manual is initially adopted and implemented, and a reduced number of points may be claimed for subsequent years in which the manual remains implemented.	3 points may be claimed in the year the manual is initially implemented, and 2 points may be claimed for each successive year the manual remains effective.

Lbmp C S S R C - 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. Lbmp C S S R C - 04	This training class must address all local requirements for a SWP2 Plan, requirements for implementation of BMPs and address the requirements for permits.	Points may be claimed for the year in which the training class is held.	3 points
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.	Points may be claimed in the year the review process is initially developed and implemented. Also points may be claimed in each subsequent year the review process continues to be implemented.	3 points may be claimed in the year the review process is initially developed and implemented, 2 points may be claimed for each successive year the review process continues to be implemented.
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:	Enact ordinance or other effective means to achieve control of wastes at construction sites.	Points may be claimed in the year of enactment. Also points may be claimed in each subsequent year the method of effective control of construction site waste remains in effect.	3 points may be claimed in the year of enactment, 2 points may be claimed for each successive year the method of effective control of construction site waste remains in effect.

<pre> > discarded building materials > concrete > Truck washout > chemicals, > litter, and > sanitary waste Lbmp C S S R C - 06 </pre>			
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.	Development of the written procedures and the Inspection Guide can occur in any year. Initial implementation can allow points to be claimed in that year and continued implementation can allow points to be claimed in subsequent years.	3 points may be claimed in the year of initial development, 2 points may be claimed for each successive year the written procedures and inspection guide continue to be utilized.
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.	A point can be claimed in the initial year the software tracking system is implemented and each year thereafter it is utilized.	1 point may be claimed for any year the software is initially utilized, and 1 point may be claimed for each successive year the software is utilized.

- h. Documentation of compliance with the goal and implementation time schedule must be maintained on file to claim the associated points. Permittee is responsible for implementing adequate BMPs to comply with the Construction Site Stormwater Runoff Control requirements of this permit and be able to claim at least the required number of points in the calendar years as specified above. Extent of compliance, i.e., equal or exceed the required annual point total or failure to reach the required annual point total, must be reported in the Annual Report.
- i. The permittee is not limited to implementation of the BMPs listed in the above table. Several other BMPs may be implemented, however, only implementation of the BMPs listed in the table may be documented and counted toward the required annual point total.

5. $\underline{\text{Post-Construction Stormwater Management in New Development and}}$ $\underline{\text{Redevelopment Projects}}$

The permittee shall continue to maintain 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 or sale, that discharge into the MS4. The program must include, at a minimum, all the following:

- a. Maintain a requirement for BMPs to prevent or minimize adverse water quality impacts.
- b. Maintain strategies which include a combination of structural and/or non-structural BMPs appropriate for the municipality.
- c. Maintain and enforce an ordinance or resolution, if the permittee has the authority to do so, 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 structural BMPs.
- e. The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 5 points total on an annual basis for each calendar year 2021 and 2022. The point total requirement increases to 7 points for each calendar year beginning in 2023. The following table lists various BMPs, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year.

In cases where the permittee is already implementing a BMP which qualifies for points, they may continue implementation of the BMP and earn the listed points as allowed for the first year of implementation under this permit as well as subsequent years.

Multiple BMPs involve holding public hearings; a single public hearing can be held which addresses multiple topics and points claimed for all of the multiple BMPs implemented.

In addition to implementing a Post-Construction Stormwater Management in New Development and Redevelopment Projects program as required above, the permittee must implement sufficient listed BMPs in the table below to qualify for the required number of points.

BMP Summary	Measurable Goal	Implementation Time Schedule etc.	Points
Lbmp P-C S M - 01			
	miles and the state of the stat	D 1 5 . 1 . 1	
Develop and adopt a custom design manual	The custom design manual shall impose	Development of the design manual can	
for Post-Construction	requirements to	occur in any year.	4 points may
Stormwater Management	achieve at least one	Initial	be claimed in
which specifies	of the following	implementation can	the year of
various structural	standards:	allow points to be	initial
BMPs which are		claimed in that	implementation
required for new	Capture, at	year and continued	of a custom
development and re- development	least, the first	implementation can allow points to be	design manual - alternately
construction sites	precipitation on	claimed in	6 points may
which are greater than	the	subsequent years.	be claimed in
1 acre or for which	development/re-		the year of
there is construction	development site		initial
activity disturbing	and utilize		implementation
less than one acre	methods to		of the APWA
which is part of a larger common plan of	prevent		5600 stormwater
development or sale	discharge off- site, including		design
that in total disturbs	but not limited		criteria and
one acre or more.	to:		the MARC/APWA
	• retain on-		BMP Manual,
Alternately, adopt and	site		3 points may
implement the APWA	• infiltrate		be claimed for
5600 Stormwater Design Criteria and the	• evaporate		each
MARC/APWA BMP Manual.	• transpire or		successive year
	• beneficial		compliance
	ly reuse		with the
			custom design
	> Through		manual is
	implementation		required/imple
	of appropriate		-mented
	BMP(s) reduce the peak		Alternately 5 points may be
	stormwater flow		claimed in
	rate to a value		each
	equal to or less		successive
	than the rate		year the
	which would be		implementation
	experienced on		of the APWA 5600
	the site prior to the		stormwater
	development/re-		design
	development		criteria and
	project based		the MARC/APWA
	upon modeling a		BMP Manual is
	standard storm		required/imple
	event, e.g. 1.0		-mented.
	inch - 6-hour		
	event assuming saturated soil		
	conditions.		

Lbmp P-C S M - 02	Dother 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. Measures must be included to enforce the installation of the various structural BMPs required.		
Develop a list of post-construction structural or non-structural BMPs which are required to be incorporated in any development/redevelopment 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.	Development of the list and guidance can occur in any year. Initial implementation can allow points to be claimed in that year and continued implementation can allow points to be claimed in subsequent years.	3 points may be claimed in the year of initial implementation , 2 points may be claimed for each successive year the list is maintained and implemented.
<pre>Lbmp P-C S M - 03 Develop and implement a program to ensure adequate</pre>	The program shall be detailed in a written document and made	Development of the program can occur in any year.	3 points may be claimed in the year of initial implementation

long-term cleaning, operation and maintenance of all municipally owned or operated post- construction structural stormwater BMP facilities. The	available to all pertinent maintenance staff.	Initial implementation can allow points to be claimed in that year and continued implementation can allow points to be claimed in	2 points may be claimed for each successive year the program is maintained and utilized.
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:		subsequent years.	
<pre>> detention ponds > retention ponds > grass swales > pervious paving systems > wetlands > vegetative filter strips > manufactured stormwater treatment devices (swirl separators, screens, etc.) > drop inlet-catch</pre>			
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	After all aspects are implemented including final implementation of the master or comprehensive development plan, along with enactment of the required ordinances points for implementation	5 points may be claimed in the year all aspects are initially implemented, 2 points may be claimed for each successive year all
	development requirements which include minimizing the increase of impervious surfaces and maximization/preservat ion of open space.	of this BMP can initially be claimed.	aspects continue to be implemented.

	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).		
Lbmp P-C S M - 05			
David on and implement	m1- 1 2 2		
Develop and implement a program for	The program shall require inspection of	The program shall be developed and	
inspection of	at least 10% of the	implemented within	
permittee owned	structural BMPs on an	a single year.	
structural BMPs which includes	annual basis.		
implementation of	Identified maintenance		3 points may
needed maintenance to	activities shall be		be claimed in
ensure long-term	completed:		the year the
operation of the BMPs	1. in the same year		program is
	of inspection or 2. completed as		initially
	dictated by the		developed and implemented,
	permittee's		2 points may
	maintenance/O&M		be claimed for
	plan		each
	3. or a written		successive
	plan for completion of		year the
	the necessary		program continues to
	maintenance		be
	shall be		implemented.
	completed in the		
	same year of		
	inspection with		
	the objective		
	for completion of the		
	maintenance		
	activity within		
	18 months.		
Lbmp P-C S M - 06	and a company of the second of		3 points may
			be claimed in
D1	m)	_,	the year the
Develop and implement	The program shall	The program shall	program is
a program for inspection of known	require inspection of at least 10% of the	be developed and	initially
privately owned	known privately owned	implemented within a single year.	developed and
structural BMPs which	structural BMPs on an	a brudre lear.	implemented, 2 points may
includes providing the	annual basis.		be claimed for

owner of the BMPs an inspection report which specifies needed maintenance to ensure long-term operation of the BMPs.	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.		each successive year the program continues to be implemented.
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.	The year the ordinance or resolution or other enforceable requirement is implemented points may be claimed and continued implementation can allow points to be claimed in subsequent years.	3 points may be claimed in the year of initial implementation , 2 points may be claimed for each successive year the ordinance or resolution or other enforceable requirement is implemented.
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.	The number of residential parcels improved to qualify for points must occur in a single calendar year.	2 points may be claimed in a year BMPs are installed on 1% of the residential parcels, 4 points may be claimed in a year BMPs are installed on 5% of the residential parcels.

- f. Documentation of compliance with the goal and implementation time schedule must be maintained on file to claim the associated points. Permittee is responsible for implementing adequate BMPs to comply with the Post-Construction Stormwater management in New Development and Redevelopment Projects requirements of this permit and be able to claim at least the required number of points in the calendar years as specified above. Extent of compliance, i.e., equal or exceed the required annual point total or failure to reach the required annual point total, must be reported in the Annual Report.
- g. The permittee is not limited to implementation of the BMPs listed in the above table. Several other BMPs may be implemented, however, only implementation of the BMPs listed in the table may be documented and counted toward the required annual point total.

6. Pollution Prevention/Good Housekeeping for Municipal Operations

The permittee shall continue to 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.

a. The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 4 points total on an annual basis for each calendar year 2021 and 2022. The point total requirement increases to 6 points for each calendar year beginning in 2023. The following table lists various BMPs, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year.

In cases where the permittee is already implementing a BMP which qualifies for points, they may continue implementation of the BMP and earn the listed points as allowed for the first year of implementation under this permit as well as subsequent years.

Multiple BMPs involve holding public hearings; a single public hearing can be held which addresses multiple topics and points claimed for all of the multiple BMPs implemented.

In addition to implementing a Pollution Prevention/Good Housekeeping for Municipal Operations program as required above, the permittee must implement sufficient listed BMPs in the table below to qualify for the required number of points.

BMP Summary	Measurable Goal	Implementation Time Schedule etc.	Points
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 floatables or other	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	Volume or weight of the material shall be documented for either each discharge event or on a quarterly basis.	3 points may be claimed in the year the screening device or method is initially implemented, 2 points may be claimed for each successive

Objects to receiving waters. Lbmp P P/G H - 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.	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. 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.	Recycle containers shall be available for staff use all days of the year in which points are claimed.	year the screening device or method continues to be implemented. 3 points may be claimed in the year recycle containers are made available for municipal staff use and the recycle program is initially implemented, 2 points may be claimed for each successive year the recycle program continues to be
Lbmp P P/G H - 03			continues to be implemented. 2 points may be claimed in the year the
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	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.	The guidance document must be finalized and implemented in the year which points are initially claimed.	guidance document is finalized and implemented, 1 point may be claimed for each successive year the guidance document continues to be implemented.

required by that			
Department.			
Deparement.			
Lbmp P P/G H - 04			
Implement a program, with guidance to municipal staff or third-party contractors, to ensure any municipal vehicle or other mechanical equipment washing is conducted in a manner which ensures the wash water is disposed of in the sanitary sewer or otherwise receives proper treatment prior to discharge to the environment.	Maintain proper wash facilities for municipal staff to wash vehicles and/or equipment or implement a program which includes guidance to municipal staff to take vehicles and/or equipment to commercial wash facilities, either of which ensures the wash water is conveyed to the sanitary sewer, or otherwise receives proper treatment prior to discharge to the environment, and not discharged untreated to the MS4 or directly to the environment.	The guidance document must be finalized and implemented in the year which points are initially claimed.	2 points may be claimed in the year the guidance document is finalized and implemented, 1 point may be claimed for each successive year the guidance document continues to be implemented.
Lbmp P P/G H - 05	co che envilonment.		
HDMP F F/G A - US			3 points may
			be claimed in
Implement a program for street sweeping in which the street sweepings are collected and disposed of properly or recycled/reused if possible.	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.	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.	the year at least 10% of the listed streets are swept and street sweeping equipment is purchased, 2 points may be claimed for each year at least 10% of the listed streets are swept or
	Alternatively, for municipalities with less than 500 population street sweeping can be limited to sweeping the gutters. The log which must be maintained need only indicate the street segments which were	Alternately, for municipalities with less than 500 population at least 5% of the street gutters which can be swept must be swept in a year to claim points for the year.	alternately for municipalities with less than 500 population if at least 5% of the street gutters which can be swept are swept in a year 2 points

	swept in the year and confirm the sweepings were properly disposed or recycled and/or reused		may be claimed.
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. Alternately, provide in-person training or videos with sign-in-sheets for signature documentation of personal or video training. Retain copies of the guidance documents and/or sign-in-sheets. A log of when the guidance was distributed, or training was provided to staff should be maintained. Provide appropriate guidance and/or training to staff a minimum of twice per year.	For each year in which staff receive guidance documents or in-person training or video training on two separate dates, points may be claimed for the year.	In years when guidance documents or training (inperson or video) are provided on two separate dates 1 point may be claimed.
Implement a program to inspect stormwater inlets to identify illicit discharges and clean drop inlets of accumulated debris.	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. 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	For each year in which staff inspect at least 5% of all stormwater inlets at least one point may be claimed.	In years when staff inspect at least 5% of all stormwater inlets and remove accumulated debris 1 point may be claimed. In years when staff inspect at least 10% of all stormwater inlets and remove accumulated debris 2 points may be claimed.

	inlet about illicit discharges.		
Lbmp P P/G H - 08	For inlets which have any accumulation of debris, remove the debris for proper disposal.		
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.	For each year in which the map is posted online points may be claimed. In the first year the map is posted it must be posted for at least six months for points to be claimed.	3 points may be claimed in the first year, 2 points may be claimed for each year thereafter for which the map remains posted.
Lbmp P P/G H - 09			1 point may be
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.	The site(s) must be retrofitted with stormwater BMPs as listed in the measurable goals. Points can be awarded in the first year the BMPs are installed and begin operation and points may be claimed for each year the retrofitted BMPs continue to be operated.	claimed in the first year for each site retrofitted (up to two sites/points maximum, 2 points may be claimed for each year at least two sites continue to operate all of the retrofitted BMPs which were installed.
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,	The wetland shall include a water surface area of at least 1/4 acre or equivalent submerged surface area for submerged wetlands.	Points may be claimed in the year the wetland is constructed and in subsequent years the wetland remains in operation.	<pre>2 points may be claimed for the year in which the wetland is constructed, 1 point may be claimed for each subsequent year the wetland</pre>

transfer station, kennel, or airport.			remains in operation.
Install a canopy or other covered area for load-out of salt or other de-icing chemicals where such de-icing materials are stored either within the permit area or a storage facility located within 30 miles of this permit area. The canopy or 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	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	Points may be claimed in the initial year of construction and in subsequent years the canopy/covered area remains in operation.	3 points may be claimed for the year in which the canopy/covered area is constructed, 2 points may be claimed for each subsequent year the canopy/covered area remains in operation.
miles of this permit area. Lbmp P P/G H - 12 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. Alternately,	The treatment system 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 system is overloaded or fails to operate properly at any time. A log of the material (noting either volume or weight) captured and prevented from discharge to the receiving water shall be maintained.	Volume or weight of the material shall be documented for either each discharge event, on a quarterly basis or at least annually.	3 points may be claimed in the year the treatment system is initially implemented, 2 points may be claimed for each successive year the treatment system continues to be implemented.

installed on a	
stormwater line to	
provide treatment at	
problem locations.	

- b. Documentation of compliance with the goal and implementation time schedule must be maintained on file to claim the associated points. Permittee is responsible for implementing adequate BMPs to comply with the Pollution Prevention/Good Housekeeping for Municipal Operations requirements of this permit and be able to claim at least the required number of points in the calendar years as specified above. Extent of compliance, i.e., equal or exceed the required annual point total or failure to reach the required annual point total, must be reported in the Annual Report.
- c. The permittee is not limited to implementation of the BMPs listed in the above table. Several other BMPs may be implemented, however, only implementation of the BMPs listed in the table may be documented and counted toward the required annual point total.

Guidance useful in implementing the six minimum control measures can be obtained from the Online Water Library (OWL) of the Center for Watershed Protection. A list of url links to helpful guidance documents, including OWL, can be found on the KDHE Municipal Stormwater Program website at the following url:

http://www.kdheks.gov/muni/download/MS4 NPDES Permit helpful guidance.pdf

Document titled "MS4 NPDES Permit Helpful Guidance and/or Resources"

D. Total Maximum Daily Load (TMDL) Regulated Pollutants

The Permittee shall continue to review, update, implement and develop, when necessary, structural and non-structural BMPs which will reduce to the Maximum Extent Practicable the discharge of the TMDL regulated pollutants from the MS4 as listed in PART II.

The effort to reduce the discharge of TMDL regulated pollutants is anticipated to be an iterative process with changes in the SMP periodically, generally not more frequently than annually, possibly every two or three years. This "adaptive management" type process is recommended to attenuate the discharge of TMDL regulated pollutants listed in the TMDL Table of PART II of this permit.

Kansas Permit No.: M-AR64-SU01
Page 39 of 57

Each updated SMP document shall provide:

1. Best Management Practices (BMPs)

Updates of the SMP document can include structural and/or non-structural BMPs implemented to reduce the discharge of TMDL regulated pollutants from the MS4. This section of the SMP shall identify or include:

a. BMPs which will be implemented, including non-structural and/or structural measures, as selected from EPA's "National Menu of Best Management Practices (BMPs) for Stormwater" or from a local or regionally appropriate storm drainage criteria manual such as the Kansas City Metro Chapter of the American Public Works Association (APWA) Manual of Best Management Practices for Stormwater Quality or such other BMP manuals as are appropriate (links for the National Menu of Best Management Practices (BMPs) for Stormwater and the Kansas City Metro Chapter of the American Public Works Association (APWA) Manual of Best Management Practices for Stormwater Quality can be found on the KDHE document titled "MS4 NPDES Permit Helpful Guidance and/or Resources" at the following url:

http://www.kdheks.gov/muni/download/MS4 NPDES Permit helpful guidance.pdf

- b. Include a description of non-structural practices being implemented, including the six minimum control measures and/or other source control measures.
- c. Include the location of the structural BMPs.
- d. Identify the design factors associated with the structural BMPs.
- e. Include information on the reported effectiveness of the chosen BMPs based on regionally appropriate data or performance analyses in the International Stormwater BMP Database (a link to the Database can be found on the KDHE document titled "MS4 NPDES Permit Helpful Guidance and/or Resources" at the following url:

http://www.kdheks.gov/muni/download/MS4 NPDES Permit helpful guidance.pdf

- f. Include a schedule for constructing and/or implementing additional selected BMPs to reduce the discharge of TMDL regulated pollutants.
- g. Include an inspection/maintenance plan and schedule for each BMP, as appropriate.
- h. Include a plan and schedule to monitor the effectiveness of the BMPs to reduce the discharge of TMDL regulated pollutants

2. Measurable goals to assess the effectiveness of the TMDL BMPs

Overall TMDL measurable goals should be based upon in stream sampling of the stream(s) existing in, or adjacent to the Permit Area (or Permit Areas for cooperative stormwater control efforts as provided in paragraph 4 below) during or immediately following storm events. Alternately, the TMDL measurable goals may be based on stormwater sampling within the MS4 comparing results upstream of the BMP and downstream of the BMP. The monitoring results of samples obtained to determine performance of BMPs should be maintained on file in compliance with the Standard

Conditions records retention requirement, these results do not need to be reported to KDHE via the electronic DMR process at this time. However, these monitoring results are to be reported or summarized in the Annual Report as required in PART V REPORTING.

Individual or sub-basin BMP performance goals may include in stream or BMP discharge sampling locations based upon individual BMPs, sub-basin BMPs or aggregate BMPs. Alternatively, the permittee may use modeling that has been properly calibrated to determine that BMP measurable goals are being met.

Measurable goals for reducing TMDL pollutants contributed by MS4s can be expressed in quantifiable values to:

- I. reduce the total mass of pollutants, and
- II. be expressed as average and median values (percent reduction of inflow volume, reduction in pollutant mass loading) or for bacteria as a geometric mean.

3. Maps shall be developed and maintained which illustrate:

- I. The Permit Area, boundaries of the contributing drainage basins and primary sub-basins, within and outside the Permit Area
- II. The locations of the BMPs, if structural
- III. The location of TMDL stream monitoring locations, if such monitoring is required
- IV. Storm sewer collection system which includes the outfalls within the Permit Area where the MS4 drains to TMDL listed impaired streams or lakes

4. Alternative Stormwater Offsite Pollution Reduction Program

As appropriate, when waters of the state are affected by TMDL regulated pollutants from both the Permit Area and surrounding non-jurisdictional lands, the permittees may incorporate and implement plans through their SMP for an offsite pollution reduction program to install Best Management Practices (BMPs) in alternative locations, including outside the Permit Area, within the watershed shared by urban entities or urban and non-urban entities. Any alternative stormwater offsite pollution reduction program should 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 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.

E. The parties responsible for compliance with the SMP document.

F. Monitoring Requirements

Possibly required in PART II.

Kansas Permit No.: M-AR64-SU01 Page 41 of 57

G. Reporting Requirements

See PART V.

H. Modifications to BMPs and the Stormwater Management Program document

For minor BMP modifications/replacement: Within 60 days of a determination by the permittee or date of written notification from KDHE, the permittee shall modify the BMP if modifications are needed to maintain a program in compliance with this permit.

For major BMP modifications/replacement: These major modifications are defined as ones which normally take more than 60 days to construct and/or implement. Within 60 days of a determination by the permittee or date of notification from KDHE, the permittee shall provide a plan and schedule for the upgrade/replacement of the BMP. The plan and schedule are subject to KDHE approval.

The SMP shall be evaluated annually and, if revisions are necessary, the modified SMP document shall be submitted with the annual report due to KDHE by February 28 of each year.

PART II. TOTAL MAXIMUM DAILY LOAD (TMDL) BEST MANAGEMENT PRACTICES AND SURFACE WATER MONITORING

Permittees who are required to complete storm event monitoring of surface waters, i.e., streams or rivers, (see TMDL Table and associated text) shall report the results of the storm event monitoring with the eDMR reporting system.

A. TMDL BMP IMPLEMENTATION REQUIREMENTS

The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 4 points total on an annual basis for each calendar year 2021 and 2022. The point total requirement increases to 6 points for each calendar year beginning in 2023. The following table lists various BMPs, measurable goals, and the required timing-period or implementation-schedule to qualify for the points in the year.

In cases where the permittee is already implementing a BMP which qualifies for points, they may continue implementation of the BMP and earn the listed points as allowed for the first year of implementation under this permit as well as subsequent years.

Multiple BMPs involve holding public hearings; a single public hearing can be held which addresses multiple topics and points claimed for all of the multiple BMPs implemented.

In addition to implementing a TMDL Pollutant Reduction and Monitoring program as required above, the permittee must implement sufficient listed BMPs in the table below to qualify for the required number of points.

BMP Summary	Measurable Goal	Implementation Time Points Schedule etc.	
Install pet waste stations which include a glove/bag dispenser with signage and waste can to encourage pet waste disposal at either parks, trails,	At least one pet waste station shall be installed at the selected park, trail, rest area or other public land. The station(s) shall	In the year the Measurable Goal requirement is implemented the point may be claimed and for each year	1 point may be claimed for the year in which the Measurable Goal requirements are enacted, and

rest areas or other public lands owned by the permittee.	include signage which encourages proper pet waste disposal/cleanup and a waste can.	thereafter the pet waste stations remain in use.	1 points may be claimed for each subsequent year the Measurable Goal requirements remain in effect.
Lbmp T M D L - 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.	In the year five or more residential rain gardens are finally constructed and become operational the points may be initially claimed and in subsequent years when at least five residential rain gardens remain operational points may be claimed.	a points may be claimed for the year in which five or more residential parcels install rain gardens and initiate operation, 2 points may be claimed for each subsequent year at least five or more residential parcels have rain gardens remain in operation.
Lbmp T M D L - 03 Install and operate a constructed wetland.	The wetland shall include a water surface area of at least one acre or equivalent submerged surface area for submerged wetlands.	Points may be claimed in the year the wetland is constructed and in subsequent years the wetland remains in operation.	3 points may be claimed for the year in which the wetland is constructed, 2 points may be claimed for each subsequent year the wetland remains in operation.
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.	The year the ordinance, resolution or other enforceable requirement is enacted points may be claimed. Also points may be claimed for	3 points may be claimed for the year in which the ordinance, resolution or other enforceable requirement is enacted, 2 points may be claimed for

Lbmp T M D L - 05		subsequent years the ordinance, resolution or other enforceable requirement remains in effect.	each subsequent year it remains in effect.
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.	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.	The documents may be distributed in any fashion and at any time throughout the year. Documents posted on website(s) shall be posted for at least six months in the	1 point may be claimed in a year in which
Alternately, post the document on social media or the municipal website.	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.	year. Documents posted on social media shall be posted six times within the year points are claimed.	the required number of brochures and/or flyers are distributed, documents posted on social media or the website must be posted for at least as specified.
Lbmp T M D L - 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	The documents may be distributed in any fashion and at any time throughout the year. Alternately, the	2 points may be claimed in a year in which the required number of hangers or similar documents are
	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	document may be posted to social media (at least three times in the year) or posted on the municipal website for a minimum of three months in the year	distributed or alternately posted to social media or the municipal website for the required time.

	documents distributed shall also be documented. This information and copies of the documents shall be retained on file.	to qualify for points	
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 inspections must be conducted either annually or if twice per year they must be seasonal within the same calendar year (winter, spring, summer, and fall). Points can be claimed for that year. In addition, if an illicit discharge is detected and eliminated in association with this inspection program additional points may be claimed in the year detected or in the year the discharge is eliminated.	3 points may be claimed for annual inspection as required by this BMP, 5 points may be claimed for these inspections completed twice in a year, and if an illicit discharge is detected and eliminated. The 2 additional points may be claimed, only once, either in the year detected or in the year the illicit discharge is eliminated.
Implement an Alternative Stormwater Offsite Pollution Reduction Program.	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	In the year the Alternative Stormwater Offsite Pollution Reduction Program is approved by KDHE points may be claimed. In subsequent years in which the program is maintained points may be claimed.	5 points may be claimed in the year KDHE approves the program, 4 points may be claimed for each subsequent year it remains in effect.

	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		
J.	watershed 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.		
Lbmp T M D L - 09			
Implement a program to	The four litter	The four collection	
collect and properly	collection efforts	efforts must occur	2 points may
dispose of litter, on	should, but are not	in a calendar year.	be claimed for
four separate	required to, occur		
occasions per calendar	seasonally, i.e.,		any year in which four
year, within areas	winter, spring, summer		
where littering has	and fall. If it is		collection
been identified as a	unreasonable to		efforts have
problem. Such areas	collect litter in any		occurred in
may include municipal	season the required		compliance
parks, trails, rest	four collection		with the
areas, or other public	efforts may occur in		requirements
lands owned by the	either three seasons		of this BMP.
permittee.	or in a minimum of two		
	seasons.		
Lbmp T M D L - 10			3 nointa mar-
			3 points may
			be claimed for
Establish a program to	Provide public	In the war fire	any year in
1 can troit a broatam co	education on rainwater	In the year five or	which
		more residential	sufficient
encourage Rainwater		Land 2 - 1	
	harvesting and design	rain barrel systems	rain
encourage Rainwater	harvesting and design guidance for the	or one commercial	harvesting
encourage Rainwater	harvesting and design		

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 equal to that generated by a 0.1inch 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.

become operational the points may be initially claimed and in subsequent years when at least five residential rain barrel systems or one commercial cistern remain operational points may be claimed.

maintained in operation in compliance with the requirements of this BMP.

Lbmp T M D L - 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.

By year five of this permit, at least two structural BMP projects will be constructed and maintained. Points will be awarded in the year construction was completed and subsequent points will be awarded in the subsequent years after documentation of maintenance of the project.

4 points may be claimed for any year in which a structural BMP project is completed for a contributing area exceeding one acre. 3 points may be claimed for any year in which a structural project is completed for a contributing area under one acre. A bonus point may be awarded for a composite BMP project. 2 points may be awarded in subsequent

			years upon documentation of ongoing maintenance of the BMPs.
Lbmp T M D L - 12			3 points may be claimed for the year in
Construct a stream bank stabilization project.	Install a minimum of 100 feet of bank stabilization at a site(s) with a history of erosion.	The installation of, the minimum 100 feet of bank stabilization must occur in the year points are claimed at a single site or at multiple sites. The sites may be on the same stream or on different streams.	which the required minimum amount of stream bank stabilization is installed, 2 points may be claimed for each subsequent year it remains in effect.

- 1. Documentation of compliance with the goal and implementation time schedule must be maintained on file to claim the associated points. Permittee is responsible for implementing adequate BMPs to comply with the TMDL BMP Implementation Requirements of this permit and be able to claim at least the required number of points in the calendar years as specified above. Extent of compliance, i.e., equal or exceed the required annual point total or failure to reach the required annual point total, must be reported in the Annual Report.
- 2. The permittee is not limited to implementation of the BMPs listed in the above table. Several other BMPs may be implemented, however, only implementation of the BMPs listed in the table may be documented and counted toward the required annual point total.

The permittee shall implement Best Management Practices (BMPs) to reduce to the Maximum Extent Practicable the discharge of the TMDL regulated pollutants from the MS4 to the watershed of the impaired stream(s) as listed below:

TMDL TABLE

Total Maximum Daily Loads, TMDLs, are established for waters found on the CWA Section 303d list of impaired waters. The purpose of the TMDL is to define the necessary and allowable pollutant load that may enter those impaired waters, so those waters attain a condition that fully supports all their designated uses. The TMDL then allocates portions of that allowable load among the likely point and non-point sources discharging the pollutant into the water or its watershed. Implementation of the TMDL by the NPDES and 319 programs brings about reductions in current loading from those sources through numeric goals or narrative actions to the allowable level allocated to each source.

TMDL Regulated Pollutant	Specific Impaired Stream(s) to Target
Bacteria	Dog Creek
Nutrients	Dog Creek
Sediment	Dog Creek

The required surface water monitoring locations* and their EDMR codes are identified as follows:

SURFACE WATER MONITORING LOCATIONS			
LOCAL SITE LOCAL LOCATION DESCRIPTION KDHE EDMR CODE			
Site #1	Upstream	Dog Creek 200 feet north of K-53 and 2,500 feet east of K-15.	DOG1001A6
Site #2	Downstream	Dog Creek at 140 th Street bridge.	DOG2001B6

^{*} Note - Monitoring locations may change with KDHE approval.

Kansas Permit No.: M-AR64-SU01 Page 49 of 57

B. Monitoring Requirements

1. Storm Event Monitoring: The permittee shall implement a wet weather monitoring program with the intent to assess the impact of precipitation related discharges to the stream. Sampling and analysis will normally include, instream monitoring of the main stream(s) entering and leaving the Permit Area as identified in the TMDL Table. Alternately, in some cases main stream monitoring may not be appropriate as other sources of pollutants may be introduced by point or non-point discharges and tributaries to the listed main streams, which originate within or near the Permit Area, may be monitored at a single location to characterize the water quality draining from the permit area. The permittee shall implement this monitoring program to support adaptive stormwater management and the evaluation of SMP effectiveness in reducing the discharge of pollutants from the MS4. Monitoring for the parameters listed in the Parameters table shall be conducted as required for each storm event sampled which meets the criteria specified in this section.

The storm event monitoring data for TMDLs, as required in this PART II, may be used to assist in evaluating trends in water quality. This monitoring is not necessarily intended to demonstrate compliance with the requirements of this MS4 NPDES permit.

2. Additionally, other stream monitoring, monitoring of flow within the MS4, monitoring of discharges from MS4 outfalls, monitoring to detect or locate illicit discharges, and monitoring stormwater flow within structural BMPs may be completed at the permittee's discretion to assist in management and evaluation of the BMPs and the SMP. These additional monitoring results are not required to be reported to KDHE via the eDMR reporting process.

In addition to the storm event monitoring, the permittee may want to conduct dry weather monitoring, as appropriate, to determine the effectiveness of the six minimum control measures, detect illicit discharges, or to confirm baseline water quality data. These additional monitoring results are not required to be reported to KDHE via the eDMR reporting process.

C. Monitoring Frequency and Periods Criteria

- 1. Four storm events per year per monitoring site shall be monitored. Storm event shall mean a 24-hr rain or snow melt event of greater than or equal to 0.25 inches.
- 2. Monitoring shall normally be conducted in the spring (between March 1 and June 30) and summer (between July 1 and October 31) for the parameters as appropriate based upon the impairment. It is recommended two events be monitored in the spring and two events be monitored in the summer. However, it is most important four events be monitored in each calendar year and storm event monitoring can occur in any month.

D. Parameters

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	E. coli (Col/100 ml or MPN)	10 (Col/100 ml or MPN)	Grab

* For a listed TMDL Regulated Pollutant in the TMDL Table, multiple parameters may be required to be monitored. In the case of Bacteria only one parameter needs to be monitored (E. coli). However, in the case of Sediment two parameters need to be monitored (Total Suspended Solids and Turbidity). In the case of Nutrients three parameters need to be monitored (Total Phosphorus, Nitrate+Nitrite as N, and, Total Kjeldahl Nitrogen). Additionally, one value needs to be calculated Total Nitrogen which equals the sum of Nitrate+Nitrite as N and Total Kjeldahl Nitrogen (the eDMR reporting process will calculate this value for the individual reporting the data).

Monitoring in impaired streams to test for TMDL pollutants, as listed in the TMDL Table does not necessarily require monitoring for all of the parameters listed in the Parameters table. For a stream, or its tributary, where monitoring is conducted, only the parameters associated with the listed TMDL Regulated Pollutant need to be monitored.

- ** Minimum Reportable Limit
- *** Total Nitrogen = Total Kjeldahl Nitrogen + Nitrate+Nitrite.

In addition, at the time of sampling, report the following:

- 1. Rainfall (last 24 hours) inches
- 2. Stream Flow CFS
- 3. Stream Depth from a standard Feet
- 4. Stream Level (rising, falling, steady)
- 5. Stream Velocity (rapid, normal, still [backwater])

Gauge Reading
Estimate/Reading
Estimate/Reading
Describe

Describe

For storm events, grab samples for instream monitoring are to be obtained within 4 hours of rising stages on streams. Monitoring of a storm event for the purpose of complying with the stormwater monitoring and reporting requirements of this permit is not allowed if there is not at least 24 hours between this sampling storm event and the end of the previous rainfall event. If composite sampling is conducted, samples are normally collected over the course of the hydrograph and flow-weighted to provide a representative composite sample for the storm event.

E. Adaptive Management

The monitoring program may be adapted to improve the effectiveness of the SMP or if supported by additional information. It may also be supplemented or supplanted with modeling approaches to meet monitoring plan objectives. Any modifications to the monitoring program are subject to KDHE approval.

Kansas Permit No.: M-AR64-SU01
Page 51 of 57

F. Documentation of Stream Monitoring Locations

The permittee, within 100 days following the effective date of this permit, shall provide KDHE maps illustrating the wet weather surface water monitoring locations and a table listing information associated with each monitoring location in a similar fashion as required by the annual reports. In some cases, KDHE has approved a rotational monitoring program where some monitoring locations are only monitored in certain years, if this is the case the table must list the years monitoring is required or alternately indicate all years. Information provided in the table shall be formatted similar to the following example:

Local Site Name	Farwell
Local Site Identifier	C1
Sample Location Description	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.
KDHE EDMR Code if Known	Far2002C5
Lat/Long Data - Decimal & Degree Format	
Latitude	42.367056°
Longitude	-71.218089°
Years monitoring will be conducted	2019 and 2022 (Alternate notation is all years)

EPA has promulgated a final rule requiring regulated entities to report DMR data electronically. Also, KAR 28-16-63 requires permittees to report NPDES data in a form required by KDHE. KDHE has developed electronic reporting tools to assist permittees in complying with the EPA electronic reporting rule and KAR 28-61-63. Unless a waiver has been approved by KDHE, permittees are required to submit reports electronically via the eDMR process.

The storm event monitoring data for TMDLs, as required in this PART II, is required to be reported to KDHE via the electronic DMR (eDMR) process. Additional monitoring of streams flowing within or near the Permit Area, monitoring industrial stormwater discharges (PART III), monitoring of discharges from MS4 outfalls, or discharges from areas with BMPs may be done at the permittee's discretion to assist in management and evaluation of the BMPs (process control/monitoring) and for compliance with the SMP and/or this permit. This additional monitoring is not required to be reported via the eDMR process.

PART III. MONITORING INDUSTRIAL STORMWATER DISCHARGES:

This PART III requirement is not applicable to Phase II permittees. No action is required at this time for Monitoring Industrial Stormwater Discharges.

PART IV. PERMIT COMPLIANCE ACTIVITIES AND SCHEDULES

A. Year 2019:

The required update to the stormwater management program (SMP) document, as required in PART I B. Updated Stormwater Management Program document, should be considered in 2019 and planning initiated for allocating time and effort to complete this task to update the SMP document prior to the submission deadline in 2021.

Permittees required to complete TMDL storm event monitoring of streams shall report results via the eDMR reporting process for all monitoring within a calendar year by no later than January 28 of the following year.

Within 100 days following the effective date of this permit the permittee must submit the required information regarding the wet weather surface water monitoring locations as addressed in PART II, B, 1 Monitoring Requirements.

The Annual Report for calendar year 2018 must be submitted to KDHE between January 1 and February 28, 2019.

B. Year 2020:

Any remaining tasks necessary to complete the update of the SMP should be completed in 2020.

Permittees required to complete TMDL storm event monitoring of streams shall report results via the eDMR reporting process for all monitoring within a calendar year by no later than January 28 of the following year.

The Annual Report for calendar year 2019 must be submitted to KDHE between January 1 and February 28, 2020.

C. Year 2021:

The updated SMP document must be submitted to KDHE with the 2020 Annual Report between January 1 and February 28, 2021.

The permittee must implement sufficient listed BMPs to achieve minimum point requirements for each year beginning in 2021.

Permittees required to complete TMDL storm event monitoring of streams shall report results via the eDMR reporting process for all monitoring within a calendar year by no later than January 28 of the following year.

The Annual Report for calendar year 2020 must be submitted to KDHE between January 1 and February 28, 2021.

D. Year 2022:

Permittees required to complete TMDL storm event monitoring of streams shall report results via the eDMR reporting process for all monitoring within a calendar year by no later than January 28 of the following year.

The permittee must implement sufficient listed BMPs to achieve minimum point requirements for each year.

The Annual Report for calendar year 2021 must be submitted to KDHE between January 1 and February 28, 2022.

E. Year 2023

Permittees required to complete TMDL storm event monitoring of streams shall report results via the eDMR reporting process for all monitoring within a calendar year by no later than January 28 of the following year.

The permittee must implement sufficient listed BMPs to achieve minimum point requirements for each year. The point total requirements increase this year.

By February 28, 2023, provide a report (in PDF format) on effectiveness of source controls and structural BMPs to attenuate pollutant discharge and achieve the measurable goals. And if the TMDL Table in PART II lists TMDL Regulated Pollutants and the permittee is required to conduct surface water monitoring of specific impaired streams, this report must also summarize water quality data from in stream monitoring sites. This report must be submitted to KDHE along with the Annual Report for 2022.

The Annual Report for calendar year 2022 must be submitted to KDHE between January 1 and February 28, 2023.

F. Year 2024

Permittees required to complete TMDL storm event monitoring of streams shall report results via the eDMR reporting process for all monitoring within a calendar year by no later than January 28 of the following year.

The permittee must implement sufficient listed BMPs to achieve minimum point requirements for each year.

The Annual Report for calendar year 2023 must be submitted to KDHE between January 1 and February 28, 2024.

PART V. REPORTING

- A. The permittee shall submit a calendar year annual report to KDHE by February 28 of each year. The annual report shall be submitted to KDHE in the form specified by KDHE. Normally an annual report template (Basic Report) is posted on the KDHE website in the last three months of each year. The report template can be downloaded and completed. The completed annual report along with attachments or other documents which need to be submitted in association with the annual report shall all be submitted in PDF file formats to KDHE on a standard compact disk (CD) or digital versatile disk (DVD). The initial report under this permit is due February 28, 2020 for calendar year 2019. Once KDHE has implemented the KEIMS webbased system, all documents submitted will be required to be uploaded through the KEIMS program. KDHE will provide notification to the permittee when reporting via the KEIMS system is required. The annual report shall cover the activities during the previous calendar year and must include:
 - 1. Provide the status of compliance with permit conditions, an assessment of the appropriateness of the implemented Best Management Practices, progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP), and the measurable goals with an indication of the progress toward meeting the goals for each of the six minimum control measures.

- 2. Provide results of information collected and analyzed, (for example test results, surveys, or public comments/input) during the annual reporting period. This may include monitoring data used to assess the success of best management practices with respect to reduction in pollutant discharge. Include an interpretation of the information which addresses success or failure of the portion of the program for which the information applies.
- 3. For Best Management Practices (BMPs), which are directed at reducing the discharge of TMDL regulated pollutants, provide the measurable goals of each BMP with an indication of the progress toward meeting the goals.
- 4. Provide results of information collected and analyzed, if any, during the annual reporting period, including monitoring data used to assess the success of the program at reducing the TMDL regulated pollutants.
- 5. Provide a summary of the stormwater activities that were scheduled to be undertaken during the previous calendar year and the status of these activities.
- 6. Provide a summary of the stormwater activities which are scheduled to be undertaken during the next calendar year (including an implementation schedule).
- 7. Provide a map showing changes in the permittee's Permit Area if the permit area has changed within the year.
- 8. Provide a description of significant changes in any of the BMPs.
- 9. Provide copies of any ordinances or resolutions which were updated in the last year and are associated with the SMP.
- 10. Provide a list of other parties (such as other municipalities or consultants), which are responsible for implementing any of the program areas of the Stormwater Management Program.
- B. Information and monitoring results gathered in compliance with PART II TOTAL MAXIMUM DAILY LOAD (TMDL) BEST MANAGEMENT PRACTICES AND SURFACE WATER MONITORING, must be reported in compliance with the eDMR reporting requirement as addressed in B. Monitoring Requirements, Frequency and Parameters.

STANDARD CONDITIONS FOR KANSAS WATER POLLUTION CONTROL AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM MS4 PERMITS

- 1. Representative Sampling and Monitoring Report Submittals:
 - A. Samples and measurements taken as required herein shall be representative of the quality of the monitored water. Test results shall be recorded for the day the samples were taken. All samples shall normally be taken at the locations designated by the permittee in the Stormwater Management Plan according to the requirements of this permit. In the event samples must be obtained from a location different than that designated in the Stormwater Management Plan the annual report shall indicate the change of location and provide the justification therefore.
 - B. Monitoring results shall be recorded and reported on forms acceptable to the Division and provided in the annual report. Signed and certified copies of the annual report prepared in accordance with KAR 28-16-59, and all other reports required herein, shall be sent by U.S. mail to:

Kansas Department of Health & Environment Bureau of Water-Municipal Programs Section 1000 SW Jackson Street, Suite 420 Topeka, KS 66612-1367

2. Definitions:

- A. A "grab sample" is an individual sample collected in less than 15 minutes. A "composite sample" is a combination of individual samples in which the volume of each individual sample is proportional to the flow, or the sample frequency is proportional to time.
- B. The terms "Director", "Division", and "Department" refer to the Director, Division of Environment, Kansas Department of Health and Environment, respectively.
- C. "Severe property damage" means substantial physical damage to property, damage to the treatment/control facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a diversion.
- 3. Duty to Mitigate: The permittee shall take all reasonable steps to minimize or prevent any damage to the environment or hazard to human health from any discharge in violation of this permit.
- 4. Test Procedures: All analyses required by this permit shall conform to the requirements of 40 CFR Part 136, unless otherwise specified, and shall be conducted in a laboratory accredited by the Department. For each measurement or sample, the permittee shall record the exact place, date, and time of measuring/sampling; the date and time of the analyses, the analytical techniques or methods used, minimum detection or reportable level, and the individual(s) who performed the measuring/sampling and analysis and, the results. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved procedures, the results shall be included in the Monitoring Report form required in 1.B. above. Such increased frequencies shall also be indicated.
- 5. Change in Discharge: All stormwater discharges shall be in compliance with the conditions of the permit. Modification or expansion of the storm sewer system is allowed. All new storm sewer segments and outfalls constructed after the effective date of the permit, which are located within the permit area, are authorized under the permit and must comply with the permit conditions.
- 6. Proper Operations and Maintenance: The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the requirements of this permit and Kansas and Federal law.

7. Incident Reporting: The permittee shall report any unanticipated significant incidents which would be expected to result in non-compliance with the permit requirements within 24 hours from the time the permittee became aware of the incident. A written submission shall be provided within 5 days of the time the permittee became aware of the incident. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

For an anticipated incident or any planned changes or activities in the permitted control/treatment facility that may result in noncompliance with the permit requirements, the permittee shall submit written notice, if possible, at least ten days before the date of the event.

- 8. Removed Substances: Solids, sludges, debris, or other pollutants removed in the course of control/treatment of stormwater shall be utilized or disposed of in a manner acceptable to the Division.
- 9. Right of Entry: The permittee shall allow authorized representatives of the Division of Environment or the Environmental Protection Agency upon the presentation of credentials, to enter upon the permittee's premises where a stormwater discharge or source is located, or in which are located any records required by this permit, and at reasonable times, to have access to and copy any records required by this permit, to inspect any facilities, monitoring equipment or monitoring method required in this permit, and to sample any stormwater discharges from or influents into the stormwater control/treatment facilities.
- 10. Transfer of Ownership: The permittee shall notify the succeeding owner or controlling person of the existence of this permit by certified letter, a copy of which shall be forwarded to the Division. The succeeding owner shall secure a new permit. This permit is not transferable to any person except after notice and approval by the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.
- 11. Records Retention: Unless otherwise specified, all records and information resulting from the monitoring activities required by this permit, including all records of analyses and calibration and maintenance of instruments and recordings from continuous monitoring instruments, shall be retained for a minimum of 3 years, or longer if requested by the Division.
- 12. Availability of Records: Except for data determined to be confidential under 33 USC Section 1318, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Treated and raw stormwater data shall not be considered confidential. Knowingly making any false statement on any such report or tampering with equipment to falsify data may result in the imposition of criminal penalties as provided for in 33 USC Section 1319 and KSA 65-170c.
- 13. Permit Modifications and Terminations: As provided by KAR 28-16-62, after notice and opportunity for a hearing, this permit may be modified, suspended or revoked or terminated in whole or in part during its term for cause as provided, but not limited to those set forth in KAR 28-16-62 and KAR 28-16-28b through g. The permittee shall furnish to the Director, within a reasonable amount of time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish upon request, copies of all records required to be kept by this permit. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 14. Administrative, Civil and Criminal Liability: The permittee shall comply with all requirements of this permit. Nothing in this permit shall be construed to relieve the permittee from administrative, civil or criminal penalties for noncompliance as provided for in KSA 65-161 et seq., and 33 USC Section 1319.
- 15. Oil and Hazardous Substance Liability: Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under 33 USC Section 1321 or KSA 65-164 et seq. A permittee shall promptly notify the Division by telephone upon discovering crude oil or any petroleum derivative in its storm sewer system or stormwater control/treatment facilities.

Standard Conditions Page 56 of 57

- 16. Property Rights: The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights nor any infringements of or violation of federal, state or local laws or regulations.
- 17. Severability: The provisions of this permit are severable. If any provision of this permit or any circumstance is held invalid, the application of such provision to other circumstances and the remainder of the permit shall not be affected thereby.
- 18. Removal from Service: The permittee shall inform the Division at least three months before any control/treatment unit, or any other part of the control/treatment facility permitted by this permit is to be removed from service and shall make arrangements acceptable to the Division to decommission the facility or part of the facility being removed from service such that the public health and waters of the state are protected.
- 19. Duty to Reapply: A permit holder wishing to continue any activity regulated by this permit after the expiration date, must apply for a new permit at least 180 days prior to expiration of the permit.