

Stormwater Management Plan

Effective: February 28, 2021

Revised: February 28, 2024

Sedgwick County, Kansas

Kansas Permit No. M-AR94-SU01

Federal Permit No. KSR041032

Introduction

This Stormwater Management Plan (SMP) was developed in response to the National Pollutant Discharge Elimination System (NPDES) general permit issued by the Kansas Department of Health and Environment (KDHE). Sedgwick County obtained its initial general permit to discharge stormwater from the municipal separate storm sewer system (MS4) in September of 2004. Federal regulations 40 CFR 122.26(b)(8) defines a Municipal Separate Storm Sewer as: “a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains: (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

The county’s original permit was effective from October 1, 2004 to September 30, 2009 with subsequent years permitted on a yearly basis until February 1, 2014. This general permit which expires January 31, 2019 requires an updated Stormwater Management Plan (SMP) be developed by February 28, 2015 that reduces the discharge of pollutants from the MS4 to the Maximum Extent Practicable, continues to implement the six minimum control measures outlined in the original permit effective in 2004 and satisfies the requirements of the general permit, the Clean Water Act and the Kansas surface water quality statutes and regulations. On November 25, 2019 Sedgwick County received a new stormwater permit effective between December 1, 2019 and November 30, 2024. The new stormwater permit requires a new SMP to be developed by February 28, 2021.

As the permittee, Sedgwick County must continue to review, update and implement best management practices (BMPs) for each of the six minimum control measures defined in the general permit on a yearly basis. Additionally, BMPs shall be put in place to reduce to the Maximum Extent Practicable the Total Maximum Daily Load (TMDL) regulated pollutants that have been identified in specific impaired streams and lakes in the permitted area.

The impaired water (Cowskin Creek) listed in the permit must be monitored in order measure the effectiveness of the chosen BMPs and potentially delist the impaired water. At each of the chosen monitoring sites, samples shall be taken from the impaired water at least four times per year following a 0.5” or greater rain event with at least one sample in the spring and summer. For more information on the testing requirements, refer to the MS4 permit issued by KDHE.

A report shall be submitted to KDHE by February 28 for each year summarizing the BMPs and the effectiveness of the actions taken by Sedgwick County to comply with MS4 permit. Maps, water quality testing results, updated ordinances, stormwater activities, and any changes to the SMP shall be summarized within the annual report.

Minimum Control and Performance Measures

1 Public Education and Outreach

The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 7 points for each calendar year.

1.1 Maintain a stormwater webpage for the permittee. (Lbmp P Ed & O – 01)

Measurable Goal: 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.

Points Claimed: 3 in 2021, 2 in each successive years

1.2 Distribute educational materials (either flyers, brochures, catalog mailings, handouts, or e-mails) addressing various pertinent stormwater public education topics. (Lbmp P Ed & O – 02)

Measurable Goal: Number of all flyers, brochures, catalog mailings, handouts or emails distributed in a year shall equal or exceed the most recent US Census Bureau decennial housing units value shall be documented, and the number of flyers, brochures, or emails distributed shall also be documented. This information and copies of the flyers, brochures, or emails shall be retained on file.

Points Claimed: 2

1.3 Apply notification, placard, covers/hatches with message, or stencil, on stormwater inlets to provide a message similar to No Dumping – Drains to River". (Lbmp P Ed & O – 04)

Measurable Goal: Apply notification on at least 10% of all known stormwater inlets in the MS4.

Points Claimed: 2

1.4 Post the municipality's MS4 permit and SMP document on either the stormwater web page or municipal webpage. (Lbmp P Ed & O – 05)

Measurable Goal: The two documents must be posted for at least six months of the year to claim one point.

Points Claimed: 1

1.5 Provide either a stormwater telephone hotline or web based or text message method for public reporting of illicit discharges. (Lbmp Ed & O – 06)

Measurable Goal: Respond to all reported complaints within 10 days and, if found valid resolve or establish a schedule for resolution within 20 days. Actual resolution may take more than 20 days, but the schedule for resolution must be finalized and the efforts to implement resolution must begin within 20 days following receipt of complaint. Document complaints and response/resolution process for all complaints received in the year.

Points Claimed: 2

1.6 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 building associated with a single address). This training does not need to be provided to the entire school system, e.g. USD. (Lbmp P Ed & O – 08)

Measurable Goal: Provide or fund an educator or speaker that will reach at least 5% of the K-12 students as normally attended school in the selected school campus. Alternately, the funding of BMPs at the school campus may provide of the following: 1) Installation of BMPs at the school 2) stormwater related field trips 3) water quality sampling activities 4) construction of rain gardens on school property 5) rain barrel workshops 6) rain garden workshops

Points Claimed: 3

1.7 Operate an adopt a street program to utilize public volunteers to clean street right-of-way. (Lbmp P Ed & O – 13)

Measurable Goal: 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.

Points Claimed: 1

1.8 Develop or participate in an ongoing social media program on pertinent stormwater public education topics. (Lbmp P Ed & O – 15)

Measurable Goal: 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 stormwater education website.

Points Claimed: 2

2 Public Involvement and Participation

The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 6 points for each calendar year.

2.1 Hold a public hearing or public forum to notify the public about stormwater program activities and to solicit public comments regarding stormwater issues. (Lbmp P I/P – 01)

Measurable Goal: 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.

Points Claimed: 2

2.2 Establish a citizens advisory committee. (Lbmp P I/P – 02)

Measurable Goal: 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.

Points Claimed: 3

2.3 Train either citizen watch groups, homeowner associations (HOAs), or public service groups to recognize illicit discharge activities and communicate observations to appropriate municipal staff. (Lbmp P I/P - 04)

Measurable Goal: Provide training or distribute training materials to the group participants at least once annually.

Points Claimed: 2

2.4 Provide a monetary donation to a scholarship fund for students in an environmental program which would qualify them to work in a field which can result in water pollution control. (Lbmp P I/P – 08)

Measurable Goal: A \$500 contribution in a year is the minimum acceptable amount to achieve this goal.

Points Claimed: 2

2.5 Distribute stormwater educational materials to the public within the permit area. Alternately, the permittee may provide stormwater educational materials, e.g. brochures, flyers, or pamphlets. These materials may address various stormwater topics. For this alternative, these materials may be provided to other nearby municipalities for distribution to the public. The nearby municipalities must be within 30 miles from this permit area. (Lbmp P I/P – 09)

Measurable Goal: The educational materials, for each topic, which are distributed or supplied must have a value of at least \$50. Topics may be anything related to stormwater including but not limited to clean-up guidance following flooding, discouraging littering, explaining and discouraging illicit discharges to the storm sewers, guidance on constructed BMPs for home owners (rain gardens, rain barrels, etc.) guidance on area household hazardous waste receiving centers, and guidance on area recycling programs.

Points Claimed: 1 per topic addressed

3 Illicit Discharge Detection and Elimination

The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 7 points for each calendar.

- 3.1 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 IDD&E – 01)

Measurable Goal: 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.

Points Claimed: 2

- 3.2 Implement a program to evaluate MS4 outfalls to identify illicit discharges, inspect 5% of the known MS4 outfalls during a calendar year and evaluate the ones which have dry weather discharges. Evaluate the water quality of the dry weather discharges to recognize non-stormwater contributions and trace the source of any illicit discharge. (Lbmp IDD&E – 04)

Measurable Goal: 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 with dry weather discharges and the MS4

outfalls inspected, the outfalls with dry weather discharges and the MS4 outfalls associated with illicit discharges.

Points Claimed: 1

- 3.3 Implement a Household Hazardous Waste Collection Program (HHWCP) or document others have implemented such a program to provide such services to all property owners within the permit area. (Lbmp IDD&E – 07)

Measurable Goals: 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.

Points Claimed: 3

- 3.4 Provide a contribution to area recycle programs (such as household hazardous waste disposal facilities, e-cycle facilities, paper shred facilities, pharmaceutical disposal facilities etc.) designed to properly dispose of types of waste or materials which have previously been discarded to or adjacent to within the MS4, streams, or lakes within or adjacent to the permittee's permit area. The area program must be within 30 miles from the permit area. (Lbmp IDD&E – 09)

Measurable Goal: The contribution may be made to programs which take tires, automotive fluids, batteries, or other wastes for which there is any documentation such wastes have been discarded as addressed under the BMP summary. The contribution must total a minimum of \$500 in the year (\$100 in the year for alternative lower population's municipalities) which points are claimed. The contributions can be monetary or can be in the form of goods and/or services with an agreed specified value. Contributions may be made to area household hazardous waste programs, private recycle/reuse facilities or civic/volunteer organizations assisting in recycle.

Points Claimed: 2

3.5 Inspect, 5% of the MS4 system Stormwater inlets and/or outfalls within the permit area all conducted within a 12-month period to aid in identifying illicit discharges. If in a 12-month period 15 of the MS4 system inlets and/or outfalls are inspected a higher point value may be claimed in the year the required percentage of inspections are completed. (Lbmp IDD&E – 10)

Measurable Goal: Generate a summary report of the inspection including the number of inlets and/or outfalls visually inspected, condition comments, illicit discharges identified and the results of efforts to eliminate illicit discharges, e.g., discharge line disconnected and redirected to the sanitary sewer or discharge practice terminated.

Points Claimed: 3 points for 2%, 5 points for 15%

4 Construction Site Stormwater Runoff Control

The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 6 points for each calendar year.

4.1 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 in total disturbs one acre or more. (Lbmp CSSRC – 01)

Measurable Goal: Enact a regulatory ordinance, or other enforceable measure that requires an SESC Plan for all developments disturbing sites which 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 Claimed: 2

4.2 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 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 is total disturbs one acre or more. (Lbmp CSSRC – 02)

Measurable Goals: Require implementations of BMPs in compliance with the design manual on all sites which meet the disturbed area standard as specified in the BMP summary.

Points Claimed: 2

4.3 Develop a site plan review process which considers potential water quality impacts which many occur during construction as well as post construction impacts. (Lbmp CSSRC – 04)

Measurable Goal: 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 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 Claimed: 2

4.4 Develop written procedures for inspection of construction sites. Develop a Stormwater Construction Site Inspection Guide for use by municipal inspectors. (CSSRC – 06)

Measurable Goal: The procedures document must address the administrative aspects associated with required inspections of construction sites, the issuance of inspection reports, notice 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 by other municipal staff,

guidance on photo log of the inspection and inspection checklists for use by the inspector.

Points Claimed: 2

4.5 Acquire or develop a software tracking system to track inspections and related tasks. (Lbmp CSSRC – 07)

Measurable Goal: The tracking system must allow for scheduling and follow-up activities such as re-inspections, mailing notices or reports, etc.

Points Claimed: 1

5 Post Construction Site Stormwater Management in New Development and Redevelopment

The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 7 points for each calendar year.

5.1 Apply the Stormwater Manual criteria to all future developments. Review and revise the manual as needed. (Lbmp P-CSM – 01)

Measurable Goal: Through implementation of the appropriate BMPs reduce the peak stormwater flow rate to a value equal to or less than the rate which would be experienced on the site prior to development/redevelopment project based upon modeling a standard storm event.

Points Claimed: 3

5.2 Apply the Stormwater Manual criteria for post-construction structural or non-structural BMPs which are required to be incorporated in any development/redevelopment project. (Lbmp P-CSM – 02)

Measurable Goals: Development and implementation of 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.

Points Claimed: 2

5.3 Develop and implement a program for inspection of permittee owned structural BMPs which includes implementation of needed maintenance to ensure long-term operation of the BMPs. (Lbmp P-CSM – 05)

Measurable Goal: The program shall require the inspection of at least 10% of the structural BMPs on an annual basis.

Points Claimed: 2

5.4 Develop and implement a program for inspection of known privately owned structural BMPs which includes providing owner of the BMPs and inspection report which specifies needed maintenance to ensure long-term operation of the BMPs. (Lbmp P-CSM – 06)

Measurable Goal: The program shall require inspection of at least 10% of the known privately owned structural BMPs on an annual basis.

Points Claimed: 2

6 Pollution Prevention/Good Housekeeping Municipal Operations

The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 6 points for each calendar year.

6.1 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 objects to receiving waters. (Lbmp P P/G H – 01)

Measurable Goal: The screening device or method is required to remove objects that exceed at least 1.5 inches in size. The device or method must be capable of continuous operations during stormwater discharges. An emergency bypass or overflow line can be included to avoid surcharging/flooding in the event the device or method fails to operate properly at any time. A log of material captured and prevented from discharge to the receiving water shall be maintained.

Points Claimed: 3 points may be claimed in the year the screening device or method is initially implemented, 2 points may be claimed for each successive year the screening device or method continues to be implemented.

6.2 Implement a recycle and proper waste disposal program for staff to reduce potential for litter, to recycle waste oil, batteries, glass containers, plastic containers and paper products. (Lbmp P P/G H – 02)

Measurable Goal: A log of the material 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 wells as the date of transport.

Points Claimed: 2

6.3 Proper application of herbicides and pesticides (Lbmp P P/G H – 03)

Measurable Goal: Noxious Weeds Department's Applicators shall be certified within 1 year of hire to ensure proper chemical use.

Points Claimed: 1

6.4 Implement a program for street sweeping in which the street sweeping are collected and disposed of properly or recycled/reused if possible. (Lbmp P P/G H – 05)

Measurable Goal: 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 were the material was sent to be recycled and/or reused.

Points Claimed: 2 points may claimed in the year 10% of the listed streets are swept.

6.5 Develop an employee training program to ensure permittee's staff understand what actions they can take in the workplace to minimize stormwater pollution. (Lbmp P P/G H – 06)

Measurable Goal: 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.

Points Claimed: 1

6.6 Implement a program to inspect stormwater inlets to identify illicit discharges and clean drop inlets of accumulated debris. (Lbmp P P/G H – 07)

Measurable Goal: 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 inlet about illicit discharges. For inlets which have any accumulation of debris, remove the debris for proper disposal.

Points Claimed: 1 for at least 5%, 2 for at least 10%

6.7 Develop, implement keep updated an online storm sewer map assessable to the public. (Lbmp P P/G H – 08)

Measurable Goal: 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.

Points Claimed: 2

6.8 Identify permittee owned facilities, open space and buildings that can be retrofitted for stormwater BMPs. (Lbmp P P/G H – 09)

Measurable Goal: Retrofit projects can include: green infrastructure, catchment improvements, Pollutant of Concern targeted BMPs, and native plant restoration projects.

Points Claimed: 1 per site

6.9 Install a stormwater treatment system for capture of either trash, sediment, or debris. Systems may include proprietary stormwater treatment systems 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, a system may be installed on a stormwater line to provide treatment at problem locations. (Lbmp P P/G H – 12)

Measurable Goal: 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 material (noting either volume or weight) captured and prevented from discharge to the receiving water shall be maintained.

Points Claimed: 3 point 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.

7 Total Maximum Daily Load (TMDL) Regulated Pollutants

The implementation of BMPs for this minimum control measure must result in accumulation of a minimum of 6 points for each calendar year.

7.1 Install pet waste stations which include a glove/bag dispenser with signage and waste can to encourage pet waste disposal at either park, trails, rest areas, or other public lands owned by the permittee. (Lbmp TMDL – 01)

Measurable Goal: At least one pet waste station shall be installed at the selected park, trail, rest area, or other public land. The station(s) shall include signage which encourages proper pet waste disposal/cleanup and a waste can.

Points Claimed: 1

7.2 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. (Lbmp TMDL – 05)

Measurable Goal: 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 US census bureau decennial housing units value shall be documented, the number of documents distributed shall also be documented. This information and copies of the documents shall retain on file.

Points Claimed: 1

7.3 Distribute “Only Rain Down the Drain” door hangers or similar document. (Lbmp TMDL – 06)

Measurable Goal: Provide in portions of the permit area with suspected illicit discharges. In the year the number of documents distributed shall be equal or exceed 10% of the most recent US Census Bureau decennial housing units value for the permit area. The applicable US 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.

Points Claimed: 2

7.4 Inspect 10% of all known MS4 outfalls for dry weather discharges either annually or twice per year to identify potential illicit discharges. (Lbmp TMDL – 07)

Measurable Goal: 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 if a portion of all the discharge is illicit. Document the findings and initiate efforts to eliminate any identified illicit discharges.

Points Claimed: 3 points claimed for annual inspection and 5 points claimed for inspecting twice a year.

7.5 Construct a stream bank stabilization project. (Lbmp TMDL – 12)

Measurable Goal: Install a minimum of 100 feet of bank stabilization at a site(s) with a history of erosion.

Points Claimed: 2