

# **Stormwater Management Plan**

Effective: February 28, 2021

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 4 points total on an annual basis for each calendar year of 2021 and 2022. The point total requirement increases to 7 points for each calendar year beginning in 2023.*

### 1.1 Maintain a stormwater webpage for the permittee.

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.

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”.

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.

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 Operate an adopt a street program to utilize public volunteers to clean street right-of-way.

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

## **2 Public Involvement and Participation**

*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 of 2021 and 2022. The point total requirement increases to 6 points for each calendar year beginning in 2023.*

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.

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.

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 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.

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

### **3 Illicit Discharge Detection and Elimination**

*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 of 2021 and 2022. The point total requirement increases to 7 points for each calendar year beginning in 2023.*

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.

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 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.

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

3.3 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.

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 populations 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

#### **4 Construction Site Stormwater Runoff Control**

*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 of 2021 and 2022. The point total requirement increases to 6 points for each calendar year beginning in 2023.*

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.

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: 3 points may be claimed in the year of the ordinance and 2 points may be claimed for each successive year.

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.

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: 3 points may be claimed in the year of the ordinance and 2 points may be claimed for each successive year.

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.

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: 3 points may be claimed in the year of the ordinance and 2 points may be claimed for each successive year.



## **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 5 points total on an annual basis for each calendar year of 2021 and 2022. The point total requirement increases to 7 points for each calendar year beginning in 2023.*

5.1 Apply the stormwater manual criteria to all future developments. Review and revise the manual as needed.

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.

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.

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

Points Claimed: 3 points may be claimed in the year program initially developed and 2 points for successive years.

## **6 Pollution Prevention/Good Housekeeping Municipal Operations**

*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 of 2021 and 2022. The point total requirement increases to 6 points for each calendar year beginning in 2023.*

### 6.1 Proper application of herbicides and pesticides

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

Points Claimed: 1

### 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.

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 well as the date of transport.

Points Claimed: 3 points can be claimed the first year of the program and 2 points in each successive years.

### 6.3 Install a screening device or method at a single 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.

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. A log of the material captured and prevented from discharge to the receiving water shall be maintained.

Points Claimed: 3 points can be claimed the first year the screening device is implemented and 2 points in each successive years.

### 6.4 Implement a program for street sweeping in which the street sweeping are collected and disposed of properly or recycled/reused if possible.

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 where the material was sent to be recycled and/or reduced.

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

6.5 Install a canopy or other covered area for load-out of salt or other de-icing chemical where such de-icing materials are stored either within the permit area or a storage facility located within 30 miles of the permit area.

Measurable Goal: The canopy or covered area shall be large enough to allow normal load-out and cleanup of spilled de-icing materials, without mixing with precipitations and resulting in contaminated runoff from the site, during and immediately following load out operations.

Points Claimed: 3 points may be claimed in the year the canopy is constructed, 2 points in subsequent years the canopy is in operation.

## **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 4 points total on an annual basis for each calendar year of 2021 and 2022. The point total requirement increases to 6 points for each calendar year beginning in 2023.*

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.

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.

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 Inspect 10% of all known MS4 outfalls for dry weather discharges either annually or twice per year to identify potential illicit discharges.

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.