

# Stormwater Management Plan

## City of Andover, KS

Prepared February 22nd, 2022

Submitted in Compliance with the Requirements of  
Kansas Water Pollution Control General Permit  
Permit No. M-WA01-SU01

The City of Andover, Kansas (herein referred to as “we”) has prepared this Stormwater Management Plan to outline the measures we will take to reduce the discharge of pollutants from our Municipal Separate Storm Sewer System (MS4) to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act and our NPDES Permit.

This Plan is being submitted in compliance with the requirement of Kansas Water Pollution Control General MS4 Permit No. M-WA01-SU01 for the term beginning December 1, 2019 and ending November 30, 2024. This plan shall be evaluated annually and changes to this plan may be made as allowed by the permit and approved by KDHE.

Unless otherwise indicated, measure will be implemented for the entire City, regardless of whether such are part of an “urbanized area” as defined in the permit.

The City intends to engage in partnerships with other municipal, County, and regional organizations when possible to jointly accomplish portions of this work. And activity which is completed by another entity as part of such partnerships and which applies to our population and jurisdiction will be counted towards our compliance.

## **Part A: Six Minimum Control Measures**

We plan to implement the following best management practices (BMPs) as part of the six control measures:

### 1. Public Education

- a. We will implement a public education program which includes message development and media distribution in the community using all local media outlets for Stormwater news releases.

Measurable Goal: A minimum of one news release per year on general Stormwater information.

- b. 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 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.

- c. 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 this notification on at least 10% of all known stormwater inlets in the MS4.

- d. Post the municipality's MS4 permit and SMP document on either the stormwater web page or the municipal webpage.

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

## 2. Public Involvement and Participation

- a. 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.

Measurable Goal: 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.

- b. 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.

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

- c. Distribute stormwater educational materials to the public within this 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.

### 3. Illicit Discharge Detection and Elimination

- a. 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

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

- b. 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 claim

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

- c. 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.

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.

- d. 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

Measurable Goals: 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 redirect to the sanitary sewer or discharge practice terminated.

#### 4. Construction Site Stormwater Runoff Control

- a. 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.

Measurable Goal: 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.

- b. Develop a site plan review process which considers potential water quality impacts which may 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 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.

- c. Establish effective requirements for construction sites to control wastes. Develop through ordinance or other enforceable means requirements for construction site Operator or owners to control wastes. At a minimum control shall be imposed to prevent entry into the MS4 for the following wastes;

1. Discarded building materials
2. Concrete truck washout
3. Chemicals
4. Litter
5. Sanitary Waste

Measurable Goal: Enact ordinance or other effective means to achieve control of wastes at construction sites.

- d. Develop written procedures for inspection of construction sites. Develop a Stormwater Construction Site Inspection Guide for use by municipal inspectors.

Measurable Goal: 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.

5. Post-Construction Stormwater Management in New Development and Redevelopment.

- a. Develop and adopt a custom design manual for Post-Construction Stormwater Management which specifies various structural BMPs which are required for new development and redevelopment construction sites which hare greater than 1 acre or for which there is construction activity disturbing less one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more. We will develop, implement and enforce a program to address post-construction.

Measurable Goal: The custom design manual shall impose requirement to achieve at least one of the following standards:

- Capture, at least, the first 0.5 inches of precipitation on the development/redevelopment site and utilize methods to prevent discharge offsite, including but limited to:
  - Retain onsite
  - Infiltrate
  - Evaporate

- Transpire or
  - Beneficially reuse
  - Through implementation of appropriate BMP(s) reduce the peak stormwater flow rate to a value equal to or less than the rate which would be experienced on the site prior to the development or redevelopment project based on project based upon modeling a standard storm event, e.g. 1.0 inch – 6- hour event assuming saturated soil conditions.
  - Other sizing or detention standard generally accepted by design engineers as adequate for the permittee’s local.
- b. Develop and implement a program to insure adequate long-term cleaning, operation and maintenance of all municipally owned or operated post construction structural stormwater BMP facilities. The program shall address several different types of these BMP systems. The systems which are addressed, shall include any type of post-construction structural BMP system, contained in the MS4. These shall include, if so present, at a minimum the following:
- > detention ponds
  - > retention ponds
  - > grass swales
  - > pervious paving systems
  - > wetlands
  - > vegetative filter strips
  - > manufactured stormwater Treatment devices (swirl separators, screens, etc.)
  - > drop inlet-catch basin.

Measurable Goal: The program shall be detailed in a written a written document and made available to all pertinent maintenance staff.

- c. 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 inspection of at least 10% of the structural BMPs on an annual basis. Identified maintenance activities shall be completed:

1. in the same year of inspection or

2. completed as dictated by the permittee's maintenance/O&M plan
3. or a written plan for completion of the necessary maintenance shall be completed in the same year of inspection with the objective for completion of the maintenance activity within 18 months.

6. Pollution Prevention/Good Housekeeping for Municipal Operations

- a. 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 reused.

- b. Implement a program to inspect stormwater inlets to identify illicit, discharges and clean drop inlets of accumulated debris.

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.

## **Part B: Total Maximum Daily Loads**

1. Selection of Best Management Practices (BMPs)

- a. Install pet waste stations which include a glove/bag dispenser with signage and waste can to encourage pet waste disposal at City parks and trails.

Measurable Goals: At least on pet waste station shall be installed 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.

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

Measurable Goals: Complete inspection of 10% of all known MS4 outfalls, either annually or twice per year during dry weather periods. If dry weather discharge is found follow-up with investigation to determine if a portion or ail the discharge is illicit. Document the findings and initiate efforts to eliminate any identified illicit discharges

## **Part C: Map of Permit Area**

Electronic maps including TMDL sampling locations and sampling results are made public and will be made public on the city website. An electronic map of the MS4 stormsewer will also be linked on the city website.