

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 seq., the "Act",

Permittee: City of Topeka, Kansas

Permittee's Address: Water Pollution Control
1115 NE Poplar Street
Topeka, KS 66616

Drainage Basin: Kansas River

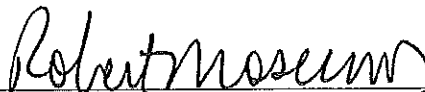
is hereby authorized to discharge stormwater from the system as described herein in accordance with the limitations, conditions and requirements set forth in this permit.

This permit is effective August 1, 2014, supersedes the previously issued Kansas Stormwater Pollution Control permit M-KS72-S001 and expires July 31, 2019.

PERMIT AREA AND AUTHORIZED DISCHARGES

This permit covers all areas within the permittee's jurisdiction (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 all existing or new stormwater point source discharges which discharge to waters of the state from the Municipal Separate Storm Sewer System (MS4) located within the Permit Area. New stormwater discharges are those which are created during the term of this permit.



Secretary, Kansas Department of Health and Environment

July 11, 2014
Date

PART I. STORMWATER MANAGEMENT PROGRAM (SMP) DOCUMENT REQUIREMENTS

- A. Current Stormwater Management Plan - The permittee shall continue to implement, and enforce the current Stormwater Management Program (SMP) until an updated SMP is implemented.
- B. Updated Stormwater Management Plan - By February 28, 2015, the current SMP document shall be updated to include the additional requirements in this permit. The updated SMP shall be designed to:
1. reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP),
 2. continue to implement the six minimum control measures,
 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 and this permit constitutes compliance with the standard of reducing pollutants to the Maximum Extent Practicable.
- C. Six Minimum Control Measures - The Permittee shall continue to review, update and implement BMPs with measureable goals for each of the six minimum control measures. The six minimum control measures are:
1. Public Education and Outreach
 2. Public Involvement and Participation
 3. Illicit Discharge Detection and Elimination
 4. Construction Site Stormwater Runoff Control
 5. Post-Construction Stormwater Management in New Development and Redevelopment Projects
 6. Pollution Prevention/Good Housekeeping for Municipal Operations

The detailed requirements for the Six Minimum Control measures are explained at the following url:

http://www.kdheks.gov/muni/download/Fact_Sheet_six_min_controls.pdf

D. Monitoring Industrial and High Risk Run-off:

1. A program for monitoring industrial and high risk run-off to control pollutants from industrial facilities shall be developed and detailed within the SMP. This program for monitoring and controlling such run-off shall include the following:
 - a. Develop and maintain a list of industrial facilities that the permittee determines are contributing a substantial pollutant loading to the municipal storm sewer system. This list shall include municipal landfills; hazardous waste treatment, disposal, or recovery facilities; and facilities that are subject to section 313 of title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).
 - b. Annually at least two facilities on the list shall be identified as high priority facilities and an inspection shall be conducted with sampling of stormwater run-off, for the following parameters:
 - 1) Oil and grease - mg/l
 - 2) Chemical oxygen demand - mg/l
 - 3) pH - Standard Units
 - 4) Biochemical oxygen demand (5 day) - mg/l
 - 5) Total suspended solids - mg/l
 - 6) Total phosphorus - mg/l
 - 7) Total Kjeldahl nitrogen (TKN) - mg/l reported as N

- 8) Nitrate plus nitrite (NO₃NO₂) - mg/l reported as N
- 9) Total Nitrogen - mg/l calculated as TKN + NO₃NO₂
- 10) Any other pollutant limited in effluent guidelines subcategories
- 11) Any other pollutant listed in an existing NPDES permit for the industrial facility.

A minimum of a single grab sample shall be obtained within the first 30 minutes of storm water run-off. The storm event should result in 0.5 inch or more rainfall.

E. 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 updated SMP shall provide:

1. Selection of Best Management Practices (BMPs)

The permittee shall provide an updated SMP document which discusses the structural and non-structural BMPs that have been or will be implemented to reduce the discharge of TMDL regulated pollutants from the MS4 significantly contributing to or causing an exceedence of the water quality standard. The SMP shall identify:

- a. which BMPs will be implemented, including non-structural and/or structural measures, as selected from EPA's Menu of BMPS located at (<http://cfpub.epa.gov/npdes/stormwater/menuofbmpps/>) or from a local or regionally appropriate storm drainage criteria manual such as the Kansas City APWA/MARC BMP Manual or such other BMPs as are appropriate.
- b. a description of non-structural practices being implemented, including the six minimum control measures and/or other source control measures,
- c. the location of the BMPs, if structural,
- d. the design factors associated with the BMPs, if structural,
- e. the reported effectiveness of the chosen BMPs based on regionally appropriate data or performance analyses in the International Stormwater BMP Database (<http://www.bmpdatabase.org>) or other appropriate sources,
- f. a schedule for constructing and/or implementing the BMPs,
- g. an inspection/maintenance plan and schedule for each BMP, as appropriate,
- h. a plan and schedule to monitor the effectiveness of the BMPs.

2. Establishing measurable goals to assess the effectiveness of the TMDL BMPs

- a. Overall TMDL measurable goals shall be based upon instream/inlake sampling of the main stream(s)/lake(s) existing in, or entering and leaving the Permit Area (or Permit Areas for co-operative stormwater control efforts as provided in paragraph 4 below) during or immediately following storm events.
- b. 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 performance goals are being met.

- c. Measurable goals for reducing pollutants contributed by MS4s shall be expressed in quantifiable values to:
- 1) reduce the concentration of pollutants,
 - 2) reduce the total mass of pollutants,
 - 3) a combination of the above methods and
 - 4) expressed as average and median values (percent reduction of inflow volume, reduction in pollutant concentration or mass loading) or for bacteria as a geometric mean.

3. Maps illustrating:

- a. the Permit Area, boundaries of the contributing drainage basins and primary sub-basins, within and outside the Permit Area,
- b. the locations of the BMPs, if structural,
- c. the stormwater BMP influent/effluent, lake and stream monitoring locations, as appropriate
- d. 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 (BMP) 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.

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

G. Monitoring Requirements - See Part III.

H. Reporting Requirements - See Part V.

I. Modifications to BMPs and the Stormwater Management Program document

For minor BMP modifications: Within 60 days of a determination by the permittee or by written notification from KDHE, the permittee shall modify the BMP if modifications are needed to achieve the goals of the program.

For major BMP modifications/replacement: Within 60 days of a determination by the permittee or by written 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 modifications, if necessary, submitted with the annual report due to KDHE by February 28 of each year.

PART II. TOTAL MAXIMUM DAILY LOAD (TMDL) BEST MANAGEMENT PRACTICES

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 impaired watershed stream and/or lake as listed below:

T M D L T A B L E

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 or Lake to Target |
|--------------------------|---|
| Bacteria | Kansas River, South Branch Shunganunga Creek, Shunganunga Creek, Deer Creek |
| Nutrients | Kansas River, MS4 discharges to Lake Shawnee* |
| Sediment | Kansas River |
| | |
| | |
| | |

*Monitoring of the lake is not required by this permit. It is anticipated Shawnee County will monitor Lake Shawnee.

PART III. MONITORING REQUIREMENTS, FREQUENCY AND PARAMETERS

Monitoring Requirements

- A. Storm Event Monitoring: The permittee shall implement a wet weather monitoring program designed to assess the improvements in the water body due to the BMP control measures implemented under the SMP. Sampling and analysis will include, at a minimum, instream monitoring of the main stream(s) entering and leaving the jurisdictional Permit Area for the pollutants identified by the governing TMDLs during or immediately after a specified storm event. For impaired lakes within the Permit Area, monitoring of conditions within those lakes will be conducted after rainfall has ceased and runoff into those lakes has curtailed. Additionally, monitoring of streams flowing within the Permit Area, 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 and the SMP.
- B. In addition to the storm event monitoring, the permittee may want to conduct dry weather monitoring, as appropriate, to determine the effectiveness or violations of the six minimum control measures or to confirm baseline water quality data.

Monitoring Frequency and Periods

- A. Four storm events per year per monitoring site (Storm event shall mean a 24-hr rain or snow melt event of greater than or equal to 0.50 inches.),
- B. At a minimum, monitoring shall 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.
- C. Additional monitoring may be conducted outside these timeframes if needed to meet the requirements of this permit.

Parameters

| <u>TMDL Impairment</u> | <u>Parameter to be Monitored</u> | <u>MRL*</u> | <u>Sample Type</u> |
|------------------------|----------------------------------|-------------|---------------------|
| Nutrients | Total Phosphorus as P (mg/l) | 0.05 | Grab or Composite |
| Nutrients | Orthophosphate as P (mg/l) ** | 0.05 | Grab or Composite |
| Nutrients | Nitrate+Nitrite as N (mg/l) | 0.10 | Grab or Composite |
| Nutrients | Total Kjeldahl Nitrogen (mg/l) | 0.10 | Grab or Composite |
| Nutrients | Total Nitrogen (mg/l) | | Calculate*** |
| Sediment | Total Suspended Solids (mg/l) | 10 | Grab or Composite |
| Sediment | Turbidity (NTU) | | Grab or Composite |
| Sediment (Lake) | Secchi Disk, (Ft) | | Visual |
| Bacteria | E. coli (Col/100 ml or MPN) | 10 | Grab |
| Others | As provided by KDHE | | As provided by KDHE |

* Minimum Reportable Limit

** Optional - useful for measuring the impacts of lawn fertilizers and other sources of dissolved phase phosphorus.

*** Total Nitrogen = Total Kjeldahl Nitrogen + Nitrate+Nitrite.

In addition, for streams at the time of sampling:

| | |
|--|------------------|
| Rainfall, inches (last 24 hours) | Gauge Reading |
| Stream Flow, CFS and Stream Depth from a standard - Feet | Estimate/Reading |
| Stream Level (rising, falling, steady) | Describe |
| Stream Velocity (rapid, normal, still(backwater)) | Describe |

For storm events, grab samples for instream monitoring are to be obtained within 4 hours of rising stages on streams entering and leaving the Permit Area. 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 to be collected over the course of the hydrograph and flow-weighted to provide a representative composite sample for the storm event. However, multiple composite or grab samples for an extended storm event may be taken to measure the variation of pollutant concentrations with time or stormwater flow.

PART IV. PERMIT COMPLIANCE ACTIVITIES AND SCHEDULES

- A. Year 2014: Complete inventory and maps of the outfalls, streams, and lakes in the targeted areas, select drainage basins and sub-basins as candidates for structural or non-structural BMPs, select and initiate, or continue existing effective plans for source control programs targeted to the TMDL pollutants. By September 1, 2014, implement new source control programs and the initial stormwater monitoring program.
- B. Year 2015: Continue the source control programs and monitoring of storm events at selected sites.

- C. Year 2016: Continue source control programs and monitoring of storm events at selected site. By July 1, 2016, select, design and initiate installation of appropriate structural BMPs.
- D. Year 2017: Continue BMP installation and/or source control programs and stream/lake/BMP outfall monitoring as appropriate. Complete BMP installations by the end of the year.
- E. Year 2018: Continue stream/lake/BMP monitoring and effective source control programs,
- F. By February 28, 2015, a copy of the initial updated/implemented SMP document developed pursuant to this permit's requirements shall be submitted to KDHE for review. Subsequent annual reports shall be submitted to KDHE by February 28 of each year for the preceding calendar year.
- G. By February 28, 2019, provide a final report on effectiveness of source controls and structural BMPs to achieve the measureable goals and summarize water quality data from selected monitoring sites.

PART V. REPORTING

The permittee shall submit a calendar year annual report to KDHE by February 28 of each year with the initial report under this permit due February 28, 2015 for calendar year 2014. The report shall cover the activities during the previous calendar year and must include:

- A. the status of compliance with permit conditions, an assessment of the appropriateness of the 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 and TMDLs as listed in the Stormwater Management Program document;
- B. 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;
- C. a summary of the stormwater activities that were scheduled to be undertaken during the previous calendar year and the status of these activities;
- D. a summary of the stormwater activities which are scheduled to be undertaken during the next reporting cycle (including an implementation schedule);
- E. a map showing changes in the permittee's jurisdictional Permit Area;
- F. description of significant changes in any of the BMPs including those in the SMP implementing the six minimum control measures;
- G. updated ordinances or resolutions associated with the SMP or the six minimum control measures shall be provided with the annual reports.
- H. a summary of the inspection results and information obtained under the Monitoring Industrial and High Risk Run-off section of this permit.
- I. a list of other parties, if any, which will be responsible for implementing any of the program areas of the Stormwater Management Program.

STANDARD CONDITIONS FOR
KANSAS WATER POLLUTION CONTROL AND
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM MS4 GENERAL 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 proportioned to the flow rate over the sample period, 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.

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.