

# City of Leavenworth, Kansas



January 2, 2013 - December 31, 2013

Kansas Permit No: M-MO12-SN01

Federal Permit No: KSR044011

February 28, 2014

# CITY OF LEAVENWORTH

Kansas Stormwater Annual Report Form for Municipal Separate Storm Sewer Systems  
(MS4s)

**January 2, 2013 – December 31, 2013**

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**KANSAS STORMWATER ANNUAL REPORT FORM  
FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS  
(MS4s)**

Check box if this  
is a new name,  
address, etc.

**A. Permittee Information and Reporting Period**

Permittee:	<u>City of Leavenworth, Kansas</u>	<input type="checkbox"/>
Mailing Address 1:	<u>100 N 5<sup>th</sup> Street</u>	<input type="checkbox"/>
Mailing Address 2:	<u></u>	<input type="checkbox"/>
City:	<u>Leavenworth</u>	<input type="checkbox"/>
State:	<u>Kansas</u>	<input type="checkbox"/>
Zip Code:	<u>66048</u>	<input type="checkbox"/>
Contact Person:	<u>Michael G. McDonald, P.E.</u>	<input type="checkbox"/>
Contact Phone #:	<u>913-684-0375</u>	Cell #: <u></u>
Kansas Permit No.:	<u>M</u> - <u>MO12</u> - <u>SN01</u>	
(Example)	<u>M</u> - <u>MC21</u> - <u>SU01</u>	

The enclosed report is provided for the 2009-2010 permit year. This report covers activities from October 1, 2009 – September 30, 2010:

The permit requires this annual report be submitted to the Kansas Department of Health and Environment (KDHE) by February 1, 2011.

**B. Executive Summary**

Append an executive summary to this report which briefly covers the major aspects of the MS4 stormwater management program enacted during the year. In completing the executive summary, the preparer should address the following questions:

1. Were there any aspects of the program that appeared especially effective at reducing pollutants in your stormwater discharge?
2. Were there any aspects of the program that provided unsatisfactory results?
3. What was the most successful part of the program?
4. What was the most challenging aspect of the program?

The executive summary does not need to be extensive and detailed. It is anticipated the executive summaries will range from one half of a page to two pages in length depending on the scope of the program.

# City of Leavenworth

## Executive Summary

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### **SECTION 1: EXECUTIVE SUMMARY**

To satisfy of the requirements of NPDES permit, this annual report summarizes the City of Leavenworth's plans and actions to reduce the discharge of pollutants from the municipal separate storm sewer system (MS4) to the maximum extent practicable, to protect water quality, and to meet the appropriate water quality requirements of the Clean Water Act. The information contained within this report was obtained through interviews with city staff, review of permits and projects from 2013, and examining publications made available to the citizens of Leavenworth. These discussions with office and field personnel from the Public Works Department highlighted the key aspects and defined the current state of the stormwater management plan and provided insight into future improvements to the stormwater quality standards. Naji Ahmad of the EPA visited the City in December 2013 and reviewed the City Stormwater Program. At this time there has been no report received from EPA.

Stormwater quality is addressed most notably during the planning phase of projects. This begins at the review by the "Development Review Committee", which provides general advice and guidance to applicants and other staff on most projects prior to the design process. Stormwater quantity and quality issues are discussed. Construction drawing reviews have proven especially effective at reducing pollutants in stormwater by ensuring large and small projects attempt some measure of action. Plan reviews include evaluations of both the construction site erosion control plan and the drainage plan of the development. Addressing stormwater issues early in the design process has ensured that Best Management Practices (BMPs) are well suited for the site and adequate information is included in the plans for construction.

Leavenworth has been focused on incorporating BMPs such as native plantings and filter strips into their plans as most developments occupy existing lots with existing drainage systems. Erosion and stream bed degradation issues on Five-Mile Creek at Wastewater Treatment Plant were addressed using a "natural" approach. The result was a series of rip-rap grade control structures and a vegetated bank. Pervious concrete was used on one project as a test for further consideration. Public Works staff has also encouraged the use of filter strips on multiple development projects due to effective pollutant removal, low costs and low-cost maintenance efforts being required.

One of the least effective parts of the stormwater management plan lies with managing existing BMPs on private developments. Lack of maintenance to detention ponds by Home Associations continues to be a concern by both the HOA's and the City. Failure to maintain these systems can decrease the functionality of these critical stormwater infrastructure components over time and adversely impact water quality as well. In response the city will formally contact owners of these facilities to reinforce the importance of their responsibility to properly maintain these ponds.

# City of Leavenworth

## Executive Summary

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Efforts to reach out and educate the citizens of Leavenworth through media such as the city website, the local cable television station (Channel 2), Facebook, and Twitter have increased public awareness of environmental issues in general. The Adopt-A-Park program added three locations (twelve total). Staff has been contacted by Boy Scouts and schools regarding appropriate projects although none have materialized.

Preparing for one of the largest changes to the stormwater management plan continues. The City did adopt a comprehensive revision to the planning documents – creating a “Master Development Regulations Manual” that assists in clarifying responsibilities of various Departments. A draft manual of procedures related to Stormwater Regulations in Leavenworth was reviewed with the City Manager. Further revisions were necessary before it can be reviewed with local engineers, developers and contractors. Adoption of an updated stormwater infrastructure manual is still necessary and is a key goal for 2014. To prepare the city has reviewed similar regulations from KC APWA section 5600, the Mid America Regional Council (MARC) BMP manual, and several municipalities including the City of Overland Park. The new regulations will be customized to highlight BMPs such as filter strips that city staff has come to believe are most suitable in the city of Leavenworth due to the existing soil types, maintenance requirements, and economy.

**C. Stormwater Management Program**

		Place mark in the appropriate box	
		Yes	No
1.	Has the Stormwater Management Plan (SMP) been developed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a.	If yes, Has it been submitted to KDHE as required by the permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	If no, it needs to be developed and submitted to KDHE preferably with this annual report but no later than February 1, 2011. Additionally, if the SMP requires modification as required by the last paragraph in Part II of the permit, the modified SMP must be submitted with this annual report..		

**Total Maximum Daily Load (TMDL) Best Management Practices**

The permit requires the implementation of these BMPs prior to October 1, 2006.

		Place mark in the appropriate box.		
		Yes	No	Not Applicable
1.	Were any best management practices (BMPs) intended to attenuate the discharge of TMDL regulated pollutants implemented? See your permit to determine if TMDL regulated pollutants are listed for the receiving streams affected by your stormwater system.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.	List all of the BMPs intended to attenuate the discharge of TMDL regulated pollutants as identified in the SMP and provide the requested information on the following table.			



## E. Stormwater Management Program Requirements (Six Minimum Control Measures)

### 1. Public Education and Outreach

The permit requires the implementation of these BMPs prior to October 1, 2005. List all of the public education and outreach BMPs as identified in the SMP and provide the requested information in the following table.

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress on Achieving Goal(s) (Measured Result)
1.1	Maintain a Library of Stormwater Educational Materials.	Provide copies of the Stormwater Master Plan for viewing at the Public Library.	The Stormwater Master Plan has remained available to the public at the Leavenworth Public Library.
1.2	Develop a Series of Educational Brochures on the Impacts of Stormwater Pollution.	Distribute brochures and make them available to the public.	This year's "City Connection" newsletters have highlighted Adopt-a-Park Program, Legacy Tree Program and the construction of detention basins. Parks Department has increased visibility and enforcement of the "dog doo" rules at parks and reports it has been a successful program.
1.3	Provide Information to Citizens regarding the City of Leavenworth Solid Waste Division.	Distribute trash bags to citizens with proper disposal handout.	Trash bags are distributed twice per year with additional bags available at the City offices. Flyers available through the City advertise the brush site, the recycling center, Free First Saturdays, and trash regulations.
1.4	Issue Press Release Regarding Local Stormwater Issues	Complete and send out monthly Press Releases to local media outlets.	Information regarding solid waste collection scheduling, snow removal operations, the Spring Clean Up, leaf collection program and general updates on stormwater issues are now also being released through social media such as Twitter and Facebook in addition to Leavenworth Residents.

1.5	Show Stormwater Information on Local TV Station	Broadcast community forums, in which continued water quality discussions take place.	In addition to normal programming, the brush site and leaf pick-up information has aired on the City Channel. Video clips on a variety of subjects are presented YouTube including information on use of the brush sie and Spring Clean-up.
1.6	Provide Educational Stormwater Information on City Website.	Establish a series of informational articles addressing topics on Stormwater education.	The City website provides access to the City Connection Newsletter mentioned earlier, links to First City Focus episodes on YouTube, as well information on the Public Works Department for easy access to work schedules and regulations. Items incorporated into the updated Stormwater Design Manual will be highlighted upon adoption.

## 2. Public Involvement and Participation

The permit requires the implementation of these BMPs prior to October 1, 2005. List all of the public involvement and participation BMPs as identified in the SMP and provide the requested information in the following table.

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress on Achieving Goal(s) (Measured Result)
2.1	Hold Public Meetings Regarding Stormwater Issues.	Provide the public an opportunity to discuss related Water Quality topics.	On-going stormwater issues are discussed at City Planning Commission and City Council Meetings in an Open Forum Environment.
2.2	Improve Lines of Communication with the Public.	Integrate contemporary methods of providing and receiving information to the Public.	The City Information Officer has opened up accounts with Facebook, Twitter, and Youtube which distributes information regarding City services, current City projects, and educational material. City staff email addresses and phone numbers are available on the City website.
2.3	Develop a Stormwater Stenciling Program.	Advertise to the Public the importance of Stormwater Management and the need for storm drain stenciling within the City.	Local volunteers such as the Boy Scouts have helped stencil storm inlets in the past throughout the City. City has received contact from at least two groups seeking to pursue such programs although no programs were completed in 2013. City has revised specifications for inlets to now require "stenciling" be stamped into the concrete tops.
2.4	Continue to Maintain and Clean Trash and Debris from Local Streams.	Establish an Adopt a Stream program.	City crews continue to clean streams on public property throughout the City. Volunteers have been especially effective on the Annual Spring Clean Up day at removing Trash from City Property. Additional parks (9 total)

			have been adopted through the Adopt a Park program which provides organizations the opportunity to clean and keep specific parks. Two large scale creek clean-up events in August and September were coordinated by the Parks Department.
2.5	Establish a Reforestation Program.	Continue to promote Arbor Day to increase community involvement.	The City of Leavenworth continues to be part of the Tree City USA program sponsored by the Arbor Day Foundation. The Legacy Tree Program allows for a tree to be planted and dedicated in public spaces. Arbor Day is celebrated yearly. 17 Legacy trees were planted in 2013.
2.6	Collect rainfall and streamflow data to analyze citizen complaints.	Increase data sources to include more streamflow data and weather stations.	Davis Pro Weather stations have been installed at 4 locations citywide. The data is available to all on the internet. This information has been used to assist in evaluating runoff for projects and citizen concerns. Increased data allows for City staff to better analyze flooding events and address the concerns of the public. The City also has 4 portable digital depth recorders used to monitor performance of streams and detention basins. City has coordinated weather collection data with Leavenworth County, Lansing and Basehor.

### 3. Illicit Discharge Detection and Elimination

The permit requires the implementation of these BMPs prior to October 1, 2007.

	Place mark in the appropriate box.		
	Yes	No	Not Applicable
1. Has a program/plan been developed and is it presently implemented to detect and address illicit/prohibited discharges into the MS4?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Has a map of the MS4 been developed, showing the location of all outfalls, either pipes or open channel drainage, showing the names and location of all streams or lakes that receive discharges from those outfalls?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. The permit requires the permittee enact certain ordinances or resolutions if the permittee has such authority. Has an ordinance or resolution to prohibit non-stormwater discharges into the storm sewer system been enacted? Date Effective: <u>1999</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Has a copy of the ordinance or resolution been submitted to KDHE as required by the permit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Have public employees, businesses, and the general public been informed of hazards associated with illegal discharges and improper disposal of waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. List all of the illicit discharge detection and elimination BMPs as identified in the SMP and provide the requested information in the table on the following page.			

## Illicit Discharge Detection and Elimination

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress on Achieving Goal(s) (Measured Result)
3.1	Stormsewer Mapping	Continue to update existing stormsewer structures as well as add new development structures to the city mapping systems.	An updated map of the existing stormsewer network is being developed by the city. Data is collected utilizing a GPS receiver and invert information is collected by opening all manholes. The GIS system now has updated technical information on essentially all of the facilities, (structures, ponds, outfalls, etc.). Over 50% of the system has been physically location verified with GPS equipment with substantial additional work anticipated 2014. While the map and GIS data base are works in progress - it is available to city users and design engineers.
3.2	Stormsewer Maintenance and Inspection	Provide dry weather storm sewer inspection.	A 2 Person Crew is devoted to stormsewer inspection Full-time. The crew provides on-going review of storm infrastructure, responds to public complaints, and provides maintenance for the storm system.
3.3	Inspection of Sanitary Sewer Systems	Inspect residential and commercial sanitary systems for improper discharge into storm drains.	The city purchased an upgraded Sewer TV system with better quality camera, and also integrated TV inspection into the GIS. City purchased a "pole camera" to provide better and quicker images of storm and sanitary sewer pipelines in 2013. City completed a substantial flow monitoring study for I/I reduction efforts, and has trained staff to perform smoke testing. I/I projects and inspection efforts are on-

			going.
3.4	Procedural Training for City Staff.	City inspectors shall attend annual continuing educational programs.	City inspection staff attend continuing educational programs as required. City forces (Parks and Public Works) attend certification courses for herbicides and pesticides. Recent contact with EPA has identified additional training and procedures are necessary to adequately inspect construction sites. Additional training will take place throughout 2014.
3.5	Establish a Program for Household Hazardous Waste Disposal.	Provide pick up for household hazardous waste on a regular Basis.	Used motor oil may be dropped off at the City's Recycling Center and all other household hazardous-waste may be dropped off at the Leavenworth County Transfer Station.

#### 4. Construction Site Stormwater Runoff Control

The permit requires the implementation of these BMPs prior to October 1, 2007.

	Place mark in the appropriate box.		
	Yes	No	Not Applicable
1. The permit requires the permittee enact certain ordinances or resolutions if the permittee has such authority. Has an ordinance or resolution to address construction site runoff from new development and redevelopment projects been enacted? Date Effective: <u>1999</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has a copy of the ordinance or resolution been submitted to KDHE as required by the permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Has a procedure or program been developed which requires construction site owners or operators to implement appropriate erosion and sediment control best management practices?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Has a procedure or program been developed which requires 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Has a procedure been developed that requires site plan review which incorporate consideration of potential water quality impacts?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Has a procedure been developed for receipt and consideration of information submitted by the public?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7. Has a procedure been developed for site inspection and enforcement of control measures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. List all of the construction site stormwater runoff control BMPs as identified in the SMP and provide the requested information in the table on the following page.			

## Construction Site Stormwater Runoff Control

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress on Achieving Goal(s) (Measured Result)
4.1	Construction Specifications and Standard Details.	Continue to develop and update the City specifications and design criteria.	Public Works staff has submitted draft of stormwater requirements and expectations to the City Manager for review. Additional work is necessary prior to review by local engineers, developers and contractors. Staff currently uses APWA guidelines as an interim document. Adoption of new regulations is anticipated in 2014.
4.2	BMP Fact Sheet	Develop BMP Guidelines and Distribute Materials to Developers.	The MARC BMP Manual and APWA design guidelines are readily available online. Upon adoption of an updated infrastructure manual, consulting firms will be made aware of changes to the code.
4.3	Construction Drawing Review	Require City review of all construction projects to ensure design addresses stormwater concerns.	All new residential and commercial developments are reviewed by City staff for stormwater concerns. BMPs have been incorporated into new development by consulting firms. NOI permits are required on projects that disturb areas in excess of 1 acre and require that a Storm Water Pollution Prevention Plan (SWPPP) be developed.
4.4	Pre-Construction Meetings with Owner and Contractor.	Require meetings with owner and contractor prior to commencement of grading operations.	Pre-construction meetings have been conducted by City staff with contractors and developers on all new developments to discuss the implementation of proper erosion controls.

4.5	Construction Site Inspection and Enforcement	Increase the frequency of inspections and develop a site checklist.	City inspection staff checks construction sites a minimum of once a week. In addition, after a half inch or greater rainfall the site's BMPs functionality are checked. Stop work orders are issued if site erosion control measures are not in compliance and remedied in a timely manner. Temporary controls remain onsite until an acceptable grass stand is established. EPA visit identified a need to improve staff understanding of current regulations. Training will occur in 2014.
4.6	Staff Training	Conduct monthly meetings with inspection staff and provide training to new staff	Recent visit by EPA identified that additional staff training related to construction practices and Inspection activities is necessary. Expectations have been reviewed with staff and training will occur in 2014. New inspection staff members would be trained by experienced in-house inspection staff.

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

The permit requires the implementation of these BMPs prior to October 1, 2007.

Place mark in the appropriate box.

Yes                  No

1. The permit requires the permittee enact a program to address post-construction stormwater runoff from new development and redevelopment.

The program developed to manage stormwater in new development and redevelopment projects must include the following elements:

- a. strategies which include a combination of structural and/or non-structural BMPs,
- b. measures to ensure adequate long-term operation and maintenance of BMPs.
- c. BMPs to prevent or minimize adverse water impacts.

Has a post construction stormwater runoff program been implemented?



2. List all of the post-construction site stormwater management in new development and redevelopment BMPs as identified in the SMP and provide the requested information in the table on the following page.

## Post-Construction Site Stormwater Management in New Development and Redevelopment

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress on Achieving Goal(s) (Measured Result)
5.1	Construction Site Inspection and Maintenance of Long Term Controls.	Increase inspections.	Sites are inspected on a bi-weekly schedule following construction to ensure BMP's such as gutter-buddies remain in working order. City has been working on informing detention pond owners on their responsibility of maintaining permanent facilities.
5.2	Protect sensitive areas, such as wetlands and riparian areas.	Maintain or increase open space.	The City has purchased additional properties in flood prone areas in 2013. As part of the Stormwater Regulations being developed, Stream Buffers along creeks within the City would decrease the encroachment of developments into riparian areas.
5.3	Promote non-structural best management practices.	Minimize impervious surfaces and disturbance of soils and vegetation.	City staff have focused on encouraging developers to minimize grading impacts, provide tree preservation, and address project BMP's early in the plan review process.
5.4	Construction Drawing Review.	Require city review of all construction projects to ensure design addresses post construction storm water concerns.	All new residential and commercial developments are reviewed by City Staff. Additional measures addressing Stormwater Quality will be incorporated into the updated City specifications.
5.5	Analyze Existing Structural BMP Performances.	Evaluate local detention pond performances.	The City is utilizing 4 level recorders to evaluate the performance of selected detention ponds during storm events.

## 6. Pollution Prevention/Good Housekeeping for Municipal Operations

The permit requires the implementation of these BMPs prior to October 1, 2005. List all of the pollution prevention/good housekeeping for municipal operations BMPs as identified in the SMP and provide the requested information in the following table.

BMP ID Number	Brief BMP Description	Measurable Goal(s)	Progress on Achieving Goal(s) (Measured Result)
6.1	Storm Sewer and Catch Basin Cleaning.	Inspect and clean all storm sewer inlets on a quarterly basis.	The City has contracted for repairs to several storm structures. Two Full Time employees utilize the City's vacuum truck to remove debris from storm sewer inlets and performed several inlet repair projects .
6.2	Street Sweeping.	Increase street sweeping rotations throughout the City.	Arterial streets are required to be cleaned on a monthly basis, and residential streets must be swept twice per year. Leavenworth's crews have met these goals and have cleaned ALL streets a minimum of 4 times in 2013.
6.3	Snow Removal Operations.	Upgrade the City's Snow removal equipment.	The salt trucks are ground speed controlled which allows for a more precise application rate of the salt/sand mix. Mix ratio is modified to reduce the materials applied to the roadways. City has moved toward more salt/sand rather than all salt for most storms. Review of application rates finds that they are within guidelines. Staff is also becoming more familiar with the controls of the spreaders to ensure proper application of sand and salt..
6.4	Leaf Pick Up.	Establish a City wide program offering leaf pick up.	Leaf collection is scheduled in half of the City each year (alternating). Other disposal options are available to the public - free brush site use and regular refuse collection.

## F. Recordkeeping and Reporting

Attach a report which addresses the following subjects:

1. A general assessment of the appropriateness of the various BMPs included for each of the major program elements as follows:
  - a. TMDL regulated pollutants
  - b. Public Education and Outreach
  - c. Public Involvement and Participation
  - d. Illicit Discharge Detection and Elimination
  - e. Construction Site Stormwater Runoff Control
  - f. Post-Construction Site Stormwater Management in New Development and Redevelopment
  - g. Pollution Prevention/Good Housekeeping for Municipal Operations

Issues which may be addressed include:

- a. Are the BMPs appropriate for the local population?
  - b. Are the BMPs appropriate for the pollution sources?
  - c. Are the specific concerns related to the local receiving waters that may justify a change in BMPs?
2. An assessment of the effectiveness of the BMPs towards achieving the statutory goal of reducing the discharge of pollutants to the Maximum Extent Practicable (MEP).
  3. Provide a summary of results of information collected and analyzed, if any, during the reporting period used to assess the success of the SMP. If the MS4 has tested the stormwater entering a receiving stream or the water in the receiving stream, please provide the laboratory test results and a map showing the location of the sampling. Also, provide an explanation of the conditions under which the sample was taken (recent rainfall amounts and dates, estimated amount of stormwater running in the ditch (ditch barely running, quarter full, half full, full, overflowing,) and stream conditions (barely running, quarter full, half full, full, overflowing its banks) and any other conditions that may help characterize the situation at the time the samples were taken. An explanation as to why the sample was taken or what the permittee intended to show would be helpful in understanding the test results.
  4. Provide a summary of the planned minor changes in stormwater activities to accomplish the SMP designated goals that are scheduled to be undertaken during the next annual reporting cycle. Examples would be emphasizing (or de-emphasizing but not elimination) of a significant action to accomplish a designate goal – for instance, changing the direction of public education from annual public meetings to education of school children.
  5. Provide a list of proposed major changes to the SMP. This should be a list of major changes in direction for any of the designated goals of the SMP. It does not include the minor changes in stormwater activities (listed in item 4) being planned to accomplish a previously designated goal. Examples of a major change would be the implementation of new BMPs and/or the deletion of a BMP. Include a projected schedule for the month or quarter when the BMP will be either implemented or discontinued.
  6. Provide a list of other municipalities/contractors, if any, which will be responsible for implementing any of the program areas of the SMP.

**G. Certification**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



Signature of Permittee (legally responsible person)

2-27-14

Date Signed

MICHAEL B. McDONALD

Name (printed)

DIR. OF PUBLIC WORKS

Title

**40 CFR 122.22 Signatories to permit applications and reports.**

(a) Application. All permit applications shall be signed by either a principal executive officer or ranking elected official. All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person.

Submit this report to:

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT  
 Technical Services Section  
 1000 SW Jackson Street, Suite 420  
 Topeka, KS 66612-1367

# City of Leavenworth, Section III

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## **SECTION III: Recordkeeping and Reporting**

1. *A general assessment of the appropriateness of the various BMPs included for each of the major program elements as follows:*
  - a. **TMDL Regulated Pollutants.** Not Applicable
  - b. **Public Education and Outreach.** Stormwater information is disseminated to the public through numerous channels such as the city newsletter, press releases, posting documents on the city website, and placing reference material at the Public Library.. For news and relevant material such as storm debris collection or flood recovery efforts, Facebook, Twitter, television and YouTube are being utilized by the Public Information Officer to reach a larger population in a timely manner. Considering all of these avenues to reach the public, the city's attempt to provide its citizens with updated material is very effective. Updated videos and information would increase the effectiveness of this means of communication. A review of materials placed at the library showed that there had been little to no use of them.
  - c. **Public Involvement and Participation.** The city engages the public by calling for volunteers to work on local initiatives through the several lines of communication discussed earlier. The Annual Spring Clean Up has been effective in reducing pollution as well increasing the public awareness of stormwater BMPs and other city programs. Free drop-off of large items on Free Saturdays continues to be a popular program. Calls for civic organizations to clean and make improvements to city parks throughout the year are being made through an established Adopt-a-Park program with three new parks (twelve total) of the available twenty-one parks currently adopted. Arbor Day is observed yearly and the city continues to be part of the Tree City USA program. An Adopt-a-Stream program has not been established however cleaning along streams has occurred in public spaces through the Spring Clean-up and spontaneous citizen efforts coordinated with through the Parks Department. City receives occasional calls from groups such as Boy Scouts related to public service projects. No stormwater related projects have recently been completed, but typical discussions include marking stormwater inlets, creek clean-up and neighborhood trash clean-up.
  - d. **Illicit Discharge Detection and Elimination.** In order to control improper disposal of waste to the storm sewer system, the City of Leavenworth makes material available through flyers and online regarding household hazardous waste and its proper disposal. Wastewater Superintendent has worked with Public Information Officer and representatives of Fort Leavenworth to distribute information for disposal of outdated medicines. This has also been posted to the Webpage. Parks Department reports that the "Pick up Your Dog Doo" plan has been very effective at the parks where it has been implemented. Storm sewers are examined with the city's camera truck which allows for sewer lines to be videotaped and searched for improper connections or line failures. The city continues to devote resources to updating the storm sewer map with current

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information through use of hand held GPS to locate all storm structures, ponds, and outfalls in the storm sewer network and opening all manholes for measurements and inspection. The final database will include horizontal location as well as invert and top elevations for all storm structures. City employees are reminded at staff meetings and safety meetings to report any activity that is questionable to their supervisor and/or the City Engineer Office.

- e. **Construction Site Stormwater Runoff Control.** Plan review and construction site inspection are the city's first line of defense in protecting water quality in developing areas. The initial planning process for large and small developments has improved in the last year with a formal focus on stormwater quantity and quality as part of the Development Review Committee meeting with project sponsors and developers. Weekly meetings are held in the Public Works office to review stormwater issues on current city and developer projects both in the design and construction phase. The city is continuing to work on updating the city design criteria to incorporate guidelines similar to the MARC BMP Manual. The EPA inspection identified that staff should become more familiar with the rules and regulations to ensure proper enforcement of any violations. Training for staff will occur in 2014.
- f. **Post-Construction Site Stormwater Management in New Development and Redevelopment.** The City of Leavenworth is taking appropriate action to improve stormwater quality from developed sites. First (on City funded projects), in order to reduce erosion from recently developed sites, contractors are responsible for landscaping for 2 years following construction rather than the previous period of one year. This practice ensures that an acceptable grass stand is established in the area to stabilize soils and increase infiltration by reducing runoff velocity. Also, the city has identified detention pond owners in order to inform them of proper maintenance procedures and requirements. The City increase periodic inspection of post-construction sites to ensure compliance with the regulations.
- g. **Pollution Prevention/Good Housekeeping for Municipal Operations.** The leaf collection program continues in the Fall (curbside pick-up has been reduced to one-half of the city each year), more efficient application of salt and sand to the roadways through better equipment, street sweeping operations, and extended sweeping season are all effective in decreasing pollutants from entering the storm sewer system. Beyond these steps the city has 2 full time employees dedicated to the cleaning of storm inlet structures with a vacuum truck. The addition of the ground speed control systems on the spreaders has improved consistency of application rates and remain within the recommended rates of application. The street sweeping program has exceeded performance standards.

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2. *An assessment of the effectiveness of the BMP's towards achieving the statutory goal of reducing the discharge of pollutants to the Maximum Extent Practicable (MEP).*

The City of Leavenworth has evaluated the functionality of various types of BMPs in Leavenworth while preparing for the adoption of an updated stormwater design manual. BMP overall effectiveness, economy, and general upkeep needs will drive BMP selection on future developments in Leavenworth. For instance, most in-situ soils in Leavenworth have low permeability which has led the Public Works staff to favor BMPs focused more on pollutant removal rather than stormwater infiltration. Recently constructed detention basins and bank stabilization projects have not been tested during high rainfall events for effectiveness. The successful operation of ground speed control on salt spreaders and performance of the street sweeping program have improved water quality of discharges to the creeks and rivers. The construction site monitoring program has been generally effective but needs additional documentation to demonstrate compliance levels.

3. *Provide a summary of results of information collected and analyzed, if any, during the reporting period used to assess the success of the SMP.*

Stormwater from the MS4 has not been tested.

4. *Provide a summary of the planned minor changes in stormwater activities to accomplish the SMP designated goals that are scheduled to be undertaken during the next annual reporting cycle.*

The City expects to perform the following minor changes in 2014:

1. Detention pond owners will be contacted directly to promote the importance of functioning detention facilities and proper maintenance to local home associations to improve pond operation and reduce erosion.
2. City will continue to observe performance of selected detention ponds and related facilities during the heavy rainfall season and has invested in depth recording devices to measure stream and/or pond levels during high rainfall events.
3. Increase staff training related to construction site inspection and post construction inspection activities
4. Seek opportunities with community groups to improve awareness of stormwater issues

5. *Provide a list of proposed major changes to the SMP.*

The city currently follows KC Metro APWA section 5600 design guidelines. It is anticipated that updated stormwater regulations customized to the City of Leavenworth will be adopted in 2014. The new design guidelines will encourage additional

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stormwater BMP's on future construction projects and protect riparian areas by designating stream buffers adjacent to waterways within the city.

6. *Provide a list of other municipalities/contractors, if any, which will be responsible for implementing any of the program areas of the SMP.*

None