

Municipality/Organization: City of Lawrence

EPA NPDES Permit Number: MA 041201

MassDEP Transmittal Number: W-036114

**Annual Report Number
& Reporting Period:**

Year 13
April 1, 2015 – March 31, 2016

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2016)

Part I. General Information

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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:


Printed Name: Brian Pena

Title: Water & Sewer Commissioner

Date:

4/25/2016

Part II. Self-Assessment

The City of Lawrence has completed the required self-assessment for Permit Year 13 and has determined that our municipality complies with the permit conditions.

During this Permit Year, the City has continued to place a significant focus on educating the public about water resource protection. Mayor Rivera issues a bi-monthly newsletter, which keeps residents informed of City issues and includes news about ongoing City programs such as street sweeping and yard waste pick-up. Water quality information (e.g. Source Water Assessment and Protection, FOG, SSOs, etc.) is included in the City's annual Drinking Water Quality Report made available to all residents. The Water & Sewer Department continues to update its social media pages and its website <http://www.cityoflawrence.com/water> to increase transparency and accessibility of information.

The City has implemented several programmatic documents for City staff and contractors to support MS4 General Permit requirements and improve water quality, including:

- Illicit Discharge Detection and Elimination (IDDE) Program Manual
 - o Illicit Discharge Monitoring Plan
 - o Illicit Discharge Investigation Plan
 - o Illicit Discharge Abatement Plan
- Emergency Response Plan for Sanitary Sewer Overflows (SSOs)
- Capacity, Management, Operations, and Maintenance (CMOM) Program Assessment
- Land Development Stormwater Program Manual
- Fats, Oils, and Grease (FOG) Program Manual

The City's IDDE Program gained momentum during Permit Year 13, and several direct illicit discharges have been eliminated from the MS4. The City also continues to use an electronic SSO Reporting Tool, allowing for improved tracking and reporting of SSOs that could affect the City's MS4 and water resource areas.

In October 2015, the City received bids for Sewer System Rehabilitation and Improvements Contract I to address structural and operations and maintenance (O&M) defects prioritized as part of the ongoing sewer system evaluation survey (SSES) investigations. Repairs will improve sewer system functionality and reduce the likelihood of sewer exfiltration (i.e. indirect illicit discharge) into the City's MS4. Construction began in February 2016 and will last approximately seven months. The City expects to publicly bid Sewer System Rehabilitation and Improvements Contract II for additional infrastructure repairs in 2016.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-A	Classroom Education	DPW/Recycling Coordinator	Annual presentation; raise awareness starting with children	Groundwork Lawrence (GWL) developed recycling and clean water materials for youth education that are available at www.groundworklawrence.org/cleaning and greening . GWL also hosted a community cleanup event (Earth Day/Comcast Cares Day) on April 25, 2015. The City's Recycling Coordinator organizes an ongoing school outreach program.	Continue working with local groups to host community cleanup events. Continue to provide school outreach program.
Revised					
1-B	Educational Displays	DPW/Recycling Coordinator	Raise public awareness	Recycling information is available on the City's website at www.cityoflawrence.com/recycling-program.aspx . Printed materials and free recycling stickers are available at the DPW Office (City Hall, Room 201). The City provides an annual Drinking Water Quality Report to its citizens. In addition to drinking water information, the annual report covers related water resource protection topics such as SSOs, water conservation, and FOG control, which all indirectly benefit stormwater quality. The City also works with local non-profit organizations (e.g. GWL) to raise public awareness of water quality issues.	Continue to provide educational information by posting on the City's website, distributing mailings or disseminating through local or regional organizations.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-C	Newspaper Articles	DPW/Director	Annual article	The Eagle Tribune continues to publish articles regarding water resource management in Lawrence. An article about the City’s planned sewer and stormwater infrastructure improvements was published on May 4, 2015 (http://www.eagletribune.com/news/lawrence-moves-to-improve-sewer-system-after-violations/article_508d9bad-8a8b-532d-9658-5ef9903e0248.html). An article about proposed upgrades to the City’s stormwater collection system was published on March 14, 2016 (http://www.eagletribune.com/news/hearing-on-million-stormwater-project-is-tuesday/article_c21ffe1d-8213-5515-887f-7eca029e15f1.html).	Continue to publish articles regarding water resource management.
Revised					
1-D	Local Cable		Ongoing education	Access to City Council TV is available on YouTube via the City’s website at www.youtube.com/user/LawrenceCityCouncil/videos?flow=grid&live_view=500&sort=dd&view=0 . Videos of City Council meetings are updated as needed, and include hearings for the Stormwater Management & IDDE Ordinances. The City also maintains Twitter accounts (@COL1853, @Lawrence_H2O) and a Facebook page (www.facebook.com/LawrenceH2O) which has 215 “likes”.	Continue to update City Council TV YouTube channel with videos of recent meetings; continue to update Twitter & Facebook accounts to reach residents via social media.
Revised	City Website	IT Dept./Director			

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-E	Mailings	DPW/Director	Raise homeowners' awareness	The Water & Sewer Department mails an annual Drinking Water Quality Report to residents that includes water quality protection information. Annual reports can be found electronically at http://www.cityoflawrence.com/water . Mayor Rivera continues to issue a bi-monthly newsletter, which is sent to interested members of the public and made available electronically on the City's website at http://www.cityoflawrence.com/the-common-news.aspx .	Continue to include water resource protection information in annual Drinking Water Quality Reports. Continue to issue bi-monthly newsletter to interested citizens.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2-A	Community Hot Line		Increase public participation	Hidden cameras and increased public input via walk-ins and calls to City Hall have resulted in an increase in enforcement actions related to littering and illegal dumping.	Continue to maintain hidden cameras throughout the City.
Revised	<i>Inspectional Services</i>	Insp. Services/ Director			
2-B	Neighborhood Meetings	DPW/Director	Presentation	Neighborhood meetings provide opportunities for public involvement and participation in the implementation of the City's Stormwater Management Program.	Continue to support and attend neighborhood meetings.
Revised				Public notification is done when required by law (e.g. public hearings, abutter notification).	

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3-A	Mapping Outfalls	DPW/Director	Locate illegal discharge	All MS4 outfalls and interconnections have been mapped in GIS.	Continue to update and maintain the City's GIS database with accurate drainage information.
Revised				The City has retained a consultant to update and maintain the City's GIS database. In Fall of 2014, a low altitude aerial survey of the City was completed to gather orthography and key planimetric features (catch basins, manholes, etc.) to improve the existing stormwater system mapping. As part of ongoing illicit discharge fieldwork, drainage connectivity edits continue to be made to the City's GIS database when discrepancies arise between GIS information and actual conditions.	
3-B	Illicit Discharge	Water & Sewer Dept./Commissioner	Identify origin of illegal discharge	The City continues to implement its IDDE Program, which includes outfall and interconnection screening/sampling and systematic catchment investigations to identify illicit discharges. All MS4 outfalls and interconnections have been screened/sampled during dry and wet weather conditions to identify illicit discharge. Screening results are used to rank outfalls for investigation priority.	Continue to implement the City's IDDE Program Manual. Complete systematic catchment investigations of High Priority catchments. Update priority ranking as needed.
Revised				During Permit Year 13, the City completed systematic investigations of five Problem catchments. Approximately 14,000 LF of stormwater pipe cleaning and CCTV inspection were conducted to attempt to isolate direct illicit connections. The City removed six sources of illicit discharge.	

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3-C	Ordinance Development	City Council	Reduce illegal dumping	The City Council voted to implement an IDDE Ordinance in March 17, 2015, prohibiting non-stormwater discharge into the City's MS4. The City continues to develop stormwater regulations to support implementation of the IDDE Ordinance.	Develop stormwater regulations to support implementation of IDDE Ordinance.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4-A	Site Plan Review	Engineering Dept./City Engineer	Site runoff control	The City continues to implement its Land Development Stormwater Program Manual, which includes site plan review and construction site inspections.	Continue to implement the City's Land Development Stormwater Program Manual.
Revised				The City has retained an engineering consultant to conduct construction site inspections and maintain a database to track inspection results. Construction sites permitted under EPA's CGP continue to be inspected within the first three weeks of construction for erosion and sediment controls and site stabilization measures. Four construction site inspections were conducted during Permit Year 13.	
4-B	Runoff Ordinance	City Council	Reduce site runoff	The City Council voted to implement a Stormwater and Erosion Control Ordinance in March 17, 2015, requiring certain developers to obtain a Stormwater Management Permit from the City. The City continues to develop stormwater regulations to support implementation of the Stormwater and Erosion Control Ordinance.	Develop stormwater regulations to support implementation of Stormwater and Erosion Control Ordinance.
Revised					

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5-A	Design Standards	Engineering Dept./City Engineer	Decrease site runoff	As part of the City's Land Development Stormwater Program Manual and Stormwater and Erosion Control Ordinance, the City requires developers to meet Massachusetts Stormwater Handbook design standards and associated long-term operations and maintenance obligations for stormwater management systems.	Continue to require developers to meet Massachusetts Stormwater Handbook design standards.
Revised					
5-B	Final Site Inspection	Insp. Services/Director	Compliance with design	The City's Land Development Stormwater Program Manual and Stormwater and Erosion Control Ordinance requires developers to develop long-term operations and maintenance (O&M) plans to ensure stormwater management systems function as designed. The City has retained an engineering consultant to conduct final inspections of post-construction stormwater BMPs to document whether final conditions agree with site plan.	Continue to require developers to prepare long-term O&M plans. Continue to conduct final inspections of post-construction stormwater BMPs as needed.
Revised					

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
6-A	Employee Training	DPW/Director	Educate employees and improve housekeeping	New employees are trained in the proper handling and disposal of hazardous materials. Additional employee training is conducted on an as-needed basis.	Continue to train employees and focus specifically on stormwater pollution prevention, IDDE, and other stormwater topics.
Revised					
6-B	Catch Basin Cleaning	DPW/Director	Improve sediment control	City crews conduct catch basin cleaning daily as time allows, except during the winter months.	Continue to conduct catch basin cleaning on a regular basis.
Revised					
6-C	Street Sweeping	DPW/Director	Remove potential pollutants and reduce load to system	The City hires a contractor to sweep all streets in the spring. City crews sweep streets daily as time allows, except during the winter months.	Continue to sweep streets on a regular basis.
Revised					

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

The Merrimack River, Spicket River, and Shawsheen River are all listed as Category 5 impaired waterways in the Massachusetts Year 2014 Integrated List of Waters, and the Shawsheen River Basin has an approved Bacteria TMDL. The City will continue to address the discharge of pollutants to these impaired waterways with the efforts described above. Catchments that discharge directly to the Shawsheen River Basin have been prioritized for systematic illicit discharge investigations to reduce the discharge of fecal coliform.

Part IV. Summary of Information Collected and Analyzed

Results of MS4 outfall and interconnection dry- and wet-weather sampling have been incorporated into the City's IDDE Program Manual, and are available for review upon request at the Water and Sewer Department (City Hall, Room 204).