

Stormwater Compliance is Easier

PRESENTED BY:

Brad Holcomb, City of Rockford Stormwater Manager

Macon & Champaign County's Annual Stormwater Workshop

February 21, 2019

Rockford's NPDES Permit

The City of Rockford has the only Phase 1 MS4 NPDES Permit in the State of Illinois

- Population over 100,000
- Separate storm and sanitary system

Components:

1. Structural Controls
2. Erosion & Sediment Control: Site Runoff & Post Construction Mngt.
3. Roadways
4. Flood Control
5. Pesticide, Herbicide & Fertilizer Application
6. Illicit Discharges & Improper Disposal
7. Spill Prevention & Response
8. Industrial & High Risk Runoff
9. Public Education
10. Monitoring

The Consent Decree

The City was fined \$329,395

Requirements under the Consent Decree

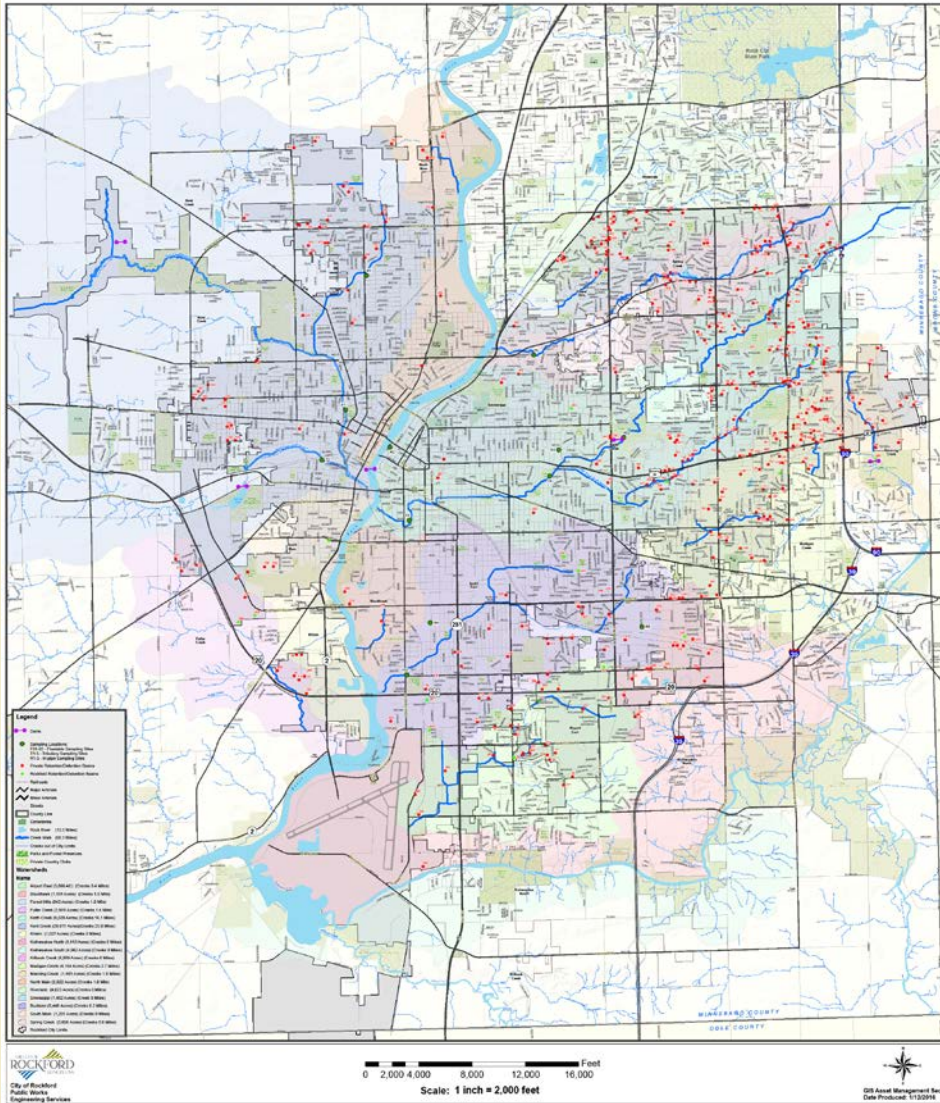
- City must follow the negotiated Standard Operating Procedures (SOP's).
- City must follow the recently issued NPDES Permit.
- City must provide annual and biannual reports to USEPA detailing compliance.
- City must pay stipulated penalties (fines) for failure to comply with any part of the consent decree
- Creation of an Enforcement Response Plan

What Changed for Rockford?

- Permit is not an Public Works or Engineering Department permit it is a city-wide permit
 - ✓ All Departments must comply, Fire/Police Departments, Community Development/Code Enforcement, Building Inspectors, Street Division, Water Division, Engineering Division, Contractors, General Public
- Service Request/Complaints - Any stormwater related item
 - ✓ Response time – How quickly are you responding (24-72 hours).
 - ✓ Inspection Results – Document all inspections/complaints.
 - ✓ Resolution – How did you address the issue?
 - ✓ If the property owner or contractor was the cause of the service request what were the enforcement efforts?
- Structural Controls Inspection Program
- Construction Site Inspection Program
- Post Construction Management Program
- Industrial & High Risk Runoff Program
- Maintenance Program

City of Rockford's Stormwater System

ROCKFORD STORMWATER 2016



Storm System Inventory

- 17 Watersheds
- 130 mi. of mapped Creeks/Drainageways
- 459 Detention Ponds
- 33,481 Inlets/Structures
- 546 miles of Storm Pipe (digitized)
- 1,269 Outfalls
- 4 Public Dams
- 3 Private Dams
- 3 Levee (1 major, 2 minor)

What Changed for Rockford?

Structural Controls

Operate and maintain stormwater structural controls for which we are owner or operator so as to reduce the discharge of pollutants.

- Perform inspections on all detention basins for performance and required maintenance.

BIENNIAL DETENTION BASIN INSPECTION AND MAINTENANCE RATINGS³²⁴

<u>Year</u>	<u># of Detention Basins Inspected</u>	<u>No Maintenance</u>	<u>Minor Maintenance</u>	<u>Intermediate Maintenance</u>	<u>Major Maintenance</u>
2011	223	34 (15.2%)	110 (49.3%)	68 (30.5%)	11 (5%)
2013	383	166 (43.4%)	94 (24.5%)	105 (27.4%)	18 (4.7%)
2015	463	75 (18.2%)	170 (41.2%)	167 (40.5%)	1 (0.1%)
2017	439	214 (48.8%)	159 (36.2%)	66 (15%)	0



What Changed for Rockford?

Structural Controls

Operate and maintain stormwater structural controls for which we are owner or operator so as to reduce the discharge of pollutants.

- Identify channels with erosion and/or obstruction concerns and develop program to stabilize/clean channels.



What Changed for Rockford?

Construction Site Inspection Program

Ensuring projects receive the proper approvals prior to construction starting.

- Overall review process
- Inspection and enforcement program (Standard Operating Procedures)
- Inspection frequency & follow-ups
- Erosion and Sediment Control Compliance

PLAN REVIEW AND EROSION AND SEDIMENT CONTROL YEARLY COMPARISON

Year	# Plans Reviewed	Pre-Grading Inspection (completed when adjacent to environmentally sensitive areas)	# Drive Through Inspections	# Full ESC Inspections	# Requiring Follow Up Inspections	# Stop work Orders Issued/Submitted to Code Enforcement
2012	100	NA *	NA *	59	27	0
2013	127	NA *	154	62	109	0
2014	149	NA *	110	95	152	2**
2015	150	5	129	130	116	1**
2016	153	5	235	122	80	3
2017	137	1	78	126	53	0
2018	118	6	135	149	86	2

Erosion and Sediment Control

NPDES Municipal Separate Storm Sewer System (MS4) Stormwater permits requires municipalities to implement an erosion and sediment control inspection and enforcement program.

All projects within City of Rockford limits must comply with the City's Subdivision review process as well as the Public Works Department - Engineering Division's Plat and Plan Review Process. Construction shall not begin until the City has completed its review process and has issued approvals.

All projects requiring an IEPA General Construction Permit (ILR10) must submit the Notice of Intent (NOI) and SWPPP with the IEPA a minimum of 30 days prior to starting construction. A fee is required along with the submittal. **The City will not permit a project until it has been approved by IEPA.**

- All City projects requiring a IEPA construction permit shall submit the NOI through the City's construction login page.
- IEPA will not approve the permit without the SWPPP being electronically submitted.
- The City of Rockford reviews all SWPPP's submitted to IEPA and will only approve when all items listed in the ILR10 General Construction Permits are addressed.
- Sites less than 1 acre of disturbance are still required to meet erosion and sediment control requirements.

City must be notified a minimum of 48 hours before grading to perform a pre-grading inspection.

Erosion and Sediment Control

Inspection Types:

- ***Pre-Grading Inspection:*** BMP's must be installed **prior** to the start of construction except in areas where clearing and grubbing is necessary for installation.
- ***Drive Through Inspections:*** A visual observation assessing site conditions and BMP's installations.
- ***Full Erosion and Sediment Control Inspection:*** Complete review of SWPPP, inspection records, ESC plan and site conditions.



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Rockford



Erosion and Sediment Control

WE EXPECT FULL COMPLIANCE AT THE TIME OF THE VISIT!

Compliance does not start when the regulatory inspector shows up.

Follow the erosion control plan and the BMP's that were specified!

Remove all BMP's when the project is completed!

Signatory Requirements for all Reports Required by the ILR10 Permit:

"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 gathered and evaluated 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."



What Changed for Rockford?

Post Construction Stormwater Management

Utilize a comprehensive master planning process to develop, implement and enforce controls to minimize the discharge of pollutants after construction is completed.

- Use a master planning approach to identify stormwater management issues on a watershed scale.
- Require developers to create and commit to long-term maintenance of privately owner permanent structural BMPs.
- Monitor facilities during dry weather and work with property owners of existing facilities to assess performance and recommend improvements.

What Changed for Rockford?

Roadways

Operate and maintain public streets, roads and highways under its jurisdiction in a manner so as to minimize the discharge of pollutants, including deicing and sanding activities.

Street Sweeping, Inlet Cleaning, Deicing

- Maintain a summary of each activity including estimates of volumes removed and applied.
- Evaluate street sweeping and inlet cleaning frequencies to determine appropriate scheduling.
- Evaluate salt/sand applications and snow management frequencies to minimize discharge of pollutants.



What Changed for Rockford?

Flood Control

Insure any flood management projects it undertakes assesses the impacts on the water quality of receiving water

- Incorporate water quality standards into the City's Engineering Design Standards, Subdivision Ordinance and Flood Hazard Reduction Ordinance in regards to flood control and stormwater detention/control facilities.
- Investigate ways to reduce nuisance flooding in conjunction with educating the public on reducing nuisance flooding.



What Changed for Rockford?

Illicit Discharge Detection and Elimination

Requirements: Detect and remove (or require to be removed) any illicit discharge of improper disposal into the storm sewer.

- Must have an investigation initiated within 72 hrs. the City receives report

ILLICIT DISCHARGE DETECTION AND ELIMINATION YEARLY COMPARISON

Year	Number of Complaints/ Reports	# Illicit Discharges	# Unknown	Non-Illicit Discharges	Number Submitted to Code Enforcement	HazMat Responses by Rockford Fire Dept.
2012	22	NA*	NA*	NA*	0	4
2013	25	NA*	NA*	NA*	0	4
2014	35	15	6	14	0	2
2015	45	24	5	16	2	8
2016	36	13	10	13	2	3
2017	12	9	0	3	1	1
2018	26	12	3	6	2	6



What Changed for Rockford?

Illicit Discharge and Improper Disposal

- Conduct dry weather screening (outfall inspections) ever other year.

Provide a summary of dry weather screening activities including the number and percentage of outfalls that were screened, findings, the number and type of follow-up actions including initiation of an illicit discharge investigation (including type(s) of investigation), a description of the illicit discharge (e.g., pollutant, volume if known), and the dates each illicit discharge identified was eliminated.

In 2018 the City completed inspections on 1,269 outfalls covering 136 miles of creek. Of those inspections, only 7 required an illicit discharge investigation.



What Changed for Rockford?

Industrial and High Risk Runoff

- Identify, monitor and control pollutants in stormwater discharges to the MS4 from industrial and commercial facilities that the permittee determines are contributing a substantial pollutant loading to the MS4.
- Identify industries and high risk properties that discharge to the MS4.
- Develop, improve and implement its existing inspection and monitoring program of a random select group of industries to verify discharge are complying with their NPDES permits.

Industrial Facility Database & Priority Rankings			
Year	# High Priority Facilities	# Medium Priority Facilities	# Low Priority Facilities
2013	355	NA*	NA*
2014	385	416	5929
2015	29	431	5822
2016	329	428	6570
2017	295	470	5790
2018	299	412	4776

Industrial High Risk Runoff Stormwater Inspections Yearly Comparison					
Year	Number of Inspections			# Requiring Follow Up Inspections	# Submitted to Code Enforcement
	High	Medium	Low		
2012	55	NA **	NA**	6	0
2013	60	NA**	NA**	25	0
2014	78	41	3	67	2
2015	78	32	13	92	1
2016	65	56	6	61	1
2017	66	48	3	30	1
2018	59	45	1	49	0

Monitoring and Reporting

Monitoring Requirements

Implement a wet weather monitoring program for the MS4 to provide data necessary to assess the effectiveness and adequacy of control measures implemented under the Stormwater Management Program.

- Maintain two monitoring locations for removal of floatable material in discharges to or from the MS4
 - Locations are maintained at least twice per year.
 - Estimates of material removed recorded for annual report.
- Representative Monitoring – monitor representative outfalls, internal sampling locations and/or in-stream monitoring locations to characterize the quality of stormwater discharges from the MS4.



Annual Report

Prepare a system-wide annual report with the following information:

- Status of implementing Stormwater Management Program
- Proposed Changes to program
- Summary of all the data accumulated throughout the year.
- Summary describing the number and nature of enforcement actions, inspections and public education programs
- Identification of water quality improvements or degradation
- Locations of monitoring outfalls
- Summary of what the City's has experienced and evaluated the past year about it's storm water program and any proposed program changes
- Summary of the effectiveness and accuracy of the monitoring results
- Results of performance measures



ANNUAL REPORT
Calendar Year 2013
CITY OF ROCKFORD, ILLINOIS
MUNICIPAL SEPARATE STORM SEWER SYSTEM

NPDES Permit No. ILS000001



Make Sure Your Stormwater Program Meets Your Permit Requirements!

- 1) Permit requirements can be interpreted many different ways. Make sure yours is the same as IEPA's and USEPA's.
- 2) Develop a program (Stormwater Master Plan).
 - a. If its not written down, you don't have a plan.
 - b. Develop standard operating procedures for all permit requirements.
 - c. Set measureable goals for all parts of the program.
- 3) Make sure your ordinances give you the ability to enforce the stormwater program and is in compliance with the Clean Water Act.
- 4) Keep accurate and current records. **If it's not documented, it didn't happen.**
- 5) Contractors that work for the City of Rockford must maintain all records of the project until at a minimum of Dec. 31, 2021

DOCUMENT! DOCUMENT! DOCUMENT!

Questions??

Contact Information:

Brad Holcomb – brad.holcomb@rockfordil.gov

stormwater@rockfordil.gov

(779)348-7175

www.rockfordil.gov

